



HAL
open science

Dynamic Deixis in the expression of motion events: A typological study of Standard Chinese

Jinke Song

► **To cite this version:**

Jinke Song. Dynamic Deixis in the expression of motion events: A typological study of Standard Chinese. Linguistics. Université Lumière - Lyon II, 2022. English. NNT: 2022LYO20036 . tel-04324765

HAL Id: tel-04324765

<https://theses.hal.science/tel-04324765>

Submitted on 5 Dec 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



N° d'ordre NNT : 2022LYO20036

THÈSE de DOCTORAT DE L'UNIVERSITÉ LUMIÈRE LYON 2

École Doctorale : ED 484 Lettres, Linguistique, Langues, Arts

Discipline : Sciences du langage

Soutenue publiquement le 21 octobre 2022, par :

Jinke SONG

Dynamic Deixis in the expression of motion events.

A typological study of Standard Chinese.

Devant le jury composé de :

Dorota SIKORA, Maîtresse de conférences HDR, Université Littoral Côte d'Opale, Présidente

Walter BISANG, Professeur des Universités, Johannes Gutenberg Universität, Rapporteur

Yo MATSUMOTO, Professeur des Universités, National Institute for Japanese Language, Rapporteur

Arnaud ARLANGUL, Maître de conférences, INALCO Institut national des langues et civilisations orientales,
Examineur

Christine LAMARRE, Professeure des Universités, INALCO Institut national des langues et civilisations
orientales, Co-Directrice de thèse

Anetta KOPECKA, Maîtresse de conférences, Université Lumière Lyon 2, Co-Directrice de thèse

Contrat de diffusion

Ce document est diffusé sous le contrat *Creative Commons* « [Paternité – pas d'utilisation commerciale - pas de modification](#) » : vous êtes libre de le reproduire, de le distribuer et de le communiquer au public à condition d'en mentionner le nom de l'auteur et de ne pas le modifier, le transformer, l'adapter ni l'utiliser à des fins commerciales.

Université Lumière Lyon 2
Laboratoire Dynamique Du Langage (UMR 5596)
École doctorale Lettres, Langues, Linguistique & Arts (ED 484)
Département de Sciences du Langage

Dynamic Deixis in the expression of motion events

A typological study of Standard Chinese



Thèse de doctorat en Sciences du Langage
dirigée par **Anetta KOPECKA** et **Christine LAMARRE**
soutenue le 21 octobre 2022

Jin-Ke SONG

Université Lumière Lyon 2
Laboratoire Dynamique Du Langage (UMR 5596)
École doctorale Lettres, Langues, Linguistique & Arts (ED 484)
Département de Sciences du Langage

Dynamic Deixis in the expression of motion events

A typological study of Standard Chinese

运动事件

Thèse de doctorat en Sciences du Langage
dirigée par **Anetta KOPECKA** et **Christine LAMARRE**

Jin-Ke SONG

Soutenue publiquement le 21 octobre 2022 devant un jury composé
de :

Arnaud ARSLANGUL, Maître de conférences, INALCO ; **Walter BISANG**,
Professeur, Johannes Gutenberg University Mainz ; **Anetta KOPECKA**,
Maître de conférences, Université Lumière Lyon 2 ; **Christine LAMARRE**,
Professeure des universités, INALCO ; **Yo MATSUMOTO**, Professeur,
National Institute for Japanese Language and Linguistics ; **Dorota SIKORA**,
Maître de conférences, HDR, Université Littoral Côte d'Opale

Cover:
Elasticità, 1912, Museo del Novecento
Umberto Boccioni

This dissertation is printed by the Reprographie, imprimerie et micro-edition
(RIME) of the University Lyon 2 - 2022

To my parents



Acknowledgments

This dissertation would not have been possible without the support and encouragement of many people.

I am grateful and indebted to my supervisors for many constructive discussions, insightful advice, and valuable mentorship regarding all aspects of the achievement of the present dissertation. I am fortunate to have worked with two such exceptional people from whom I still have so much to learn.

Words cannot express my deepest gratitude to my co-supervisor Anetta Kopecka, for her guidance through every step from my Master to PhD years. Her wide-ranging expertise in the domain of space, as well as her patience, kindness, and consideration, would not have been more helpful in saving me from many difficulties and hard times on both a professional and a personal level.

I would like to express my profound appreciation to my co-supervisor Christine Lamarre. Her rich knowledge and expertise in Chinese and Sinitic languages, as well as her calmness, seriousness, and humbleness, have influenced me deeply as a competent linguist.

I could not have undertaken this journey without my defense committee, Walter Bisang, Yo Matsumoto, Arnaud Aslangul, and Dorota Sikora. Special thanks to Walter Bisang for hosting me as a

visiting researcher at Johannes Gutenberg University Mainz in 2018. I benefited a lot from his erudition, especially in Asian languages. The six months of visiting makes my academic research an unforgettable moment. I would like to extend my sincere thanks to Yo Matsumoto and Arnaud Arslangul, whose articles and reports have been extremely inspiring and helpful in building the present research. I would also like to thank Dorota Sikora for kindly accepting to be part of my PhD defense committee and the president of the jury.

This endeavor would not have been possible without the help of the members of the DYNAMIC DEIXIS and the SALTA projects, especially Laure Sarda, Benjamin Fagard, Alice Vittrant, Noëllie Bon, Clément Voirin, Adeline Tan, Nichuta Bunkham, Léa Mouton, Karl Seifen, as well as our ‘motion team’ members Noemi De Pasquale and Krishna Parajuli.

The dissertation would not have been possible without the help of the native speakers of Standard Chinese during my data collection in France (Lyon) and in China (Beijing and Baoding).

I am extremely grateful to Antoine Guillaume, the present director of the laboratory Dynamique du Langage (DDL), and the former director Sophie Kern for hosting me. Thanks should also go to Rabia Makine and Laurence Husni (present administrative managers) and Linda Brendlin and Estelle Yuok (former administrative managers) for their meticulous help with administrative issues.

Many thanks to Christian Fressard and Marc Allassonière-Tang for their tremendous help in resolving countless computer problems, their good temper, and their playful sense of humor. Without Rémi Anselme, I would not have the courage to work until late at night at the laboratory; thank for his unfailing company. Thanks also to Françoise Rose for the valuable and pertinent suggestions on my presentations during the workshop at DDL, to Brigitte Pakendoff for her consideration, especially during my trip to Germany and during the



pandemic, to my dear compatriot Nargil for the happy chatting moments, and for her help in arranging my Appendix, to Yan Hou, Na Song, Yaqiu Liu for hosting me each time I visit Paris and sharing good times, to Clément Voirin and Yoonmi Oh, my dear friends and former colleagues with whom I have spent a lot of joyful moments, and to all the other members of DDL for the pleasant atmosphere.

My heartfelt gratitude goes to my family and friends in Lyon and in China who have always been there, especially when I am feeling under the weather. I would like to thank my parents for being role models in my life and for their love, indulgence, and understanding. I thank my friends Lingling, Yuge, Yi'ou, Jingjing, Wuchen, Xiaoqing, Yanping, Wei, Nicoleta, Marie, Patrick, Bernard, Jeanne, Jean-Pierre, and Maité for their longlasting friendship and support.

This dissertation cannot be completed without the fellowship of the China Scholarship Council (2016-2019).

ABSTRACT

Deixis, which means ‘pointing via language’, is one of the most basic things speakers of all languages do with utterances. As a fundamental element of human communication, Deixis has always fascinated language scientists and much research has been published on this topic. This dissertation, which consists of a typological description of Dynamic Deixis in the expression of motion events in Standard Chinese and was conducted within the research programme DEIXIS DYNAMIQUE (*Fédération de Typologie et Universaux Linguistiques*, CNRS, 2015-2018), is a contribution to this body of research.

By adopting the onomasiological perspective, we take the conceptual component, i.e., Dynamic Deixis, as the starting point for the investigation of different linguistic forms. The primary goal of this dissertation is to examine how Dynamic Deixis is conceptualized and encoded by speakers of Standard Chinese. Furthermore, in the light of previous studies which have discussed the relationship between Dynamic Deixis and Path of motion, we also aim at investigating how the two semantic components are related to each other (Koga, Koloskova, Mizuno, & Aoki 2008; Lamarre 2008a; Morita 2011; Matsumoto, Akita, & Takahashi 2017). More specifically, we attempt to explore the similarities and the differences in the expression of Dynamic Deixis and Path by examining the three following aspects of their linguistic expression:

(1) the coding strategies, (2) the patterns of distribution, and (3) the spatial (a)symmetries.

Unlike most of the typologically-oriented studies which focus on the encoding of Path and Manner by applying Talmy's (1985, 2000) classification of languages, i.e., satellite-framed and verb-framed, the present study examines the encoding of Dynamic Deixis and Path based on Wälchli's (2001) typology which tackles the issue from a different perspective accounting for verbal, adnominal, and adverbial encodings. There are two main reasons of this choice. First, Talmy's typology concentrates on the expression of Path in verbs and satellites leaving out other linguistic devices such as adpositions and case markers on which some languages may rely to express Path; Wälchli's typology fills this gap by paying attention to not only verbal and adverbial encodings, but also adnominal encoding. And second, Talmy's typology is based on the classification of languages and this proves problematic when one has to categorize putative satellite-framed languages which show verb-framed behavior or the other way around; by contrast, Wälchli's typology is focused on the morphosyntactic locus or loci used for the encoding of Path, thereby providing a better framework for analysing languages which use different coding strategies.

To carry out this study, we examine and compare two different types of data belonging to spoken modality. One data set consists of descriptive data collected using visual elicitation tools, i.e., *Trajectoire* (spontaneous motion) (Ishibashi, Kopecka, & Vuillermet 2006) and *Put & Take* (caused motion) (Bowerman, Gullberg, Majid, & Narasimhan 2004). The other data set consists of dialogical data extracted from two TV series including both spontaneous and caused motion, i.e., *Married for Ten Years* (released in 2003) and *Loquacious Zhang Damin's Happy Life* (broadcast in 2000). This methodological choice provides a new intralanguage perspective since in Standard Chinese, the expression of Dynamic Deixis can vary significantly depending on the data type (see also Lamarre 2008, 2013 who compares dialogical data from TV series (dialogues,

spoken style) and descriptive data from novels (descriptions, written style)).

The analysis of the Dynamic Deixis encoding in the Standard Chinese data of two types reveals the use of different morphosyntactic devices. In the descriptive data, Dynamic Deixis was found to be expressed by means of deictic satellites and prepositional phrases. By contrast, in the dialogical data, Dynamic Deixis was found to be expressed by deictic verbs, deictic satellites, and associated motion markers.

What's more, based on Wälchli's (2001) typology, we examined the coding strategies used in the expression of both Dynamic Deixis and Path of motion. The analysis reveals that the encoding of Dynamic Deixis favors single coding strategies, i.e., the adverbial encoding in the descriptive data vs. the adverbial encoding and the verbal encoding in the dialogical data. By contrast, the encoding of Path privileges a combination of different encodings, i.e., the adnominal + adverbial encoding in the descriptive data vs. the verbal + adverbial encoding in the dialogical data.

Second, by applying Sinha & Kuteva's (1995) distributed spatial semantics approach, the study shows that when only one direction of Dynamic Deixis (i.e., centripetal direction and centrifugal direction) is expressed within a clause, each semantic component can be distributed using parallel pattern and redundant pattern, i.e., the same piece of information is repeated twice by either the same morpheme or by different morphemes. As regards Path, when only one portion of Path (i.e., Source, Medium, and Goal) is expressed, each spatial information can be expressed simultaneously by two or three different morphemes using redundant pattern. When two or three pieces of information of Dynamic Deixis (i.e., centripetal + centrifugal directions) and of Path (i.e., Source + Medium, Medium + Goal, Source + Goal, and Source + Medium + Goal) are distributed within a clause, different pieces of information can be encoded by two different morphemes for Dynamic Deixis and by two up to four different morphemes for Path.

Finally, in the light of the Source-Goal asymmetry (Ikegami 1987; Bourdin 1997; Kopecka & Vuillemet 2021; *inter alia*), several (a)symmetrical phenomena have been found in the expression of Dynamic Deixis and Path in the present study. In general, at the discourse level, the results show that the centripetal direction tends to be encoded more frequently than the centrifugal direction in the descriptive data, whereas the opposite tendency is found in the dialogical data. Regarding Path of motion, Goal tends to be expressed more frequently than Source in both data types. Besides, as regards the combination of Ground with Dynamic Deixis and Path, in both data types, Ground is usually omitted in the expression of Dynamic Deixis. However, in the expression of Path, depending on the data type, Ground is often omitted in the dialogical data, while its omission is very rare in the descriptive data. Moreover, at the morphological level, the expression of Source and Goal, and that of centripetal and centrifugal directions also reveal symmetries and asymmetries depending on data type and the type of morphosyntactic devices.

By comparing two types of data, descriptive and dialogical, and by conducting qualitative and quantitative analyses, this dissertation provides a new insight into the encoding of Dynamic Deixis and contributes to a better understanding of how Dynamic Deixis is conceptualized linguistically in Standard Chinese. Furthermore, the analysis of Dynamic Deixis and Path provides evidence that, contrary to the typological approach proposed by Talmy (2000) the two semantic elements differ significantly from each at different levels: (1) the coding strategies, (2) the patterns of distribution, and (3) the spatial (a)symmetries, and thus supports the idea that the two components, Dynamic Deixis and Path, should be treated separately as suggested by Koga et al. (2008), Lamarre (2008a), Morita (2011), and Matsumoto et al. (2017).

Keywords: (a)symmetry, coding strategy, descriptive data, dialogical data, Dynamic Deixis, Path, pattern of distribution, Standard Chinese

TABLE OF CONTENTS

ACKNOWLEDGMENTS	I
ABSTRACT	IV
TABLE OF CONTENTS	VIII
ABBREVIATIONS	XI
LIST OF FIGURES	XII
LIST OF TABLES	XIII
INTRODUCTION	1
PART I THEORETICAL AND METHODOLOGICAL FRAMEWORK.....	8
CHAPTER 1 A SURVEY OF THEORETICAL AND EMPIRICAL STUDY ON DEIXIS	9
1.1. Introduction	9
1.2. Deixis: studies within the framework of semantics and pragmatics ..	11
1.2.1. Anchoring of person, place, and time	11
1.2.2. A context-dependent concept	18
1.3. Deixis: studies within the framework of motion events	20
1.3.1. The typology of motion events and its revisions.....	20
1.3.2. Deixis: terminological clarification	44
1.4. Rethinking the status of Deixis	64
1.4.1. Deixis as a distinct semantic component: aspectual and pragmatic evidence	67
1.4.2. Morphosyntactic and functional evidence	71
1.5. Summary	74
CHAPTER 2 LINGUISTIC DEVICES IN STANDARD CHINESE ENCODING CONCEPTUAL COMPONENTS OF MOTION EVENTS.....	75
2.1. Introduction	75
2.2. Linguistic encoding of Figure, Ground, and Co-event	77
2.2.1. Figure	78
2.2.2. Ground	80
2.2.3. Co-event.....	86
2.3. Linguistic encoding of Path	89



2.3.1. Verbal encoding	89
2.3.2. Adverbial encoding	95
2.3.3. Adnominal encoding	119
2.4. Linguistic encoding of Dynamic Deixis	129
2.4.1. Verbal encoding: deictic verbs	130
2.4.2. Adverbial encoding:	144
2.4.2.1. Deictic satellites	144
2.4.2.2. Associated motion markers	152
2.5. Summary	156
CHAPTER 3 METHODOLOGICAL ISSUES AND CORPORA COMPOSITION	157
3.1. Introduction	157
3.2. Stimuli-based approach.....	158
3.2.1. The <i>Trajectoire</i> stimuli set, speaker and data collection.....	159
3.2.2. The <i>Put & Take</i> stimuli set, speaker and data collection	163
3.3. TV series-based approach and data extraction.....	168
3.4. Treatment of data	169
3.4.1. Coding system.....	170
3.4.2. Glossing system.....	175
3.5. Summary	176
PART II DATA ANALYSES AND RESULTS.....	178
CHAPTER 4 ENCODING OF PATH AND DYNAMIC DEIXIS IN THE DESCRIPTIVE AND THE	
DIALOGICAL DATA.....	179
4.1. Introduction	179
4.2. Sentence features of descriptive and dialogical data	180
4.2.1. Descriptive data: one clause vs. multiple clauses	181
4.2.2. Dialogical data: frequent use of imperatives	195
4.3. Coding strategies of Path in the data.....	200
4.3.1. Coding strategies of Path in the descriptive data	211
4.3.1.1. Verbal encoding of Path in the descriptive data.....	223
4.3.1.2. Adverbial encoding of Path in the descriptive data	226
4.3.1.3. Adnominal encoding of Path in the descriptive data	231
4.3.1.4. Combination of different encodings of Path in the descriptive data	
.....	236
4.3.2. Coding strategies of Path in the dialogical data	239
4.3.2.1. Verbal encoding of Path in the dialogical data	255
4.3.2.2. Adverbial encoding of Path in the dialogical data	261
4.3.2.3. Combination of different encodings of Path in the dialogical data	
.....	268
4.4. Coding strategies of Dynamic Deixis in the data	271
4.4.1. Coding strategies of Dynamic Deixis in the descriptive data.....	272
4.4.1.1. Adverbial encoding of Dynamic Deixis in the descriptive data.....	272
4.4.1.2. Combination of different encodings of Dynamic Deixis in the	
descriptive data.....	275
4.4.2. Coding strategies of Dynmaic Deixis in the dialogical data	276
4.4.2.1. Verbal encoding of Dynamic Deixis in the dialogical data	276
4.4.2.2. Adverbial encoding of Dynamic Deixis in the dialogical data.....	280
4.4.2.3. Combination of different encodings of Dynamic Deixis in the	
dialogical data	286



4.5. Summary and discussion	287
CHAPTER 5 PATTERNS OF PATH AND DYNAMIC DEIXIS DISTRIBUTION	292
5.1. Introduction	292
5.2. Distributed spatial semantics approach	293
5.3. Patterns of distribution in the expression of Path	297
5.3.1. Redundant distribution pattern of Path.....	300
5.3.1.1. Redundant distribution pattern of Source	301
5.3.1.2. Redundant distribution pattern of Medium	307
5.3.1.3. Redundant distribution pattern of Goal	310
5.3.2. Differentiated distribution pattern of Path.....	315
5.4. Patterns of distribution in the expression of Dynamic Deixis	320
5.4.1. Parallel distribution pattern of Dynamic Deixis.....	320
5.4.1.1. Parallel distribution pattern of centripetal direction	321
5.4.1.2. Parallel distribution pattern of centrifugal direction	321
5.4.2. Redundant distribution pattern of Dynamic Deixis.....	323
5.4.3. Differentiated distribution pattern of Dynamic Deixis.....	324
5.5. Summary	325
CHAPTER 6 (A)SYMMETRIES IN THE EXPRESSION OF PATH AND DYNAMIC DEIXIS	331
6.1. Introduction	331
6.2. Source-Goal asymmetry	332
6.3. (A)symmetries in Path encoding	336
6.3.1. Source-Goal (a)symmetry in discourse frequency	336
6.3.2. Source-Goal asymmetry in morphology.....	345
6.3.3. Source-Goal asymmetry in relation to Ground	350
6.4. (A)symmetries in Dynamic Deixis encoding	358
6.4.1. The use and non-use of Dynamic Deixis in discourse frequency	358
6.4.2. Centripetal and centrifugal (a)symmetry in relation to Ground	364
6.5. Summary	368
CONCLUSION AND PERSPECTIVES.....	372
APPENDIXES A INFORMATION OF STIMULUS SETS.....	383
APPENDIXES B SELECTED EXAMPLES FROM THE CORPORA	406
REFERENCES.....	439
RÉSUMÉ EN FRANÇAIS	473



ABBREVIATIONS¹

1	first person	NEG	negation
2	second person	OM	object marker
3	third person	PASS	passive marker
BEN	benefactive marker	PFV	perfective aspect marker
CL	classifier	PL	plural
CRS	current relevant state	PROH	prohibitive marker
DUR	durative marker	PRT	sentence-final particle
EXCL	exclusive	Q	question marker
GEN	genitive marker	RDP	reduplication
HON	honorifics	REAL	realis
INCL	inclusive	SG	singular
IRR	irrealis	SUG	suggestion

¹ In this table, glosses are exclusively concerned with examples of Standard Chinese from the data we collected. As for other languages (and Chinese investigated by various linguists), we follow the original glosses provided by different authors and put each specific gloss in the footnote after each cited example.



LIST OF FIGURES

Figure 1. Centripetal direction (Fortis & Fagard 2010: 16).....	55
Figure 2. Centrifugal direction (ibid.).....	55
Figure 3. Transverse direction (ibid.: 17).....	55
Figure 4. Specific and shared properties of Deixis and Path (J.-K. Song, Bunkham, & Mouton 2019)	69
Figure 5. 去 <i>qù</i> meaning 'leave' (adapted from Shǐ 2014: 92).....	132
Figure 6. 去 <i>qù</i> meaning 'towards' (ibid.).....	132
Figure 7. 去 <i>qù</i> meaning 'arrive' (ibid.).....	132
Figure 8. Scene 023.....	162
Figure 9. Scene 061.....	162
Figure 10. Scene 064.....	162
Figure 11. Scene 007.....	166
Figure 12. Scene 026.....	166
Figure 13. Scene 022.....	166
Figure 14. Scene 115.....	166
Figure 15. Scene 133.....	166
Figure 16. Scene 051.....	166
Figure 17. Different semantics lexicalized in verbs in the Standard Chinese data	202
Figure 18. Distributed spatial semantics.....	297
Figure 19. Source-Medium-oriented Path.....	318
Figure 20. Medium-oriented Path.....	318
Figure 21. Apple falling from tree (ibid.).....	333
Figure 22. Apple falling into grass (ibid.).....	333

LIST OF TABLES

Table 1. Fijian subject pronouns (Anderson & Keenan 1985: 263).....	13
Table 2. Three demonstrative adjectives/pronouns in Spanish (adapted from Anderson & Keenan 1985: 282).....	15
Table 3. Cardinal kinds of displacement (adapted from Wälchli 2001: 300).....	29
Table 4. Cardinal kinds of displacement (revised by Berthele 2004: 100, based on Wälchli 2001: 300).....	30
Table 5. Summary of Filmorean appropriateness conditions for English come and go (Lewandowski 2007: 15).....	46
Table 6. Equivalent directional terms (Guillaume & Koch 2021b: 10).....	59
Table 7. Localizers (adapted from Peyraube 1980: 18, 2003: 183-184).....	83
Table 8. Path verbs.....	92
Table 9. Directional complements (=Path satellites) in Standard Chinese (adapted from Liú 1998).....	96
Table 10. Semantics roles of NPlocs that can follow Path satellites (adapted from Lamarre 2008b: 216).....	98
Table 11. Prepositions encoding Path and their positions with respect to the verb.....	120
Table 12. The parameters underlying the design of the <i>Trajectorie</i> material (Vuillermet & Kopecka 2019: 103).....	161
Table 13. The information of speakers in data collected with the <i>Trajectoire</i> stimulus set.....	163
Table 14. The information of speakers in data collected with <i>Put & Take</i> stimulus set.....	167
Table 15. Number of clauses expressing translational motion per data set.....	170
Table 16. Morphosyntactic and semantic coding in the data.....	173
Table 17. Supplementary coding in the data.....	175
Table 18. Number of clauses per motion description in the <i>Trajectoire</i> data....	184
Table 19. Number of clauses per motion description of clips showing simple vs. complex Path in the <i>Trajectoire</i> data.....	184
Table 20. Number of clauses per motion description in the <i>Put & Take</i> data...	190

Table 21. Number of clauses per motion description of clips showing simple vs. complex Path in the <i>Put & Take</i> data.....	191
Table 22. The distribution of sentence types in the dialogical data.....	200
Table 23. Verbs expressing Path in the <i>Trajectoire</i> data	213
Table 24. Verbs expressing Manner in the <i>Trajectoire</i> data.....	216
Table 25. Verbs expressing Cause in the <i>Put & Take</i> data.....	220
Table 26. Verbal encoding in the descriptive data	223
Table 27. Verbs in verbal encoding strategy in the <i>Trajectoire</i> data (spontaneous motion)	223
Table 28. Adverbial encoding in the descriptive data.....	226
Table 29. Satellites in adverbial encoding strategy in the <i>Trajectoire</i> data (spontaneous motion)	227
Table 30. Satellites in adverbial encoding strategy in the <i>Put & Take</i> data (caused motion)	229
Table 31. Adnominal encoding in the descriptive data.....	231
Table 32. Prepositions (+/- localizers) in adnominal encoding strategy in the <i>Trajectoire</i> data (= data of spontaneous motion)	232
Table 33. Prepositions in adnominal encoding strategy in the <i>Put Take</i> data (caused motion)	234
Table 34. Combination of different encodings of Path in the descriptive data.	237
Table 35. Verbs expressing Path (or Path + Dynamic Deixis) in the <i>MFTY</i> data (spontaneous motion)	242
Table 36. Verbs expressing Path (or Path + Dynamic Deixis) in the <i>LZHL</i> data (spontaneous motion)	243
Table 37. Verbs expressing Manner in the <i>MFTY</i> data (spontaneous motion) ..	248
Table 38. Verbs expressing Manner in the <i>LZHL</i> data (spontaneous motion) ...	249
Table 39. Verbs expressing Cause in the <i>MFTY</i> data (caused motion)	252
Table 40. Verbs expressing Cause in the <i>LZHL</i> data (caused motion).....	254
Table 41. Verbal encoding of Path in the dialogical data.....	255
Table 42. Verbs in verbal encoding strategy in the <i>MZTY</i> data (spontaneous motion)	255
Table 43. Verbs in verbal encoding strategy in the <i>LZHL</i> data (spontaneous motion)	256
Table 44. Adverbial encoding of Path in the dialogical data.....	261
Table 45. Satellites in adverbial encoding strategy in the <i>MFTY</i> data	262
Table 46. Satellites in adverbial encoding strategy in the <i>LZHL</i> data	262
Table 47. Comparison of the use of Path satellites in the descriptive and the dialogical data.....	264
Table 48. Combination of different encodings of Path in the dialogical data ...	268
Table 49. Adverbial encoding of Dynamic Deixis in the descriptive data	272
Table 50. Combination of different encodings of Dynamic Deixis in the descriptive data	275

Table 51. Verbal encoding of Dynamic Deixis in the dialogical data.....	276
Table 52. Verbal encoding of Dynamic Deixis with/without a Figure.....	278
Table 53. Verbal encoding of Dynamic Deixis with/without a Ground NP.....	279
Table 54. Verbal encoding of Dynamic Deixis with/without a purpose VP.....	280
Table 55. Adverbial encoding of Dynamic Deixis in the dialogical data.....	281
Table 56. Deictic satellites preceded by Path verbs with/without Path satellites	282
Table 57. Deictic satellites preceded by Manner verbs with/without Path satellites	283
Table 58. Deictic satellites preceded by Cause verbs with/without Path satellites	284
Table 59. Morphosyntactic devices used in adverbial encoding in the dialogical data	285
Table 60. Combination of different encodings of Dynamic Deixis in the dialogical data	286
Table 61. Coding strategies of Path in the descriptive data.....	288
Table 62. Coding strategies of Path in the dialogical data	289
Table 63. Coding strategies of Dynamic Deixis in the descriptive data.....	290
Table 64. Coding strategies of Dynamic Deixis in the dialogical data	290
Table 65. Redundant pattern of Source in the descriptive data	307
Table 66. Redundant pattern of Source in the dialogical data.....	307
Table 67. Redundant pattern of Medium in the <i>Trajectoire</i> data (spontaneous motion)	310
Table 68. Redundant pattern of Goal in the descriptive data.....	315
Table 69. Redundant pattern of Goal in the dialogical data	315
Table 70. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the <i>Trajectoire</i> data	316
Table 71. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the <i>Put & Take</i> data.....	319
Table 72. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the <i>MFTY</i> data.....	319
Table 73. The number of clauses using centripetal morpheme and the occurrences of redundant pattern	324
Table 74. The number of clauses using Dynamic Deixis and the occurrences of differentiated pattern.....	324
Table 75. The number of clauses expressing Source and the occurrences of redundant pattern.....	326
Table 76. The number of clauses expressing Medium and the occurrences of redundant pattern.....	327
Table 77. The number of clauses expressing Goal and the occurrences of redundant pattern.....	327

Table 78. The number of different morphemes in patterns of distribution in the expression of Path.....	327
Table 79. The number of clauses using centripetal morpheme and the occurrences of parallel pattern.....	329
Table 80. The number of clauses using centrifugal morpheme and the occurrences of parallel pattern.....	329
Table 81. The number of same / different morphemes in patterns of distribution in the expression of Dynamic Deixis.....	329
Table 82. Devices expressing Source and Goal found in the Standard Chinese data.....	337
Table 83. Distribution of Path in simple Path events in the <i>Trajectoire</i> data (spontaneous motion).....	338
Table 84. Distribution of Path in simple Path events in the <i>Put & Take</i> data (caused motion).....	340
Table 85. Distribution of Path encoding in complex Path events in the <i>Trajectoire</i> data (spontaneous motion).....	342
Table 86. Distribution of Path encoding in complex Path events in the <i>Put & Take</i> data (caused motion).....	342
Table 87. Distribution of Path encoding in the dialogical data.....	344
Table 88. Distribution patterns in the <i>Trajectoire</i> data (spontaneous motion)..	346
Table 89. Distribution patterns in the <i>Put & Take</i> data (caused motion).....	346
Table 90. Distribution of Source and Goal patterns in the <i>MFTY</i> data.....	349
Table 91. Distribution of Source and Goal patterns in the <i>LZHL</i> data.....	349
Table 92. The overt and covert encoding of Grounds in the <i>Trajectoire</i> data (spontaneous motion).....	351
Table 93. The overt and covert encoding of Grounds in the <i>Put & Take</i> data (caused motion).....	352
Table 94. The overt and covert encoding of Grounds in the <i>MFTY</i> data.....	357
Table 95. The overt and covert encoding of Grounds in the <i>LZHL</i> data.....	357
Table 96. The use and non-use of Dynamic Deixis expressions in the data.....	358
Table 97. Expression of centripetal (CTP) and centrifugal (CTF) directions in the descriptive data.....	364
Table 98. Expression of centripetal (CTP) and centrifugal (CTF) directions in the dialogical data.....	365
Table 99. Use of deictic verbs encoding centripetal (CTP) and centrifugal (CTF) directions.....	365
Table 100. Use of deictic satellites encoding centripetal (CTP) and centrifugal (CTF) directions.....	365
Table 101. Use of associated motion markers encoding centripetal (CTP) and centrifugal (CTF) directions.....	366
Table 102. The overt and covert encoding of Grounds in the <i>MFTY</i> data.....	366
Table 103. The overt and covert encoding of Grounds in the <i>LZHL</i> data.....	366

INTRODUCTION

Deixis, which is derived from the Greek word *δειξίς*, means 'pointing' via language. It is one of the most basic things speakers of all languages do with utterances. Given the great importance of the use of deictic expressions in everyday language, this dissertation intends to examine the expression of one type of Deixis, so-called Dynamic Deixis, in the expression of motion events in Standard Chinese.

Although a considerable amount of research on Deixis, especially Static Deixis (i.e., pronouns, demonstratives) has been carried out within the framework of semantics and pragmatics, Deixis has received relatively less attention within the typological framework of motion events. In previous literature, the majority of studies focus on Path and Manner of motion. Studies that are relevant to Dynamic Deixis usually adopt the semasiological approach and look at different meanings and functions of COME and GO forms in various languages. Hardly any research has taken the notion 'Dynamic Deixis' to be prior to explore the diversity of forms which convey such meaning in a systematic and comprehensive way. Thus, most of the research investigate deictic verbs and do not take into account other morphosyntactic devices, such as deictic satellites and associated motion markers that can also convey deictic meaning.

By adopting the onomasiological approach, the present dissertation investigates how Dynamic Deixis is expressed in

different forms in motion events in order to provide a better understanding of how this notion is conceptualized linguistically by speakers of Standard Chinese. Along with the investigation of Dynamic Deixis, which is the central topic of this study, Path, another important semantic element that is in close relation to Dynamic Deixis, is also examined in order to elucidate the relationship between the two concepts.

In this dissertation, we adopt the working definition of Dynamic Deixis proposed within the DEIXIS DYNAMIQUE project (2015-2018) in which Dynamic Deixis is understood as a direction along an axis defined by its relation to the deictic center (or viewpoint).

In what follows, we first present the aims of the present study and its empirical background, and then we outline the structure of the dissertation.

Aims and the typological and empirical approach

By adopting the functional-typological approach the aim of which is to examine the relation between form and meaning and/or function, and cross-linguistic variation in different domains of expression, the primary goal of this dissertation is to provide a description of Dynamic Deixis in Standard Chinese. More specifically, the present work seeks to address two main research questions:

(1) How Dynamic Deixis is expressed by speakers of Standard Chinese and what are the similarities and differences in its expression within the language in the descriptive and the dialogical data regarding the use of various linguistic devices such as verbs, satellites, and associated motion markers that convey Dynamic Deixis?

(2) How do Dynamic Deixis and Path relate to each other and what are formal and functional features that are specific to each of these semantic elements and features that distinguish them?

In order to answer these questions, we carry out the present study by adopting several theoretical and empirical approaches.

This dissertation is set in the framework of motion events (Talmy 1985, 2000). In particular, in order to carry out this study, we combine three frameworks, namely, Wälchli's (2001) typology on displacement encoding, Sinha & Kuteva's (1995) distributed spatial semantics, and Ikegami's (1979, 1987) Source-Goal asymmetry.

Although Talmy's (1985, 2000) influential typology is the most widely used framework in studies dealing with the description of motion events, there are still some unsolved problems with this typology as discussed in previous literature (Wälchli 2001; Matsumoto 2003; Slobin 2004; Beavers, Levin, & Tham 2010; Croft, Barðdal, Hollmann, Sotirova, & Taoka 2010; Fortis, Grinevald, Kopecka, & Vittrant 2011; Fortis & Vittrant 2016; *inter alia*). Over the last two decades, several important revisions of Talmy's typology have been proposed. Among which, Wälchli's (2001) typology constitutes the empirical background for the analysis of the encoding of Dynamic Deixis and Path in the present dissertation. Thus, while Talmy's classification, i.e., satellite-framed and verb-framed languages, focuses on two main categories, i.e., verb and satellite, Wälchli's typology, i.e., verbal, adnominal, and adverbial encodings, allows to cover a broader range of coding strategies, i.e., verb, satellite, adposition, and case marker. Hence, the latter typology can be applied to languages which do not only resort to verbs and satellites for the encoding of Path, but also to other morphosyntactic devices such as adpositions, case marker, and associated motion markers.

Unlike the local semantic approach (Miller & Johnson-Laird 1976; Landau & Jackendoff 1993; Svorou 1994) in which spatial semantics is assumed to be encoded in a single form-class (e.g., English prepositions), in the approach put forward by Sinha & Kuteva (1995), the authors show that such information can be distributed within a clause simultaneously across several elements belonging to different word classes. By applying the distributed semantics approach, the present dissertation examines how spatial information (including Source, Medium, Goal, Source + Medium,

Medium + Goal, Source + Goal, Source + Medium + Goal, centripetal direction, centrifugal direction, centripetal + centrifugal directions) is distributed in Standard Chinese and investigates various patterns of distribution.

In a study on the asymmetry between Source and Goal of motion, Ikegami (1987) postulates that the goal-over-source principle represents a very pervasive trend in human language. That is, when expressing Path of motion, speakers of different languages tend to favor the encoding of Goal over the Source. In other studies, the Source-Goal asymmetry has also been observed at different levels, e.g., discourse frequency, as well as morphosyntactic and semantic levels (Bourdin 1997; Ishibashi 2012; *inter alia*; reviewed in Kopecka & Vuillermet 2021). Research on spatial asymmetries mainly focus on the two portions of Path, Source and Goal, and such asymmetrical phenomenon has rarely been investigated for Dynamic Deixis. In the light of previous research, in this dissertation we investigate both Source and Goal of motion as well as the centripetal and centrifugal directions, in order to uncover various (a)symmetrical phenomena in Standard Chinese.

As regards the methodology, this dissertation combines two approaches: the stimulus-based approach and the TV series-based approach. Using two visual stimulus sets - *Trajectoire* (Ishibashi et al. 2006) and *Put & Take* (Bowerman et al. 2004) - and two TV series - *Married for Ten Years* (released in 2003) and *Loquacious Zhang Damin's Happy Life* (broadcast in 2000) -, we have collected descriptive and dialogical data to constitute the working corpora which include 3506 clauses in total.

The choice of comparing two types of data was motivated by different linguistic strategies manifested in the expression of motion events within the same language. In Lamarre (2008a, 2013), the author compares two types and two styles of data in Chinese examining dialogues extracted from TV series (spoken) and literary texts including descriptions (written). The author finds that the use of deictic satellites is widespread in dialogues and this differs greatly

from descriptions. Since each of the styles (written vs. spoken) has its own specificities, the use of descriptions (stimulus sets) and dialogues (TV series) in spoken modality in the present study can enrich the variety of previous studies and, as a matter of fact, uncover the variety of linguistic strategies used by the speakers. In addition, choosing these two data types enables us to carry out a comparative analysis and can allow us to investigate the similarities and differences in the way Dynamic Deixis and Path are expressed in the language under study.

Structure of the dissertation

This dissertation is organized in two parts. The first part provides the theoretical and methodological framework. In particular, in Part I, we introduce the notion of Dynamic Deixis (chapter 1), some basic characteristics of Standard Chinese related to motion events (chapter 2), and the methodology used to carry out the study (chapter 3). The second part presents the results of data analyses. In Part II, we examine the expression of Dynamic Deixis with reference to Path from three angles, namely the coding strategies (chapter 4), the patterns of distribution (chapter 5), and the spatial (a)symmetries (chapter 6).

We briefly introduce each chapter below.

Chapter 1 reviews the literature on the topic of Deixis within the frameworks of semantics/pragmatics and motion events. In particular, we introduce the typology proposed by Talmy (1985, 2000) and present some revisions put forward by other scholars (Wälchli 2001; Matsumoto 2003; Slobin 2004; Croft, Barðdal, Hollmann, Sotirova, & Taoka 2010; Fortis, Grinevald, Kopecka, & Vittrant 2011; *inter alia*). Moreover, this chapter discusses the debatable issue of the status of Deixis, that is, whether Deixis is a component of Path as postulated by Talmy (2000) or whether the two semantic elements should be treated separately as suggested in other studies (Koga et al. 2008; Lamarre 2008; Morita 2011; Matsumoto et al. 2017).

Chapter 2 gives a background overview of the linguistic devices available in Standard Chinese to encode different conceptual components of motion events. It briefly presents the linguistic encoding of Figure, Ground and Co-event, with a specific focus on linguistic devices available for the encoding of Dynamic Deixis and Path.

Chapter 3 presents the methodological approaches adopted in this study: the stimulus-based approach and the TV series-based approach. More specifically, the corpora are composed of the descriptive data elicited from two visual stimulus sets (i.e., *Trajectoire* and *Put & Take*) and the dialogical data consisting of data extracted from two TV series (i.e., *Married for Ten Years*, *Loquacious Zhang Damin's Happy Life*). In addition, this chapter also presents the coding and glossing systems used to treat and present the data.

Chapter 4 examines the encoding of Dynamic Deixis and Path in the Standard Chinese data following Wälchli's (2001) typology of spatial encoding, verbal, adnominal, and adverbial. We look at the coding strategies used to express Dynamic Deixis and Path in both data types (i.e., descriptive data and dialogical data) and different event types (i.e., spontaneous motion and caused motion).

Chapter 5 explores the distribution of Dynamic Deixis and Path information within a clause by applying Sinha & Kuteva's (1995) distributed spatial semantics approach. Specifically, the analyses focus on the distribution of semantic information related to different direction(s) of Dynamic Deixis (i.e., centripetal direction, centrifugal direction, and centripetal + centrifugal directions) and different portion(s) of Path (i.e., Source, Medium, Goal, Source + Medium, Medium + Goal, Source + Goal, and Source + Medium + Goal).

Chapter 6 investigates spatial (a)symmetries in the expression of Dynamic Deixis and Path. More specifically, various (a)symmetries are examined at different levels including discourse frequency,



morphosyntax, and the (a)symmetrical expressions in relation to the Ground.

The dissertation concludes with a summary of the main findings and the contribution of this study; it also discusses its limitations and provides the outlook for future research.



Part I

THEORETICAL AND METHODOLOGICAL FRAMEWORK

Chapter 1

A SURVEY OF THEORETICAL AND EMPIRICAL STUDY ON DEIXIS

1.1. Introduction

The term Deixis, which is derived from the Greek word *δειξίς*, means 'pointing', 'indicating' or 'showing' via language (Lyons 1977: 636; Yule 1996: 9; Y. Huang 2007: 132). It is also sometimes called *indexicals*.² In linguistics, any form used to accomplish the above meanings is called a deictic expression.³ Deixis is found to be one of the most basic things speakers of all languages do with utterances, and deictic expressions are among the first forms to be acquired by very young children (Lyons 1977; Levinson 1983; Yule 1996). Evidence from studies in language acquisition reveals an increase in the activity of the right hand in infants as early as six months (Ramsay 1985). Later, gestures in general and pointing, in particular, appear for communicative purposes before language (Bates, Camaioni, & Volterra 1975; quoted in Fortis & Fagard 2010). As stated by Huang (2007: 132), "Deixis is a universal linguistic phenomenon, that is, all human languages contain deictic terms". Therefore, it owns our particular attention.

In general, Deixis designates referring expressions such as 'this', 'that', 'here', 'there', 'now', 'then', 'I', 'we', and 'you', joined,

² Deixis and indexicals (or indexicality) reflect different traditions and are used with linguistic and philosophical approaches, respectively (Bühler 1934).

³ By deictic expression, it has both deictic usage and non-deictic usage. In this dissertation, we only focus on deictic usage.

where appropriate, to bodily postures, gestures, and gaze (Hanks 2005: 191). Over the last few decades, the field of Deixis has been the subject of numerous studies, with a focus mainly on deictic pronouns and demonstratives (Jarvella & Klein 1982; Weissenborn & Klein 1982; Rauh 1983; Anderson & Keenan 1985; Morel & Danon-Boileau 1992; Diessel 1999; Imai 2003; Lenz 2003; Jungbluth & Da Milano 2015; *inter alia*). Among these studies, Deixis expressed by means of verbs (e.g., 'come' and 'go') has not been much explored. Nevertheless, within the domain of motion, we can find some related research focusing on deictic verbs (Fillmore 1966, 1971, 1975; Clark & Garnica 1974, 1974; Groussier 1978a, 1978b; Ricca 1991, 1992, 1993; Wilkins & Hill 1995; Goddard 1997; Nakazawa 2006, 2007, 2009; Matsumoto, Akita, & Takahashi 2017; *inter alia*). Regarding the role of Deixis in a motion event, Talmy (2000: 53) considers it as one of the three main components of Path, together with the Vector and the Conformation.⁴ However, recent studies (Koga et al. 2008; Morita 2011; Matsumoto et al. 2017) have shown that Deixis (e.g., 'hither', 'thither') and Path (e.g., 'into', 'up', and 'across'), exhibiting differences in their coding positions, should be distinguished. These studies, which challenged Talmy's statement, serve as one of the primary sources of inspiration for the present dissertation and help us better reconsider the status of Deixis in motion events.

Chapter 1 aims (1) to review previous research on different types of Deixis within the framework of semantics and pragmatics; (2) to discuss studies on Deixis within the framework of motion events; and (3) to reconsider the status of Deixis, especially focusing on its relation to Path.

We structure this chapter as follows: section 1.2 briefly introduces the notion of Deixis, including Person Deixis, Place Deixis, and Time Deixis; section 1.3 presents Deixis as a component of Path in motion events; section 1.4 addresses the debatable issue

⁴ Talmy uses the term 'Deictic' to refer to Deixis.

regarding the status of Deixis with regard to Path; and section 1.5 summarizes the contribution and limitations of previous research.

1.2. Deixis: studies within the framework of semantics and pragmatics

In his monograph *Semantics* (Volume 2), Lyons (1977: 637) gives the following well-known definition of Deixis:

By deixis is meant the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee.

1.2.1. Anchoring of person, place, and time

As a conceptual notion, Deixis is a general term that refers to a specific person, place, or time in context. In his book *Sprachtheorie*, Bühler (1934) introduces the term *origo* that he calls 'das Koordinatensystem der subjektiven Orientierung' [the coordinate system of subjective orientation], which is used to organize the personal, spatial, and temporal structure of utterances (cited in Fricke 2003: 71). Deixis is often used to indicate people through Person Deixis (e.g., 'I', 'you'), location through Place Deixis (e.g., 'here', 'there', 'come', and 'go'), time through Time Deixis (e.g., 'now', 'then'), the preceding and following parts of the discourse through Discourse Deixis, and the social relationships on the part of the participants in the conversation through Social Deixis.⁵ Person, place, and time are generally considered the three fundamental dimensions of Deixis. They are interrelated and interdependent. The

⁵ We use the terms (i.e., Person Deixis, Place Deixis, Time Deixis, Discourse Deixis, and Social Deixis) following Fillmore (1971) and Levinson (1983). Place Deixis and Time Deixis are also called Spatial Deixis and Temporal Deixis in other studies (Anderson & Keenan 1985; Yule 1996).

examination of one type of Deixis usually asks for references to other kinds of Deixis. As stated by Fillmore (1966: 220):

Deixis is the name given to those aspects of language whose interpretation is relative to the occasion of utterance: to the time of utterance, and to times before and after the time of utterance; to the location of the speaker at the time of utterance; and to the identity of the speaker and the intended audience.

The underlying structure provides a brief review of the three types of Deixis.

Person Deixis

At the grammatical level, Person Deixis is usually expressed by personal pronouns: *I* for the first person, *you* for the second person, and *he* for the third person, etc., in English, for instance. At the semantic level, Person Deixis refers to the speaker, the addressee, and the other(s) (Lyons 1977; Levinson 1983, 2004; Anderson & Keenan 1985).⁶ Lyons (1977: 638) points out that: "The grammatical category of person depends upon the notion of participant-roles and upon their grammaticalization in particular languages". The pronominal systems show different features by combining grammatical and semantic levels. For first person, the speaker is included (+S). For second person, the addressee is included (+A). For third person, both the speaker and the addressee are excluded (-S, -A).⁷ It is important to distinguish different roles that individuals play in a speech event since they shift in the course of conversational turn-taking, and this can be seen in the example given by Levinson (2004: 112): A's 'I' becomes B's 'you', A's 'here' becomes B's 'there'.

⁶ The other(s) refer(s) to referents that are neither the speaker nor the addressee.

⁷ It is important to note that third person is quite unlike first or second person, in that it does not correspond to any specific participant-role in the speech event (Lyons 1977: 638; cited in Levinson 1983: 69).

In addition, Anderson & Keenan (1985) elaborate three main sorts of information that Person Deixis can encode. The information concerns the identification of the speaker(s) and addressee(s). They are:

(a) The number

All languages seem to make a distinction between the first person singular 'I' and at least one first person plural form 'we'. Standard Chinese makes such a two-way distinction. It differentiates between singular (i.e., 我 *wǒ* 'I', 你 *nǐ* 'you', 他 *tā* 'he', and 她 *tā* 'she') and plural forms (i.e., 我们 *wǒmen* 'we', 你们 *nǐmen* 'you', 他们 *tāmen* 'they', and 她们 *tāmen* 'they (female)').⁸ However, there are also languages, which make three, or even four-way distinctions. Fijian, an Austronesian language spoken in Fiji, has singular, dual, trial, and plural for each person, as illustrated in Table 1.

Number	Person		
	First	Second	Third
Singular	au	iko	koya
Dual	(inclusive)	kedaru	kemudrau
	(exclusive)	keiru	rau
Trial	(inclusive)	kedatou	iratou
	(exclusive)	keitou	(eratou)
Plural	(inclusive)	keda	ira (era)
	(exclusive)	keimami	

Table 1. Fijian subject pronouns (Anderson & Keenan 1985: 263)

⁸ In addition to 我们 *wǒmen* 'we', there is also 咱们 *zánmen* 'we (inclusive)'. In this dissertation, we gloss 我们 *wǒmen* as '1PL' instead of '1PL.EXCL' since the difference between inclusive and exclusive forms of the first person plural pronoun is not strictly observed in Standard Chinese.

(b) The gender

Person Deixis may code information concerning the sex (semantic gender) or arbitrary class (grammatical gender) of their referents (Anderson & Keenan 1985: 269). Let us consider examples from French in (1) and (2). When using first person singular pronoun, gender is not marked in the pronoun *je* 'I'. While it is agreed in the predicate, *vieux* 'old' for masculine reading and *vieille* 'old' for feminine reading.

(1) *Je suis vieux.* (adapted from Anderson & Keenan 1985: 270)
1SG am old.MAS.SG
'I (male) am old.'

(2) *Je suis vieille.* (ibid.)
1SG am old.FEM.SG
'I (female) am old.'

(c) The social rank and relationship of participants

Person Deixis commonly codes information concerning the social status of the speaker, the addressee, or a third party referred to, as well as the social or personal relationship between them. More specifically, it may reflect whether they are of the same or different social rank, sex, or age group; kin related in designated ways; personally intimate, etc. (S. R. Anderson & Keenan 1985: 270). The above information may be reflected in the choice of Person Deixis and in the use or not of particles or affixes indicating respect or deference. Taking honorifics as an example, many languages make a pronominal distinction between familiar and polite forms of the second singular pronoun (e.g., French *tu* vs. *vous*, German *du* vs. *Sie*, and Chinese 你 *nǐ* vs. 您 *nín*).⁹

⁹ East Asian languages are perhaps the classic cases of deictic systems that encode social and related distinctions (Anderson & Keenan 1985: 271).

Place Deixis

Place Deixis (or Space Deixis) concerns “the specification of locations relative to anchorage points in the speech event” (Levinson 1983: 79). The most well-known place-deictic words are adverbs and demonstratives, such as the two-term system *here* vs. *there*, *this* vs. *that* in English. In Standard Chinese, the demonstratives (i.e., 这 *zhè* ‘this’ vs. 那 *nà* ‘that’) and the adverbs (i.e., 这儿 *zhèr* / 这里 *zhèlǐ* ‘here’ vs. 那儿 *nàr* / 那里 *nàlǐ* ‘there’) present precisely this proximal-distal contrast. However, there are also languages (e.g., Japanese, Latin, Spanish, Turkish, and some varieties of Sinitic languages) that have a three-term system. This system is in relation to the distance of the items with respect to the speaker/addressee, as shown in Table 2 from Spanish.

Masculine singular form	Semantic distinction
<i>este</i>	Items which are close to the Speaker
<i>ese</i>	Items which are farther away from the Speaker
<i>aquel</i>	Items which are rather remote, clearly less present to Speaker and Addressee items than items marked with <i>ese</i>

Table 2. Three demonstrative adjectives/pronouns in Spanish (adapted from Anderson & Keenan 1985: 282)

Apart from adverbs and demonstratives, motion verbs, which have built-in deictic components, may also express Space Deixis. Let us look at deictic verbs in particular. The following conditions are identified by Fillmore (1975 [1971]) for the use of deictic motion verbs:

- **Reference time:** the time or a time period that is taken as the background or setting for time indications in the clause.
- **Coding time** comprises encoding time (the time at which the message is sent) and decoding time (the time at which the message is received).

- **Reference place:** the location or the object that is taken as the framework or spatial reference point for what is mentioned in the clause.
- **Coding place** consists of encoding place (the encoder's location) and decoding place (the decoder's location).

According to Fillmore, English deictic verbs *come* and *go* in (3) and (4), interpreted by Levinson (1983), involve both the time and place axis. Example (3) can be understood as 'he is moving towards the speaker's location at coding time' and (4) as 'he is moving away from the speaker's location at coding time'. However, when the subject changes to first person singular pronoun as in (5), it would be strange to understand the sentence like 'the speaker is moving towards the location of the speaker at coding time'. Instead, it's more logical to interpret it as 'the speaker is moving towards the location of the addressee at coding time'. The author explains that this usage may have diachronically arisen from a polite deictic shift to the addressee's point of view. Yule (1996: 12-13) also notices the same phenomenon and describes it as deictic projection. He explains that speakers seem to be able to project themselves into other locations before actually being in those locations since the location from the speaker's perspective can be fixed mentally and physically.

(3) *He's coming.* (Levinson 1983: 83)

(4) *He's going.* (ibid.)

(5) *I'm coming.* (ibid.)

Time Deixis

Time is generally thought of as a one-dimensional and unidirectional stream (Fillmore 1975 [1971]; Anderson & Keenan 1985). Moreover, in many instances, the dimension of time is conceptualized as analogous to the spatial one. Thus, most languages directly import the spatial expressions (e.g., spatial demonstratives *this, that*) into the temporal domain by means of the

metaphorical expression of time as a spatial dimension (e.g., *this week, that evening*).

Generally speaking, there are two distinct ways of representing the passage of time (i.e., the relation between events differing in time), as noted in previous studies (Anderson & Keenan 1985; Yule 1996; Huang 2007). One may consider time as constant and the world (events) as variables that pass through it from the past into the future (e.g., *the week ahead* as opposed to *the week behind*). One may also think of the world (events) as constant and of time as flowing past it from the future to the past (e.g., *the coming week, the week gone by*).

Time Deixis can be realized mainly in three distinct ways. The first way is in terms of a demonstrative system similar to that found in most languages for Place Deixis (e.g., *this* and *that*, as mentioned earlier in this section). In addition, languages also distinguish temporal adverbs *now* (proximal time) and *then* (distal time). The second way refers to the category of tense among the present, the past, and the future (e.g., *go, went, and will go* in English). The third way is demonstrated in the lexicon (e.g., *today, yesterday, and tomorrow*), in which the reference is incorporated in the lexical items.

Regarding Standard Chinese, the expressions of time in this language form a very rich and intricate system (Yu 1998). Basically, Chinese can use the spatial demonstratives 这 *zhè* 'this' and 那 *nà* 'that' to express time (e.g., 这天 *zhètiān* 'this day', 那年 *nànián* 'that year'). What's more, "the lexical items in the domain are systematically structured via metaphorical transfer from the space domain" (Yu 1998: 92). For example, two pairs of spatial terms often used in the expression of time are the ones showing horizontal axis 前 *qián* 'front; before' and 后 *hòu* 'behind; after', and the ones showing vertical axis 上 *shàng* 'upper; above' and 下 *xià* 'lower; under'.¹⁰ In general, 前 *qián* 'front; before' and 后 *hòu* 'behind; back'

¹⁰ Yu (1998: 107) points out that "The words involved are polysemous, but the spatial sense is more basic than the temporal one. [...] They are called 'localizers'



are used symmetrically to indicate the time 'before' and 'after' a point or a period of time at present, in the past, or in the future (e.g., 午饭前 *wǔfàn qián* [supper before] 'before the supper', 几天后 *jǐ tiān hòu* [a.few days later] 'after a few dys; a few days later'). Another pair 上 *shàng* 'upper; above' and 下 *xià* 'lower; under' are used symmetrically to indicate an earlier time and a later time (e.g., 上周 *shàng zhōu* [upper week] 'last week', 下周 *xià zhōu* [lower week] 'next week') (Yu 1998: 107-112, 2012: 1351). Besides, there are a number of words in which the spatial deixis 去 *qù* 'go' and 来 *lái* 'come' are usually used to refer to a period of time in the past and in the future, respectively (e.g., 去年 *qùnián* [gone.year] 'last year', 来日 *láirì* [coming.day] 'days to come; future') (Yu 1998: 94-98).

1.2.2. A context-dependent concept

Deixis is closely linked to the language system in use as much as it is intrinsically context-dependent. By examining Deixis within the pragmatic framework, Levinson (1983) emphasizes the critical relationship between language and context in the interpretation of Deixis. A context, in his understanding, refers to "a set of pragmatic indices, co-ordinates or reference points for speakers, addressees, times of utterance, places of utterance, indicated objects, and whatever else is needed". We can find some piece of evidence in his chapter devoted to Deixis.

The single most obvious way in which the relationship between language and context is reflected in the structures of languages themselves, is through the phenomenon of deixis.

(Levinson 1983: 54)

in Chinese grammar (see Chao 1968; Li & Thompson 1981), a term in which itself suggests that they are primarily spatial". A more detailed introduction of 'localizers' is provided in Chapter 2 (§ 2.2.2 and § 2.3.3).



Essentially, deixis concerns the ways in which languages encode or grammaticalize features of the context of utterance or speech event, and thus also concerns ways in which the interpretation of utterances depends on the analysis of that context of utterance.

(ibid.)

Anderson & Keenan (1985), Yule (1996), and Huang (2007) also make the connection between the use of deictic expressions and the contextual level.

We consider as deictic expressions (or deictics for short) those linguistic elements whose interpretation in simple sentences makes essential reference to properties of the extralinguistic context of the utterance in which they occur.

(Anderson & Keenan 1985: 259)

Deictic expressions depend, for their interpretation, on the speaker and hearer sharing the same context.

(Yule 1996: 9)

Deixis can be defined as the phenomenon whereby features of context of utterance or speech event are encoded by lexical and/or grammatical means in a language.

(Huang 2007: 132)

Levinson (2004) further explains why the pragmatic level plays an important role in the use of Deixis, which is probably due to its semantic insufficiency.



It is normally associated with linguistic expressions that are semantically insufficient to achieve reference without contextual support. That support is provided by the mutual attention of the interlocutors and their ability to reconstruct the speaker's referential intentions given clues in the environment.

(Levinson 2004: 103)

1.3. Deixis: studies within the framework of motion events

Motion, which is pervasive in our daily lives, is central to human experience. Based on the fundamental and influential work pioneered by Leonard Talmy (1972a, 1972b, 1985, 1991, 2000), numerous crosslinguistic studies on motion events have been carried out over the last decades. Before giving a detailed presentation of Deixis in previous studies, we will briefly outline the framework.

1.3.1. The typology of motion events and its revisions

In Talmy's book *Toward a Cognitive Semantics* (Volume 2), the author (2000: 25) defines a **Motion event** as "a situation containing motion and the continuation of a stationary location". He analyzes it as having four internal components:¹¹

¹¹ According to various linguists, these components are labeled differently. For example, Gruber (1965) and Jackendoff (1990) use **Theme** to refer to the object in motion or being located; Langacker (1987: 231) uses **Trajector** to refer to the figure in a relational profile and **Landmark** to other salient entities. In this dissertation, we adopt the terminology **Figure**, **Ground**, **Path**, and **Motion**, following Talmy (2000).

- **Figure:** one object moving or located with respect to another object;
- **Ground:** the reference object with respect to which the Figure moves or is located;
- **Path:** the path followed or site occupied by the Figure object with respect to the Ground object;
- **Motion:** the presence per se of motion or locatedness in the event.¹²

In addition to these essential components, a Motion event can be associated with an external Co-event, which usually indicates **Manner** or **Cause** of the motion. Examples (6) and (7) illustrate how the essential semantic elements are distributed and how Manner and Cause can integrate the internal components in a motion event.

(6)	<i>The pencil</i>	rolled	<i>off</i>	<i>the table.</i>	Talmy (2000: 26)
	FIGURE	MOTION+MANNER	PATH	GROUND	
(7)	<i>The pencil</i>	blew	<i>off</i>	<i>the table.</i>	(ibid.)
	FIGURE	MOTION+CAUSE	PATH	GROUND	

The relation borne by the Co-event to the Motion event with which it conflates is not limited to either Manner or Cause, but can range over a considerable set of alternatives (Talmy 2000: 42). Below we briefly presented some of these relations.

- Precursion

In the relation of Precursion, “the Co-event precedes the main Motion event but does not cause or assist its occurrence” (ibid.). As explained by Talmy, in (8), some glass could have fallen over the carpet without having first splintered. The splintering of the glass preceded but did not cause the motion of the glass onto the carpet.

¹² Talmy (2000) represents motion “by the form MOVE and location by BELOC (a mnemonic for ‘be located’)”.



(8) *Glass **splintered** onto the carpet.*

(ibid.)

- Enablement

In the relation of Enablement, “the Co-event directly precedes the main Motion event and enables the occurrence of an event that causes the Motion but does not itself cause this Motion” (ibid.: 43). Talmy claims that example (9) demonstrates that the fact of reaching to or grabbing the bottle does not cause the bottle to move off the shelf. Instead, it enables the person to hold the bottle in his or her hand as the person moves his or her arm back from the shelf, which actually causes the bottle’s motion.

(9) *Could you **reach/grab** that bottle down off the shelf?*

(ibid.: 44)

- Concomitance

The relation of Concomitance is “like Manner in that in it, the Co-event co-occurs with the main Motion event and is an activity that the Figure of the Motion event additionally exhibits” (ibid.: 46). For instance, the woman in (10) could wear a green dress whether or not she goes to a party, and the fact of wearing a green dress has no effect on her path to the party.

(10) *She **wore** a green dress to the party.*

(ibid.)

- Concurrent Result

In the relation of Concurrent Result, “the Co-event results from – that is, is caused by – the main Motion event, and would not otherwise occur. It takes place concurrently with, or during some portion of, the Motion event” (ibid.: 46-47). Example (11) illustrates that the water splashes concurrently with and as a result of the rocket’s motion into it.

(11) *The rocket **splashed** into the water.*

(ibid. :47)

- Subsequence

In the relation of Subsequence, “the Co-event takes place directly after the main Motion event, and is enabled by, is caused by, or is the purpose of that Motion event” (ibid.: 47).¹³ As we can see in (12), the prisoner should first be into his cell so that they could execute the action of locking.

(12) *They **locked** the prisoner into his cell.* (ibid.)

Besides the above characteristic of a motion event, Talmy (2000: 35) furthermore distinguishes two types of motion:

- **Translational motion:** in which “an object’s basic location shifts from one point to another in space”;
- **Self-contained motion:** in which “an object keeps its same basic, or ‘average’ location, such as oscillation, rotation, dilation, etc.”

These two types of motion are exemplified in (13) and (14), respectively. In (13), the Figure (i.e., the ball) moves down the hall with the Manner ‘bounce’ by changing its location, while in (14), the Figure (i.e., the ball) always moves within the same area (i.e., floor tile) with the Manner ‘bounce up and down’ without changing its location.

(13) *The ball bounced down the hall.* (Talmy 2000: 36)

(14) *The ball bounced up and down on the same floor tile.* (ibid.)

According to Talmy (2000: 25-26), in translational motion, the motion component refers to the occurrence (MOVE) or nonoccurrence (BELOC) specifically of translational motion, as shown in (15) and (16). In the present dissertation, we focus exclusively on

¹³ Talmy (2000: 47) adds that: “Subsequence may better be considered a cover term for a small set of such finer relations that will need to be structurally distinguished”.

translational motion and the phenomenon of the occurrence (MOVE) that concerns motion in which the location of the Figure changes in the time period.

(15) *The pencil rolled off the table.* (Talmy 2000: 26)

(16) *The pencil lay on the table.* (ibid.)

More precisely, what we examine as a translational motion here involves two types of event, namely spontaneous motion and caused motion (Choi & Bowerman 1991).¹⁴ Ishibashi (2010: 515), who employs these two terms in her study, explains that the type of spontaneous motion typically represents an animate entity moving on his/her own, and being linguistically expressed by an intransitive construction, such as *John ran to the station*; the type of caused motion represents an animate entity carrying an (in)animate entity, and is typically expressed by a transitive construction, such as *Mary brought a fruitcake to her mother*.

In Talmy's approach, Path is considered the core schema among the semantic components of a motion event. The author (2000: 53) considers that: "although Path has so far been treated as a simplex constituent, it is better understood as comprising several structurally distinct components". Therefore, Talmy (2000: 53, 54, 56) proposes to decompose Path into three main components, as follows:

- **Vector:** the direction of the Figure's movement with respect to the Ground, comprising the basic types of arrival, traversal, and departure;

¹⁴ Spontaneous motion corresponds to Talmy's (2000: 28) self-agentive motion and nonagentive motion (which is excluded in our examination), and is also called autonomous motion (Lamarre 2007a, 2008a). Caused motion corresponds to Talmy's (2000: 28) agentive motion.

- **Conformation:** the spatial relation (i.e., a geometric complex) between the Figure and the Ground during the Figure's movement;
- **Deictic:** the direction of the Figure's movement with respect to the speaker.

In English, the Vector can be realized by prepositions *at*, *to*, *from*, *via*, *along*, etc. The Conformation can be illustrated by 'the *inside* of [an enclosure]' or 'the *surface* of [a volume] of the Ground. The Deictic typically has two member notions 'toward the speaker' and 'in a direction other than toward the speaker' and can be exemplified by the English deictic verbs *come* and *go*.

Based on how languages characteristically map the core schema (i.e., the syntactic realizations of Path) into the verb or the satellite, Talmy (1991: 486, 2000: 222) categorizes the world's languages generally into two types: **verb-framed languages** and **satellite-framed languages**.¹⁵ Besides, the author (2000: 64) also mentions a split (or complementary) system of conflation in which "a language can characteristically employ one conflation type for one type of Motion event, and characteristically employ a different conflation type for another type of Motion event".

According to Talmy (2000), languages belonging to the first type (i.e., verb-framed languages) include Romance, Semitic, Japanese, Tamil, Polynesian, Bantu languages, etc. Languages of the second type (i.e., satellite-framed languages) comprise Germanic, Finno-Ugric, Chinese, Ojibwa, and Warlpiri languages, etc. Example (17) from Spanish, a typical verb-framed language, illustrates the encoding of Path by the verb *entró* 'enter'. By contrast, example (18)

¹⁵ According to Talmy, the typology he proposed is based on "a language's most characteristic expression of motion". By 'characteristic', it means that: "(1) it is colloquial in style, rather than literary, stilted, and so on; (2) it is frequent in occurrence in speech, rather than only occasional; (3) it is pervasive, rather than limited - that is, a wide range of semantic notions are expressed in this type" (Talmy 2000: 27).

from English, a representative of satellite-framed language, shows the encoding of Path by the satellite *out*.

- (17) Verb-framed language (Spanish) (Talmy 2000: 49)
La botella entró a la cueva (flotando).
 the bottle MOVED-in to the cave (floating)
 [verb]
 ‘The bottle floated into the cave.’

- (18) Satellite-framed language (English) (Talmy 2000: 104)
I run out of the house.
 [satellite]

By satellite, Talmy (2000: 102) defines it as “the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb root. It relates the verb root as a dependent to a head”. A set of forms can function as satellites in a language, for instance, English verb particles, German separable and inseparable verb prefixes, Latin or Russian verb prefixes, Chinese verb complements, etc. These forms often partially overlap with the category of prepositions, verbs, or nouns.

As a pioneering study, Talmy’s typology has influenced and inspired many researchers who work on the domain of motion events. However, this typology still remains to be improved. Talmy’s work has not only been reformulated and refined by the author himself (1985, 1991, 2000), but has also received other criticism and revisions (Wälchli 2001; Matsumoto 2003; Berthele 2004; Slobin 2004; Kopecka 2006; Beavers, Levin, & Tham 2010; Croft, Barðdal, Hollmann, Sotirova, & Taoka 2010; Fortis, Grinevald, Kopecka, & Vittrant 2011; Fortis & Vittrant 2011, 2016; Imbert, Grinevald, & Sörös 2011; *inter alia*), in particular, regarding the binary classification of languages into the verb-framed languages vs. satellite-framed languages.

Our review, far from being exhaustive, aims to provide succinctly different major criticism and revisions of the typology of

motion events. In previous literature, three main issues were highly debated regarding Talmy's typology: the first concerns the fact that Path is encoded either in a verb or in a satellite, leaving out other encoding possibilities, such as prepositions, postpositions, and case markers. The second is about how to classify languages with serial verb constructions. Such languages usually have a special kind of construction in which Manner and Path are both expressed in verbs. The last one is that the typology based on classifying languages (i.e., verb-framed language and satellite-framed language) is problematic, since there are some putative satellite-framed languages showing verb-framed behavior and some putative verb-framed languages showing satellite-framed behavior. In the following part, we attempt to present the three main problems in detail and look at different suggestions.

As far as the first issue is concerned, that is encoding Path in either a verb or a satellite, such typology cannot take into consideration languages such as Russian and spoken Indonesian, as noticed by Fortis & Vittrant (2016: 8-9). Examples (19) and (20) are cases in point. In both examples, neither verb nor satellite is used to encode Path. Instead, prepositional phrases are used. Therefore, classifying languages according to Talmy's verb-framed and satellite-framed languages typology is far from satisfactory when languages such as Russian and Spoken Indonesian are concerned.¹⁶

- (19) Russian¹⁷ (Mazon 1963: 296; cited in Hagège 2010: 247;
see also Fortis & Vittrant 2016: 8)
- | | | |
|------------------------------|----------|-------------|
| <i>ja</i> | <i>k</i> | <i>vam.</i> |
| 1SG.nom | towards | 2PL.DAT |
| 'I will come to your place.' | | |

¹⁶ Talmy (2000: 168) distinguishes satellite from adposition.

¹⁷ The abbreviations used in Russian are as follows: 2 second person, DAT dative, PL plural, and SG singular.

(20) Spoken Indonesian¹⁸ (Septiani Wulandari p.c.; cited in Hagège 2010:
247; see also Fortis & Vittrant 2016: 9)

<i>məreka</i>	<i>kə</i>	<i>bioskop</i>
3PL	towards	movies

'They are going to the movie.'

In their papers, Wälchli (2001) and Matsumoto (2003) try to provide different solutions to the above problem. Wälchli (2001) points out that Talmy's typology with three lexicalization types (i.e., conflation of Motion and Path, conflation of Motion and Manner, and conflation of Motion and Figure) is too narrow since it focuses only on verbs (verbally) while ignoring other devices (e.g., pre- or postpositions and case (adnominally), verbal affixes or verb particles (adverbally), and a combination of the verbal, adnominal and adverbial encoding).

Wälchli (2001) proposes a typology of displacement that is based exclusively on basic intransitive motion by examining a sample of 40 languages (with special reference to Latvian). Before presenting this typology, it is important to clarify what the author understands as 'displacement' and 'basic'.

By 'displacement' ('déplacement'), Wälchli (2001) distinguishes its semantics from 'movement' ('mouvement'), following Tesnière (1959: 307-310), see also Boons (1987) and Borillo (1998). Tesnière (1959: 308) points out that the movement is intrinsic, whereas the displacement is extrinsic.¹⁹ Wälchli (2001: 298) reformulates their distinction as follows: "Movement is 'inner' motion describing the kind of activity involved in motion (e.g., *run*, *walk*, *jump*, *fly*, and *swim*). Displacement is 'outer' motion and is concerned with how somebody or something changes its location in space, notably with respect to a given local point of reference (e.g., *enter*, *quit*, *descend*, and *pass*)".

¹⁸ The abbreviation used in Spoken Indonesian is as follows: 3PL third person plural.

¹⁹ "Le mouvement est intrinsèque tandis que le déplacement est extrinsèque."

By 'basic', Wälchli (2001) means "the kind of movement involved is prototypically the normal motion of humans (not animals or objects) moving without special haste and without vehicles". It concerns the cases as shown in (21) but not (22) and (23).

- (21) *Lucien went into the house.* (Wälchli 2001: 300)
 (22) *Lucien ran into the house.* (ibid.)
 (23) *The bottle floated into the cave.* (ibid.)

The basic intransitive motion comprises six kinds of displacement, which Wälchli (2001) calls 'cardinal' kinds of displacement. They are referred to by means of Latin prepositions, as illustrated in Table 3.

	Latin preposition	illustration
Cardinal goal kinds	AD	F go to G
	IN	F enter/go into G
	SUPER	F go onto G
Cardinal source kinds	AB	F come from G
	EX	F come out of G
	DE	F come down from G

Table 3. Cardinal kinds of displacement (adapted from Wälchli 2001: 300)

Berthele (2004) proposes two modifications of Wälchli's cardinal kinds of displacement in order to match his needs for analyzing data from Swiss German (Muotathal dialect), Standard German, and French, as shown in Table 4. Firstly, Berthele (2004) proposes to categorize the cardinal displacement in a more general manner, not specifying for source or goal in the vertical dimension. As can be seen from the table below, in Wälchli's list, displacement along the vertical axis is conflated with a specified motion away or towards a Ground; while in Berthele's list, no Ground element is mentioned with regard to vertical direction (upwards and downwards). Berthele explains that a motion verb, for example,

tomber 'fall', which encodes a downward, can open a slot for either the source (*tomber de l'arbre* 'falls from the tree') or goal (*tomber sur le sol* 'falls onto the ground'). Therefore, the association of the vertical axis and the Ground is an unnecessary constraint for the data analysis. Secondly, Wälchli associates deixis and displacement by using the deictic verbs 'come' and 'go'. However, Berthele disregards deixis and uses the verb 'displace' instead. The author (2004: 100) argues that "the deictic center taken depends on the deictic stance taken in a particular narrative" and "it is perfectly possible to have a path such as 'F come into G'".

Latin preposition	Illustration Berthele (2004)	Illustration Wälchli (2001)
AD	F displace to G	F go to G
IN	F displace into G	F enter/go into G
SUPER	F displace up	F go onto G
AB	F displace away from G	F come from G
EX	F displace out of G	F come out of G
DE	F displace down	F come down from G

Table 4. Cardinal kinds of displacement (revised by Berthele 2004: 100, based on Wälchli 2001: 300)

As presented earlier, Talmy's typology focuses on two main categories, namely the verb and the satellite, whereas Wälchli's typology involves verbal, adnominal, and adverbial elements. According to the locus of highest differentiation of displacement, Wälchli (2001: 301) proposes three main types for the encoding of displacement. His typology has considerably influenced our description of Standard Chinese concerning the linguistic encoding of Path and Dynamic Deixis presented in chapter 2. The three types are:

- **(V) verbal encoding** (i.e., by the verb stem);
- **(AN) adnominal encoding** (i.e., by prepositions, postpositions or case marking);
- **(AV) adverbial encoding** (i.e., by verb affixes or verb particles)



The author (2001: 301) specifies that:

The terms verbal, adnominal, and adverbial indicate nothing else than the syntactic position (slots) of non-verbal markers. There may be more than one verbal or adnominal or adverbial slot in a language (e.g., two verbal slots in verb serializing languages, or both case and preposition, or both preverbs and verb particles). We may speak therefore of the verbal, adnominal or adverbial macro-slots to unite several slots of the same type.

His statements are exemplified in (24)-(26), illustrating the three gross types in Mapudungun, Icelandic, and Ossete.²⁰ In Mapudungun, displacement is encoded predominantly verbally by the two verbs *tripa-* 'go.out' and *amu-* 'go.to'. Although there are also adnominal markers *mew* 'INS', this instrumental case is invariable for source and goal in the noun phrases *sinagoga mew* [synagogue instrumental case] 'synagogue' and *ruka mew* [house instrumental case] 'house'. In Icelandic, displacement is encoded predominantly adnominally by the two prepositions *úr* 'out of' and *í* 'into'. In addition, one can also find the verb *fara* 'go', but it happens to be the same for both displacement 'go out of' and 'go into'.²¹ In Ossete, displacement is encoded predominantly adverbally by the two preverbs *ra-* 'out' and *ba-* 'in'. Though there also involve verbs and case makers, the same verb *cäwyn* 'go/come' is used, and case makes only two distinctions: source *-äj* 'ablative' and goal *-mä* 'dative'.

²⁰ Elements in boldface illustrate verbal encoding, underlined elements adnominal encoding, and double underlined elements adverbial encoding.

²¹ Wälchli (2001: 302) notices that "The adnominal type is always defective because, in clauses without overt local nominal expressions, displacement cannot be encoded adnominally. Thus adnominal marking implies adverbial marking to some extent".

- (24) Mapudungun (Chile)²² (predominantly verbal encoding) (Wälchli 2001: 301)
Tripa-tu-lu engün tati sinagoga mew, Jesus, Santiaw ka
go.outagain-CNV they ART synagogue INS Jesus James and
Juan amu-y engün ta Simon ka Andre tañi rukamew.
 John **go.to-3** they ART Simon and Andrew ART:POSS houseINS
- (25) Icelandic²³ (predominantly adnominal encoding) (ibid.)
Úr samkundunni fóru þeir rakleitt í hús
Out.of synagogue:DAT **go:PS:3PL** they straight into house:ACC
Simonar og Andrésar og með þeim Jakob og Jóhannes.
 Simon:GEN and Andrew:GEN and with them James and John
- (26) Ossete²⁴ (predominantly adverbial encoding) (ibid.)
Ämä ämbyrdgänän-äj ku ra-cydysty, wäd tağd ba-cydysty
 And synagogue-ABL when out-go:PS:3PL then quickly in-go:PS:3PL
Simony ämä Andrei xädzar-mä, Jakobi-mä ämä Johanni-mä.
 Simon:GEN and Andrew:GEN house-DAT James-DAT and John-DAT
 ‘And forthwith, when they were **come out of** the synagogue, they **entered**
into the house of Simon and Andrew, with James and John.’

Besides Wälchli’s proposal, which focuses on the loci of displacement encoding, another important revision of Talmy’s typology is Matsumoto’s head-framed and non-head-framed languages. Matsumoto (2003: 408) points out that: “Talmy’s typology of verb vs. satellite-framed languages suffers from the misleading use of the term ‘verb’. What is meant by the term verb is in fact the head of a clause”. He argues that satellites can also be a verb, as evidenced by *flotando* ‘floating’ from Spanish and *aruite* ‘walk’ from Japanese in (27) and (28).

²² The abbreviations used in Mapudungun are as follows: ART article, CNV converb, INS instrumental, and POSS possessive.

²³ The abbreviations used in Icelandic are as follows: 3 3rd person, ACC accusative, DAT dative, GEN genitive, and PL plural.

²⁴ The abbreviations used in Ossete are as follows: 3 3rd person, ABL ablative, DAT dative, GEN genitive, PL plural, and PS present.

(27) Spanish (Matsumoto 2003: 404)

La botella entró a la cueva flotando.
the bottle moved.in to the cave floating

‘The bottle floated into the cave.’

(28) Japanese (ibid.)

Taro wa kawa o aruite watat-ta.
Taro top river ACC walk cross-PST

‘Taro walked across the river.’

Furthermore, Matsumoto (2003) argues that ‘satellite’ does not include prepositions or case markers. He proposes using a broader term ‘head’ instead of ‘verb’. ‘Head’ is determined by “1) grammatical marking such as tense and agreement, and 2) the determinant of the argument structure of a sentence” (Matsumoto 2021). In his 2003 paper, Matsumoto suggests the reformulation of ‘verb-framed languages’ into ‘head-framed languages’ and of ‘satellite-frame languages’ into ‘non-head framed languages’.²⁵ The author claims that his proposal captures more accurately what Talmy has intended to capture and that the head and non-head notions can cover cases in which neither verb nor satellite frame can explain, such as sentences like (29).

(29) *John walked through the building.* (Matsumoto 2003: 408)

Besides, Matsumoto also argues that Talmy’s terminology can only be applied to a Macro-event, which is unfortunate. The terms that he and his colleagues put forward in their recent publications and talks (Matsumoto 2018, 2021; Matsumoto & Kawachi 2020) deal with the issue of motion events with a broader perspective and are not limited to Macro-events. Their classification includes three coding types, namely²⁶:

²⁵ Matsumoto (2003: 408) specifies that “[...] satellites and non-heads are slightly different notions: all satellites are nonheads by definition, but not all nonheads are satellites. Satellites as defined above do not include prepositions, since they are not a sister of a verb”. For instance, example (29) is not satellite-framed but non-head framed.

²⁶ In a previous publication, Matsumoto (2017) “calls the contrast the head Path coding vs. the head-external Path coding” (Matsumoto 2018: 275).

- **Head (H) path-coding:** Path is coded in the head (=main verb) of a sentence;
- **Head-external (HE) path-coding:** Path is coded in an element other than the head of a sentence;
- **Co-Head (CoH) path-coding:** Path is coded in one of the 'co-heads' of a sentence (one of the symmetrical serial verbs).

Examples (30)-(32) provide each type an example in a typical language. In (30), the example is classified as a Head path-coding language. In Yupik, Path is expressed by the head verb *iter* 'enter'. As for German, (31) can be a good example that represents Head-external path-coding language. In this type, Path is encoded by an element (i.e., *in* 'into') other than the head verb (i.e., *läuft* 'ran'). Thai, a language which usually uses a serial verb construction to describe a motion event, corresponds very well to the type of Co-Head path coding language, as shown in (32). The coding of Path in Thai is distributed in two head verbs (i.e., *khaw3* 'enter' and *haa5* 'reach') having the same status.

- | | | | | | |
|------|------------------------------------|--------------------------------------|------------------|------------|------------------|
| (30) | Yupik | (Head path-coding language) | (Matsumoto 2021) | | |
| | <i>aqvaqu-a-luni</i> | <i>iter</i> - <i>tuq.</i> | | | |
| | run.hard-Inf | enter -3Sg | | | |
| | 'He entered running hard.' | | | | |
| (31) | German | (Head-external path-coding language) | (ibid.) | | |
| | <i>Mein Freund</i> | <i>läuft</i> | <i>in</i> | <i>den</i> | <i>Pavillon.</i> |
| | My friend | ran | into | the.Acc | pavilion |
| | 'My friend ran into the pavilion.' | | | | |



- (32) Thai (Co-Head path coding language) (ibid.)
phUan3 wiN3 khaw3 maa1 haa5 raw1.
 friend run enter come reach me
 ‘My friend ran in to me.’

Let us move on to the second issue: classifying languages with serial verb constructions. Languages with such constructions initially drew Slobin’s attention and motivated the linguist to introduce a new category not mentioned in Talmy’s typology. In his 2004 paper, Slobin provides another solution for languages that cannot fit either type in Talmy’s classification (i.e., verb-framed and satellite-framed languages). He proposes a third type labeled ‘**equipollently-framed languages**’. This proposal has been inspired by Zlatev & Yangklang’s (2004) observation of Thai, Ameka & Essegbey’s (later published in 2013) examination of West-African languages and other serial-verb languages, as well as other types of languages in which both Manner and Path are expressed by equipollent elements (Slobin 2004: 228). Below are the criteria that Slobin cited from Ameka & Essegbey:

When the properties are tallied, we find that serialising languages share more properties with S-languages than the V-languages to which they are supposed to belong while still possessing a unique property. What this shows is that they cannot be said to belong to either type. Instead, they appear to belong to a class of their own.

(Ameka & Essegbey 2013: 36)

More precisely, ‘equipollent elements’ refers to “elements that are equal in formal linguistic terms, and appear to be equal in force or significance” (Slobin 2004: 228). The example (33) from Thai, a single-clause sentence, illustrates these equipollent elements by means of a serial verb construction. It includes three different kinds of motion verbs: the Manner verb *dəən* ‘walk’, the (non-deictic) Path verbs *khâam* ‘cross’ and *khâw* ‘enter’, and the Deictic verb *paj* ‘go’.

- (33) Equipollently-framed language (Thai) (Zlatev & Yangklang 2004: 160)
chán dǎən khâam thanǎn khâw paj naj sǎan.
 I walk cross road enter go in park
 ‘I walked across the road and into the park.’

By examining motion event descriptions in Chinese novels, Chen & Guo (2009) advocate Slobin’s proposal and consider Chinese an equipollently-framed language. They argue that Chinese has a pervasive serial verb construction that allows for at least two verb slots in a single clause. Besides, there is no explicit morphological marking to indicate which one is the main verb. Therefore, *pǎo* ‘run’ (a Manner verb) and *chū* ‘exit’ (a Path verb) are of equal status in (34), which form a serial verb construction. And this can be evidence for Chinese as being an equipollently-framed language. However, the typological classification of Chinese depends crucially on whether the combination of *pǎo* ‘run’ and *chū* ‘exit’ in (34) should be analyzed as a compound verb or as a syntactic construction.

According to some linguists (Chao 1968: 458-480; C. N. Li & Thompson 1981: 54-65; Packard 2000: 95-100; Lamarre 2007a: 9-16; D. 刘丹青 Liú 2017: 10-14), cases as in (34) must be treated as a compound verb rather than a serial verb construction, due to the grammaticalization of Path verbs. One of the various kinds of evidence which support the above statement is the phonetic evidence. As pointed out by Lamarre(2007a: 9), when Path verbs appear after a co-event verb, they “lose their tonal contrast and become unstressed syllables, pronounced in the same prosodic unit as the co-event verb. Neutralization of tonal contrast is a feature regularly linked with grammaticalization in Mandarin Chinese (e.g., 拉出来 *lā-chu-lai* (not *lā-chū-lái*)”.²⁷

Slobin’s third type, although renovates Talmy’s typology and can be applied to certain languages such as Thai, might not be an

²⁷ Lamarre (2007a) also provides other evidence (i.e., morphological, syntactic, and semantic evidence).

ideal solution for languages like Chinese in which the status of Path verbs is problematic.

- (34) 我跑出了厨房。 (Chen & Guo 2009: 1751)
- | | | | | |
|-----------|------------|------------|-----------|-----------------|
| <i>Wǒ</i> | <i>pǎo</i> | <i>chū</i> | <i>le</i> | <i>chúfáng.</i> |
| I | run | exit | PFV | kitchen |
- 'I ran out of the kitchen.'

Let us next consider the third issue. This issue concerns the typology based on the two-way classification of languages as verb-framed and satellite-framed. It is problematic since there are putative satellite-framed languages showing verb-framed behavior and putative verb-framed languages showing satellite-framed behavior.

In her 2006 paper, Kopecka observes that French (and possibly other Romance languages), although belonging to the verb-framed language type according to Talmy's typology, can also show satellite-framed behavior. Examples (35) and (36) illustrate that Path can be encoded in a verb-framed pattern by the verb *est entré* 'entered' and in a satellite-framed pattern by the prefix *en-* 'away', respectively.

- (35) Verb-framed pattern (Kopecka 2006: 84)
- Pierre est entré dans l'école en courant.*
(lit.) Pierre entered the school running.
- (36) Satellite-framed pattern (ibid.)
- Pierre s'est enfui de l'école.*
Pierre ran away (escaped) from school.

Evidence from Italian, documented in Iacobini & Masini (2006), also confirms Kopecka's observations as far as other Romance languages are concerned. Italian is considered as a verb-framed language following Talmy's classification. Nevertheless, Path can also be found to be encoded in a particle, as exemplified by *fuori* 'out' in

- (37) Italian²⁸ (Iacobini & Masini 2006: 160)
Luigi è saltato fuori all'improvviso.
 Luigi be.3SG jump.PART.PAST out suddenly
 'Luigi suddenly popped up.'

Other languages, like Chinese, which are considered by Talmy (2000) as satellite-framed languages, can also show verb-framed behavior (Lamarre 2003: 6-8; see also Beavers et al. 2010: 350). Lamarre (2003b: 6) put forward that Modern Chinese should rather be classed as what Talmy (2000) called a 'split system', since the strategy depends on event types. As shown by the author, to encode spontaneous motion events, both Path verbs (e.g., *huí* in (38)) and Path satellites (e.g., *-jìn* 'into' in (39)) are frequently used. By contrast, to encode caused motion events, only Path satellites can be used (e.g., *-jìn* 'into' in (40)).

- (38) 你回来! (adapted from Lamarre 2003: 7)
Nǐ huí-lai!
 2SG return-hither
 'Come back!'
- (39) [...], 一条蛇突然从外面爬了进来, ...。 (ibid.)
[...] Yì tiáo shé tūrán cóng wàmiàn pá-le-jìn-lai, ...
 one CL snake suddenly from outside crawl-PFV-into-hither
 '[...], a snake suddenly crawled in from outside, ...'
- (40) 我把它扔进了废纸篓。 (ibid.)
Wǒ bǎ tā rēng-jìn-le fèzhǐlǒu.
 1SG OM it throw-into-PFV wastepaper.basket
 'I threw it into my wastepaper basket.'

Kopecka (2006) and Beavers et al. (2010) use *pattern* instead of *language* when referring to the type of different coding strategies. A similar approach can be found in Croft et al. (2010), who carry out a constructional analysis to revise Talmy's typological classification.

²⁸ The abbreviations used in Italian are as follows: 3 third person, PART.PAST past participle, and SG singular.

In his book *Typology and Universals*, Croft (2003: 42) distinguishes what he calls 'a classification of language types' and 'a classification of linguistic types':

- **A classification of language types:** typology, in the sense of a cross-linguistic classification of types, is often considered to be a classification of whole languages into types, that is, a classification of language types;
- **A classification of linguistic types:** a structural type is represented by a particular construction in a particular language, that is, a classification of linguistic types.

Croft (ibid.) further points out: "A language may have more than one construction representing more than one linguistic type". In their 2010 paper, Croft et al. criticize that "Talmy's typological classification applies to individual complex event types within a language, not to languages as a whole" (2010: 202). Thus, the authors suggest elaborating Talmy's typology as follows:

- a.) **Verb-framing construction** (or verb-framed construction);
- b.) **Satellite-framing construction** (or satellite-framed construction);
- c.) **Double-framing construction;**
- d.) **Symmetric construction.**

Speaking of verb-framing and satellite-framing constructions, Bulgarian and Icelandic show respectively these two constructions, as illustrated in (41) and (42). In Bulgarian, Path is encoded by the verb *vleze* 'enter', whereas in Icelandic, Path is encoded by the satellite *yfir* 'across'.



(41) Bulgarian²⁹ (Croft et al. 2010: 216)
Butilkata **vleze** *v* *pešterata*.
 bottle:the **enter.PF.AOR** in cave:the
 ‘The bottle entered the cave.’

(42) Icelandic³⁰ (Croft et al. 2010: 213)
Ég *dansaði* **yfir** *götuna*.
 I.NOM danced **across** street:the.ACC
 ‘I danced across the street.’

As to the double-framing construction, Croft et al. (2010: 208) observe a phenomenon “in which the path or framing expression is expressed twice, once as a detached satellite and once as part of the verb”, as shown in (43) from French.

(43) French (Aske 1989: 14, from Eve Sweetser; cited in Croft et al. 2010: 208)
monter **en haut/** **descendre** **en bas**
 go.up above/ descend below
 ‘go up (above)/ go down (below)’

Symmetric construction comprises three strategies, namely, serialization, compounding, and coordination.

As for the first strategy (i.e., serialization), “languages use serial verb constructions in which both event and frame are expressed in forms that may occur as predicates on their own” (Croft et al. 2010: 207). Example (44) is provided as an illustration of this type by Croft et al (ibid.) where each component (i.e., Manner, Path, and Deixis) is considered to be expressed symmetrically in the three verbs *pǎo* ‘run’, *chū* ‘exit’, and *lái* ‘come’.³¹

²⁹ The abbreviations used in Bulgarian are as follows: AOR aorist and PF perfective.

³⁰ The abbreviations used in Icelandic are as follows: ACC accusative and NOM nominative.

³¹ Note that, in Li & Thompson (1981: 58), the authors consider this example as using a verb-directional compound, but not a serial verb construction. However, due to some reasons, they transcribe the directional complements as having their full tonal value.

(44) Mandarin Chinese³²(Li & Thompson 1981: 58; cited in Croft et al. 2010: 207)

<i>tāmen</i>	<i>pǎo</i>	<i>chū</i>	<i>lái</i>	<i>le.</i>
3PL	run	exit	come	PF

‘They came running out.’

The second strategy (i.e., compounding) is more grammaticalized than serialization. In this second type, forms which express each component are morphologically bound or at least more tightly integrated than in the serial strategy. This can be illustrated from Kiowa in (45) for the combination of a path component (*cándé* ‘reach’) and a deictic component (*-à̀* ‘come’).

(45) Kiowa³³ (Watkins 1984: 179; cited in Croft et al. 2010: 207)

<i>ò:pàl</i>	<i>sép</i>	<i>cándé</i>	<i>-à̀</i>	<i>nò</i>	<i>pàhí:</i>	<i>bà-thídáy</i>
nearer	rain	reach	-come	and.DS	clearly	get.wet.PF

‘The rain is coming closer and it is clear we will get wet.’

With regard to the third strategy (i.e., coordination), the combination of two components in a motion event can be expressed by a coordination construction. In the case of Amele in (46), such a combination is realized by a path component (*cesel* ‘return’) and a deictic component (*nu* ‘go’).

(46) Amele³⁴ (Roberts 1987: 102; cited in Croft et al. 2010: 207)

<i>cois</i>	<i>hina</i>	<i>gad</i>	<i>cesel</i>	<i>-l</i>	<i>nu</i>	<i>-ug</i>	<i>-a</i>
OK	2SG	may	return	-PRED(SS)	go	-2SG	-IMP

‘Alright you can go home [back] now.’

Besides the above criticism and revisions of Talmy’s typology presented above, one cannot ignore the fruitful achievements made within the project entitled *Typologie de la Trajectoire – Complexité*

³² The abbreviations used in Mandarin Chinese are as follows: 3 3rd person, PF perfective, and PL plural.

³³ The abbreviations used in Kiowa are as follows: df different subject and pf perfective.

³⁴ The abbreviations used in Amele are as follows: 2 2nd person, IMP imperative, PRED (SS) predicate marker (same subject), and SG singular.

et Changements des Systèmes Typologiques.³⁵ Among their many contributions, three important ones are worth mentioning, which are the elaborated definition of Path (Fortis et al. 2011), the refined definition of satellite (Imbert et al. 2011), and the coding grid of path-expressing constructions proposed by Fortis & Vittrant (2011, 2016).

Firstly, in the light of Talmy (2000), Fortis, Grinevald, Kopecka & Vittrant (2011: 34) examine in depth the notion of Path, the core schema, and propose the following definition:

La trajectoire est un concept à différencier du mouvement, et une notion complexe. Par trajectoire, nous entendons l'ensemble des points que pourrait parcourir un mobile se déplaçant dans l'espace, ou le schéma mental d'une relation orientée imposée à des entités dans l'espace.³⁶

Moreover, the authors further elaborate the concept of Path with the following notions:

- Une ligne ou ensemble de points avec un certain contour (droite, courbe, sinueuse...) et une certaine orientation (horizontal, verticale...), bornés ou non ;
- Différents repères (source, espace médian, but) ordonnés à différentes phases du déplacement (initiale, médiane, finale) ;
- Ligne ou ensemble de points qui sont situés par rapport à un point de vue, i.e., un centre déictique ou point d'ancrage choisi par le locuteur.³⁷

³⁵ More details about the project TRAJECTOIRE can be find at: <http://www.ddl.ish-lyon.cnrs.fr/trajectoire/>.

³⁶ See the English translation below:

Path is a concept to be distinguished from movement, and a complex notion. By Path, we mean the set of points that a mobile entity moving in space, or the mental schema of an oriented relation imposed on entities in space.

³⁷ See the English translation below:

- A line or set of points with a certain contour (straight, curved, sinuous...) and a certain orientation (horizontal, vertical...), bounded or not;

Secondly, based on Talmy's previous works, Imbert, Grinevald & Sörös (2011) make an improvement in refining the definition of 'satellite'. With a functional-typological approach, they propose a multidimensional definition of 'satellite' which takes into account the following three criteria (ibid.: 103-104):

- Syntactic criteria: satellite is an element depending on the verb. In addition, satellite does not introduce any syntactic argument;³⁸
- Semantic criteria: satellite is an element that encodes the Path components in a motion event;
- Lexical criteria: satellite is an element of lexical origin which was gradually grammaticalized as a dependent of the verb.

Last but not least, Fortis & Vittrant (2011, 2016) propose a coding grid in which a path encoding construction is labeled according to the locus or loci where Path is encoded. Within the project, this coding grid is applied to a number of 30 languages belonging to about ten language families. Examples (47)-(49) illustrate constructions with one, two, and three path encoding loci, respectively. In their paper, H stands for Head, S satellite, and R relator.³⁹

-
- Different reference points (source, medium space, goal) ordered at different portions of the movement (initial, intermediate, final);
 - Line or set of points which are located in relation to a point of view, i.e., a deictic center or anchor point chosen by the speaker.

³⁸ That is to say, satellite is not linked syntactically to an adpositional or nominal phrase which express the Ground.

³⁹ According to Fortis & Alice (2016: 19), "[...] elements which specify a relation between an argument and a head are said to have the function of *relator*".

- (47) H-framed (Fortis & Vittrant 2016: 20)
She left the hotel.
- (48) SR-framed⁴⁰ (Polish, Kopecka, p.c., cited in Fortis & Vittrant 2016: 20)
Chłopiec wybiegł z morza na plażę.
boy.NOM.MASC out-run.PFV from sea.GEN.N on beach.ACC.FEM
(litt.) 'The boy ran out of the sea onto the beach.' [Polish, Kopecka, p.c.]
- (49) HSR-framed⁴¹ (Japanese, Ishibashi, p.c., cited in Fortis & Vittrant 2016: 20)
onnanohito-ga dookutu-no naka-kara de-te iki-masi-ta.
woman-NOM cave-GEN inside-ABL exit-CVB go-HON-PST
'The woman exited from the inside of the cave away from me.' p.c.]

In this section, we have reviewed Talmy's (2000) motion event typology and discussed some major revisions. Chinese has been mainly considered as a satellite-framed language (Talmy 2000), an equipollently-framed language (Slobin 2004; Chen & Guo 2009), and a language showing symmetric constructions (Croft et al. 2010). In Chapter 4 (§4.3), the issue of the encoding of Path in Standard Chinese will be further discussed.

1.3.2. Deixis: terminological clarification

In this section, we try to sketch the state of the art on Deixis within the framework of studies devoted to motion events. We attempt to clarify various terms employed by different linguists when working on different languages. The term Deixis that we are interested in can be mainly found in studies that typically use the following terms: *deictic verbs (deictic motion verbs)*, *directionals (deictic directionals or dynamic directionals)*, *associated motion*, and *Dynamic Deixis*. Let us examine each of these terms and some related works.

⁴⁰ The abbreviations used in Polish are as follows: ACC accusative, FEM feminine, GEN genitive, MASC masculine, N neuter, NOM nominative, and PFV perfective.

⁴¹ The abbreviations used in Japanese are as follows: ABL ablative, CVB converb, GEN genitive, HON honorific, NOM nominative, and PST past.



Deictic verbs

Over the past decades, *deictic verbs* (or *deictic motion verbs*, or 'come' and 'go') have been the interest of researchers working on either a particular language (Fillmore 1966, 1975 [1971], 1983; Sinha 1972; Gandour 1978; Pryor & Farr 1989; Ricca 1992; Senft 2000; Antonopoulou & Nikiforidou 2002; Pate 2016) or a comparison of several languages (Gathercole 1977; Nakazawa 1990; Ricca 1991, 1993; Lewandowski 2007; Matsumoto et al. 2017). Among these studies, Fillmore's (1975 [1971]) work on English *coming* and *going* and Ricca's (1993) cross-linguistic empirical study are worth our great attention.⁴²

Fillmore (1975 [1971]), in his 1971 *Santa Cruz Lectures on Deixis* cites the definitions of *come* and *go* respectively from the *Oxford English Dictionary* (OED):

come: An elementary intransitive verb of motion expressing movement towards or so as to reach the speaker, or the person spoken to, or towards a point where the speaker in thought or imagination places himself, or (when he himself is not in question) towards the person who forms the subject of his narrative.

(Fillmore 1975 [1971]: 51)

go: (Where) the prominent notion is that of destination or direction... the verb is distinguished from COME by the implication that the movement is not towards the speaker, or the person whose point of view he for the moment assumes.⁴³

(ibid.)

The author presents the use of deictic motion verbs in relation with time and space and formulates a set of hypotheses that

⁴² In this dissertation, the presentation of Ricca's (1993) study, originally written in Italian, is based mainly on the reviews given by Fortis (2008) and Fortis & Fagard (2010).

⁴³ Fillmore adds that *go* is seen as paired with *come*.



condition the use of deictic motion verbs, as summarized by Lewandowski (2007: 15) in Table 5.

Goal of movement	Verb
1. Speaker's location at coding time	COME
2. Speaker's location at reference time	COME/GO
3. Addressee's location at coding time	COME/GO
4. Addressee's location at reference time	COME/GO
5. Speaker's home base	COME/GO
6. Addressee's home base	COME/GO
7. Speaker in comitative contexts	COME/GO
8. Addressee in comitative contexts	COME/GO
9. Central character of a narrative	COME/GO
10. Any other location	GO

Table 5. Summary of Fillmorean appropriateness conditions for English *come* and *go* (Lewandowski 2007: 15)

Conditions 1-4 are related to *reference time*, *coding time*, *reference place*, and *coding place* (see §1.2.1). When motion is oriented toward the location of the speaker at coding time, only *come* can be used, as exemplified in (50). When motion is oriented toward the location of the speaker at reference time, both *come* and *go* are equally well in (51) and (52). When motion is directed toward the location of the addressee at either coding time or reference time, both *come* and *go* are acceptable in (53) and (54).

(50) *He came here two hours before I arrived.* (Fillmore 1975 [1971]: 55)

(51) *He'll come to the office tomorrow to pick me up.* (Fillmore 1975 [1971]: 59)

(52) *He'll go to the office tomorrow to pick me up.* (ibid.)

(53) *She'll come there to meet you.* (ibid.)

(54) *She'll go there to meet you.* (ibid.)

Conditions 5 and 6 are illustrated in examples (55) and (56). They are concerned with the notion *home base*, a term to which Fillmore didn't give a clear definition. The author (1975 [1971]: 60)



considers that: "...the destination of 'come' is not a place where either participant is at coding time or was at reference time, but is understood as the home base of one of them". Based on Winston (1988) and Di Meola (1994), Lewandowski (2007: 13) suggests that: "*home base* does not only refer to the speaker's or addressee's residence, but it might also be extended to the speaker's or addressee's usual work place or any other place with which he is strongly identified".

(55) *He came over to my place last night, but I wasn't home.*

(Fillmore 1975 [1971]: 60)

(56) *I came over to your place last night, but you weren't home.*

(ibid.)

Conditions 7 and 8 are in relation with *comitative contexts*. In such contexts, the use of *come* and *go* indicates motion at reference time which is in the company of either the speaker or the addressee, as examples (57), (58), (59), and (60) illustrate.

(57) *Would you like to come (along)?*

(Fillmore 1975 [1971]: 66)

(58) *Would you like to go (along)?*

(ibid.)

(59) *Can I come along?*

(ibid.)

(60) *Can I go along?*

(ibid.)

Condition 9 deals with the cases in which the deictic center is in a third-person discourse. When *come* and *go* are used in a third-person narrative, the deictic center is anchored in the central character. Fillmore (1975 [1971]: 67) points out that it would be strange to say a sentence like (61), and he stresses that only one person at a time can be referred to as the central character. In (61), the use of *come* twice reflects that both Fred and Bill are considered as the central character, which violates Fillmore's statement. We suggest that (62), (63), and (64) would be acceptable, following Fillmore's argument.



(61) *After John came to Fred's house, John and Fred together came over to Bill's house.*

(Fillmore 1975 [1971]: 67)

(62) *After John came to Fred's house, John and Fred together went over to Bill's house.*

(63) *After John went to Fred's house, John and Fred together came over to Bill's house.*

(64) *After John went to Fred's house, John and Fred together went over to Bill's house.*

Deictic motion verbs, such as *come*, *go*, *bring*, and *take*, though constituting a small set, are among the most frequently used in common speech. We only concentrate on *come* and *go*, since *bring* and *take* can be paraphrased as 'cause to come' and 'cause to go,' according to Miller & Johnson-Laird (1976: 539).

Besides the use of *come* and *go* examined by Fillmore (1975 [1971]), another important issue concerning deictic verbs discussed in previous studies is also worth noting. Are COME and GO lexically universal and deictically opposite?

We have presented earlier in this section the definitions of *come* and *go* in English, cited by Fillmore (1975 [1971]), which are seen as a paired notion. In these definitions, what differs *come* and *go* the most is the perspective with respect to the speaker. In addition, Fillmore (1975 [1971]: 52, 1983: 220) also observes that *come* and *go* differ in relation to what he calls 'reference place': "*come* has many uses in which it functions as a Goal-oriented verb, while *go* functions both as a Source-oriented verb and as a verb which is neutral with respect to these two possible orientations".⁴⁴ In (65), the reference time *at midnight* implies the arrival time which means that he should reach the Goal (i.e., arrive at home) at midnight. By contrast, in (66), the reference time *at midnight* implies the departure time which means that he should leave the Source (i.e., a place other than the home) at midnight. The neutral use of *go* is exemplified in (67), which involves both the Source (i.e., Vancouver) and the Goal (i.e., Hawaii).

⁴⁴ Fillmore (1983: 219) speaks of the starting point or point of origin as the Source, the ending point or destination as the Goal.



- (65) *He came home at midnight.* (Fillmore 1983: 220)
(66) *He went home at midnight.* (ibid.)
(67) *He went from Vancouver to Hawaii last week.* (ibid.)

A similar observation has also been found in Miller & Johnson-Laird (1976: 531):

‘Come’ entails a change of location, but it also entails a destination – someone who is coming will not have come until he has reached the destination (although someone who is going will have gone before he gets there.

We can see that *come* and *go* do not always behave oppositely. *Go* can sometimes be used in a situation when it is irrelevant to the speaker.

With regard to the deictic opposition between ‘come’ and ‘go’, Wilkins & Hills (1995) wrote an article entitled *When ‘go’ means ‘come’: Questioning the basicness of basic motion verbs*. In their paper, they question some of the basic assumptions concerning motion verbs, especially regarding the lexical universals of ‘come’ and ‘go’ and the universal deictic opposition manifested by the two verbs. They observe that (1995: 209-210):

It is commonly assumed that all languages have a class of motion verbs and that this class will minimally include two forms which correspond to English ‘come’ and ‘go’. It is also usual to presume that these two verb forms manifest a universal deictic opposition which is frequently characterized as ‘motion-towards-speaker’ for the ‘come’ form and ‘motion-away-from-speaker’ (or ‘motion-not-towards-speaker’) for the ‘go’ form. In short, ‘come’ and ‘go’ tend to be treated as lexical universals, belonging to a notionally coherent class of motion verbs, and both encoding deictic information.

In order to investigate the universality of ‘come’ and ‘go’, Wilkins & Hills (1995) examine two genetically unrelated and

geographically remote languages, Mparntwe Arrernte (Pama-Nyungan, Australian) and Longgu (Oceanic, Austronesian). The authors suggest that: "If lexical universal is understood in the strictest sense as meaning that all natural languages possess a monomorphemic root which codes the same conceptual content, then it is possible to state with confidence that COME is not a lexical universal". Both Arrernte and Longgu confirm this statement. In Arrernte, the authors identify a basic set of four general motion roots (i.e., *lhe-* 'go', *unte-* 'hurry along', *knge-* 'carry along', and *alpe-* 'go back') which does contain the GO form but not the COME form. The COME form is encoded in a derived verb stem which is composed of a basic motion root and a bound deictic morpheme (i.e., *petye-* 'come', *utne-type-* 'hurry hither', and *knge-tye* 'bring'). In Longgu, as observed by the authors (1995: 231): "the expression that unambiguously corresponds to COME is the phrasally complex *la mai* 'come', consisting of the verb *la* 'go, travel, move along a path' and a directional particle *mai* 'hither, direction towards speaker or deictic center'. [...] The expression which occurs in immediate opposition to *la mai* 'come' is *la hou* 'go (from here)'. Hence, Longgu has a way of indicating the deictic sense of motion. However, both COME and GO expressions in this language are phrasally complex, being headed by the same generic motion verb root *la* 'go, travel, move along a path'. The corresponding COME and GO expressions in different languages show not only the diversity of deictic coding systems but also its complexity.

In the following paragraphs, we shift our view from individual languages to a larger scope of languages and take a look at Ricca's empirical study. In his book, Ricca (1993) examines the use of *deictic verbs* in 20 languages spoken in Europe.⁴⁵ By *deictic verbs*, the author refers to the morphemes expressing movement either

⁴⁵ The languages include: Italian, Spanish, Portuguese, French, German, English, Dutch, Swedish, Danish, Czech, Polish, Russian, Ukrainian, Serbo-Croatian, Slovene, Lithuanian, Albanian, Modern Greek, Hungarian, and Finnish.

towards (ventive) or away from (itive) the origo.⁴⁶ The study presented in his book was conducted with the help of a questionnaire. Native speakers of different languages were asked to inform the questionnaire by replacing the term MOVE in a contextualized sentence with a deictic motion verb. More specifically, the verb should be one of the closest equivalents of the English *come* and *go*, if they exist in the target language. The contextual information is provided for each sentence (in the square brackets), as exemplified in (68).⁴⁷

(68) [Mother calls from the kitchen. Son replies from another room] (Ricca 1993: 145)

M: - MOVE, dinner is ready!

S: - OK, I MOVE immediately.

A possible answer to replace MOVE in English can be like (69).

(69) M: - *Come, dinner is ready!*

S: - OK, I am coming immediately.

The results of Ricca's study suggest that three groups of languages should be set apart, as summarized in Lewandowski (2007) and Fortis & Fagard (2010):

- **Fully deictic languages** (Italian, Spanish, Portuguese, Hungarian, Modern Greek, Albanian, and Finnish);
- **Predominantly deictic languages** (Swedish, Danish, German, Dutch, Slovene, Serbo-Croatian, and to a lesser degree, English and French);
- **Non-deictic languages** (Eastern and North-Eastern Europe).

In fully deictic languages, the coming and going verbs display strictly a deictic behavior and code systematically a centripetal movement with ventive and a centrifugal movement with itive.

⁴⁶*Ventive* and *itive* are used based on their Latin origin. Other terms sometimes seen are *venitive* and *andative* (Bourdin 1992) or *centripetal* and *centrifugal* (Fortis & Fagard 2010).

⁴⁷ Sentences are tested in different contexts, such as in imperative and interrogative sentences, in telic and atelic events, etc.

Concerning predominantly deictic languages, the deictic dimension is decisive in these languages and the use of ventive and itive competes with each other and is conditioned by several factors. As for non-deictic languages, they use the same verb for both centripetal and centrifugal movement, and the verb does not involve deixis in the interpretation of the utterance it appears in (Lewandowski 2007: 16; Fortis & Fagard 2010: 31).

By exploring the use of deictic motion verbs in a cross-linguistic perspective, Ricca's (1993) work contributes significantly to the research domain on Deixis. However, it also has some limitations. *Coming* and *going* verbs are not the only way to express spatial deixis that involves movement towards or away from the origio. Other realizations can also express centripetal and centrifugal directions, such as prefixes *hin-* and *her-* in German, *po-* and *przy-* in Polish. Therefore, the neglect of these devices does not allow the author to establish an adequate classification that can also apply to other languages not mentioned in this study. The classification of twenty languages in three groups merely based on deictic verbs seems to be unsatisfying for the examination of deictic system. It is important indeed to take account of other morphological, syntactical, and lexical devices which encode Deixis as deictic verbs do.

Directionals

As pointed out by Guillaume (2000: 150), the term *directionals* "comes from descriptions of Mayan languages (Robertson 1980; Haviland 1991, 1993; Craig 1993; Zavala 1994) and Papua New Guinea languages (Foley 1986) which have extensive system of this type of category". It was not until the development of discussion on grammaticalization in the late 80s' that *directionals* became of particular interest because of the fact that they were resulting from

the grammaticalization of lexical verbs of motion (Craig 1993: 62).⁴⁸ Since then, this term was widely used in languages belonging to different language families (Awakatek, a Mayan language, Larsen 1994; Mwotlap, an Oceanic language, François 2003; Chinese, a Sino-Tibetan language, Lamarre 2007, 2008; Polynesian languages, Moysse-Faurie 2016; *inter alia*). In previous literature published on associated motion markers, directionals are more and more used as a cover term for grammaticalized morphemes which share specific functions, as opposed to associated motion markers that will be discussed later.

Among the above studies, we will mainly look at (Craig) Grinevald's work (1993; 2011) on Jakaltek's *directionals*. The term *directionals* is usually used in studies concerning motion event descriptions. Grinevald's (2011: 50) explains it as follows: "In the case of the expression of Path, [...], besides the lexical verbal inventories, one checks for the existence of morphosyntactic systems, such as adpositional and case systems, as well as path satellite systems (known under labels such as 'directionals' or 'preverbs' etc.)".

In her 1993 paper, Craig discusses the *directionals*, their meaning, and discourse function of Jakaltek, a Mayan language. Craig (1993: 24) observes that: "One of the characteristics of the Jakaltek directional system is the frequent combination of directionals. It is very common for verbs to bear two directionals, and occasionally three". This can be schematized as VERB – DIR1 – DIR2 – DIR3.⁴⁹

It is important to give a brief explanation of which kind of element can be assigned to the three slots, for DIR1, DIR2, and DIR3,

⁴⁸ Craig Grinevald Colette = Grinevald Colette.

⁴⁹ DIR stands for *directional*, and the numbers indicate their position. The inventory given by Craig (1993: 24) is as follows:

VERB	-	1	-	2	-	3
		pax		(v)h		toj
		kan		(v)y		tij
		kanh		(v)k		
				(v)l		
				(v)k'		

respectively. According to the author (2011: 65-66), elements that can be put in DIR1 are what she calls *aspect-like directionals*, which are closest to the verb root. Elements that can be used in DIR2 concern those that express either absolute direction in space (up/down/across) or boundary crossing motion (in/out). Elements allocated in DIR3 are deictic directionals (towards or away). The combinations of two and three directionals are illustrated in (70) and (71), respectively. In the description of other languages, we find the terms *deictic* and *non-deictic directionals* when only two slots are available, such as Awakatek (a Mayan language spoken in Guatemala) (Larsen 1994) and Chinese (Lamarre 2007a, 2008a).

(70) Jakalteq (Craig 1993: 24)

<i>ay-Ø-ik-toj</i>	<i>naj</i>	<i>yul</i>	<i>yatut</i>
EXIST-A3-DIR-DIR	NCL/he	E3.in	E3.house
	2	3	

‘He was in his house.’

(71) Jakalteq (adapted from Craig 1993: 25; see also Grinevald 2011: 65)

<i>x-Ø-s-muj-kan-ay-toj</i>	<i>heb'</i>	<i>naj</i>	<i>naj</i>
ASP-him-he-bury-DIR-DIR	PL	CL/they	CL/him
	1	2	3

‘They buried him (once and for all-down-away).’

Besides (Craig) Grinevald’s work (1993; 2011), another study which is also worth mentioning is Fortis and Fagard (2010). The authors gave a series of lectures on *Space and language* at the Leipzig summer school in typology and present three directions that *dynamic directionals* encode. In their lectures, Deixis is introduced in a broad perspective that comprises verbal and non-verbal deixis. Verbal deixis, especially deictic verbs, has already been presented above when reviewing Ricca’s (1993) work. We now look at non-verbal deixis.

In Fortis & Fagard’s (2010) work, deictic motion is treated as a speaker-centered motion. Many languages make a two-way distinction between the centripetal and centrifugal directions. However, some languages have a three-way distinction, which is

centripetal, centrifugal, and transverse. According to Fortis & Fagard (2010: 16), “many languages have dynamic directionals that encode direction toward (centripetal) or away (centrifugal) from a deictic center”. To illustrate this point, the authors propose the following schematic representation for the centripetal direction in Figure 1 and centrifugal direction in Figure 2 respectively⁵⁰:

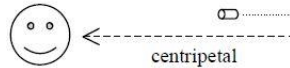


Figure 1. Centripetal direction (Fortis & Fagard 2010: 16)

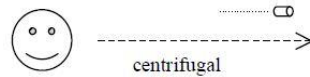


Figure 2. Centrifugal direction (ibid.)

As for the transverse direction, it indicates that a referent moves across the field of vision of a deictic center (Diessel 1999: 46; cited in Fortis & Fagard 2010) or in an ambidistal area (Fortis & Fagard 2010). This can be illustrated in Figure 3.

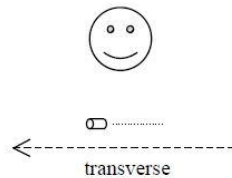





Figure 3. Transverse direction (ibid.: 17)

Spanish is a good example that makes a two-way distinction between centripetal and centrifugal direction, as shown in (72) for the centripetal direction. Furthermore, this language also makes a

⁵⁰ The moving entity  refers to the Figure; the arrow  means the direction; the smiley  indicates the point of view.



distinction between *aquí* (without movement) and *acá* (with movement).

- (72) Spanish (Fortis & Fagard 2010: 16)
¡Ven *acá!*
 come.IMPV.2SG here.CPET
 'Come here!'

Few languages possess the transverse system. As pointed out by the authors, it is mainly found in East Uvean (like a number of other Polynesian languages) (cf. Moyses-Faurie 2007), Kiowa, and Nunggubuyu (cf. Heath 1980), as illustrated in (73) and (74).

- (73) East Uvean⁵¹ (Moyse-Faurie 2007: 1; cited in Fortis & Fagard 2010: 18)
ko ai te matu'a aē 'e 'alu agé?
 pred who spec old.man deic npast go transv
 'Who is that old man passing by?'

- (74) Nunggubuyu⁵² (Heath 1980: 152; cited in Fortis & Fagard 2010: 18)
 YUWA:-GI-YAJ.
 DIST-CL-TRANSV [CL is a nominal classifier]
 'There s/he goes across [from us].'

Associated motion

The term 'associated motion' is a relatively newly identified concept that was initially proposed by Koch (1984) for a verbal category of the Australian Aboriginal language Kaytej. According to Koch, the function of this category is to "SPECIF[Y] VARIOUS KINDS OF MOTION associated with the activity [of the verb] and to distinguish the time of the motion relative to the main activity – whether the motion is PRIOR TO, SUBSEQUENT TO, or CONCURRENT WITH the time of the main activity", as summarized and emphasized in Guillaume (2016: 84). Examples (75), (76), and (77) illustrate respectively the three

⁵¹ The abbreviations used in East Uvean are as follows: DEIC deictic, NPAST non past, PRED predicative marker, SPEC specific article, and TRANSV transverse directional.

⁵² The abbreviations used in Nunggubuyu are as follows: CL classifier, DIST distal, and TRANSV transverse directional.

temporal relations (i.e., prior to, subsequent to, and concurrent with) and different direction of the motion (i.e., away, back, and towards the speaker). In a recently published volume dedicated to the phenomenon of ‘associated motion’, Guillaume & Koch (2021b: 3) reformulate the definition of ‘associated motion’ and define it as “a verbal grammatical category, separate from tense, aspect, mood, and direction, whose function is to associate, in different ways, different kinds of translational motion (spatial displacement / change of location) to a (generally non-motion) verb event”.

Kaytej (Arandic language)⁵³

- (75) Prior motion, direction ‘away’ (Koch 1984: 27)
Atne nte athe-yene-ne.
 shit your.ERG excrete-go.and-IMPV
 ‘You go and shit.’
- (76) Subsequent motion, direction ‘back’ (Koch 1984: 29)
Alarre-lalpe-nhe?
 kill-and.return-PAST
 ‘Did you kill anything before you came back?’ (asked of hunter on his return)
- (77) Concurrent motion, direction ‘toward the speaker’ (Koch 1984: 30)
Ware ampe-yernalpe-rrane mwernart-atheke
 fire burn-while.coming-PROG this.way-toward
 ‘The bushfire is burning in this direction.’

As stated in the introduction of the book *Associated Motion* edited by Guillaume & Koch (2021b), the phenomenon of associated motion was initially recognized in Aboriginal languages of *Central Australia* in the 1980s (starting with Koch 1984; Tunbridge 1988; Wilkins 1989, 1991). Then many examples from other languages have subsequently been identified in the regions below; but, conspicuously, not (yet) in Europe.⁵⁴

⁵³ The abbreviations used in Kaytej are as follows: ERG ergative, IMP imperative, PAST past, and PROG progressive.

⁵⁴ Detailed descriptions of associated motion in a wide range of the world’s languages can be found in the collective volume *Associated Motion*, edited by Guillaume & Koch (2021a). One exception is found in a European language,

- Western Amazonia (starting with Guillaume, 2000, 2006, 2008, 2009; Sakel, 2004);
- Central America (starting with Zavala Maldonado 2000; O'Connor 2004);
- North America (M. Dryer 2002, 2007);
- Africa (starting with Voisin 2010, 2013; Kawachi 2011; Renaudier 2012; Belkadi 2014, 2015, 2016; Kießling & Bruckhaus 2017; Persohn 2018);
- Asia (starting with Jacques 2013; Konnerth 2014, 2015; Vittrant 2015; Stoynova 2016; Boro 2017; Alonso de la Fuente & Jacques 2018);
- the Oceanic family in the South Pacific (Meier 2020);
- Papua New Guinea (M. S. Dryer 2013; Cleary-Kemp 2015).

The number of associated motion systems can range from one (e.g., Tungusic languages) or two members (e.g., two-way systems in Gyalrongic, a Sino-Tibetan language) to up to fifteen contrasting associated motion values (e.g., the most elaborated associated motion systems are found in the Arandic languages of Central Australia and the Takanan languages of Western Amazonia). As pointed out in Guillaume and Koch (2021b: 4), associated motion can be expressed by various forms (i.e., verbal affixes, clitics, and particles or auxiliaries), and in different linguistic tradition, these forms receive a wide range of descriptive labels, such as “‘motion / motion-cum-purpose / purposive / intentional’, ‘(deictic) directional / directive’, ‘ven(i)tive / andative / itive’, ‘hither / thither’, ‘centrifugal / centripetal’, ‘(cis- / trans- / dis- / re-) locative’, ‘displacement’, ‘(secondary / locative) aspect’, etc.”.

Following different descriptive traditions, the overabundance of terminology that indicates associated motion might not be easy for linguists who work on various languages to have a comprehensive understanding of each other. As a guide to help

Western Sicilian, in a recent study in which associated motion markers are identified (De Pasquale & Guillaume 2021), soon after the publication of Guillaume & Koch's (2021a) book.



readers better understand the relation of different terms, Guillaume and Koch (2021b: 10) provide a recapitulative list of equivalents (see Table 6) that are used by different authors of the chapters in the book *Associated Motion* (2021).

Direction	Terms
toward deictic center	ventive, venitive, centripetal, cislocative, HITHER, TOWARD, COM(ING)
away from deictic center	itive, andative, centrifugal, translocative, THITHER, HENCE, AWAY, GO(ING)
no specific direction	andative, ambulative, mobilative, MOT(IVE) ALONG, NEUTRAL, GO(ING)
indirect, multiple locations	ambulative, distributive, AROUND, HERE AND THERE, HITHER AND THITHER, RANDOM, AIMLESS, circumlocative, circular
returning	reversive, returnative, BACK
bidirectional	roundtrip, counterdirectional, returnative, GO & DO & RETURN
reach endpoint	adlocative, arrive
depart	LEAVE

Table 6. Equivalent directional terms (Guillaume & Koch 2021b: 10)

Dynamic Deixis

The term *Dynamic Deixis* is used within the DEIXIS DYNAMIQUE project (2015-2018) in order to make a distinction from *Static Deixis* (i.e., pronouns, demonstratives).⁵⁵ Based on the work of Fortis & Fagard (2010), Lamarre et al. (2022) propose the definition of Dynamic Deixis as follows:

The notion of ‘dynamic deixis’ is understood as the variation in time of the distance to a viewpoint. This implies a direction along an axis defined by its relation to the deictic center (or viewpoint).

⁵⁵ The DEIXIS DYNAMIQUE project (2015-2018) was financed by the Fédération de Recherche - FR 2559, Typologie et Universaux Linguistiques (CNRS). More information of this project can be found in the following website: <http://www.typologie.cnrs.fr/spip.php?rubrique106>.

Regarding the deictic center, 'toward the deictic center' and 'away from the deictic center' expressions are typically interpreted in terms of the speaker's location since the speaker is usually understood as the deictic center by default.

Lyons (1977: 638) makes a similar statement using the term 'viewpoint':

The canonical situation-of-utterance is egocentric in the sense that the speaker, by virtue of being the speaker, casts himself in the role of ego and relates everything to his viewpoint. He is at the zero-point of the spatiotemporal co-ordinates of what we will refer to as the deictic context.

However, deictic center (or viewpoint) can also be shifted to some other entity than the speaker. As presented earlier in this chapter, two distinct centers (i.e., the speaker and the addressee) are distinguished, and languages can differ in the extent to which they allow a shift of the deictic center to a place other than that of the speaker. Let us look at some related phenomena observed in Gathercole (1978), summarized by Hijazo-Gascón (2017: 308-309).

Based on the works of Fillmore (1966) and Talmy (1975), Gathercole (1978: 74-75) proposes the term 'immediate deixis' in which "the relevant potential presuppositions involve the presence (or absence) of the speaker or hearer at the goal at the time of utterance".⁵⁶ In this context, there are three different cases for the languages (Gathercole 1978: 75-76; see also Hijazo-Gascón 2017: 309):

- Use of COME with either the speaker or the addressee at the point of reference at the utterance time;
- Use of COME only if the deictic center is the speaker, present at the goal of movement at the utterance time;

⁵⁶ Note that the presuppositional elements (i.e., presence or absence of the speaker or addressee) are not operative in every language, but each of them is operative in some languages (Gathercole 1978).

- Use of COME and GO without any presuppositional content.

The following languages belong to the first case: English, Turkish, German, Nepali, Tamil, and in general Croatian. This is shown in English (e.g., (78) and (79)) and confirmed by a native speaker of Nepali (e.g., (80) and (81)). In these languages, both the speaker and the addressee can be the deictic center.

English (Hijazo-Gascón 2017: 309)

(78) *Can I come to your house?*

(79) *Can you come to my house?*

Nepali⁵⁷ (Parajuli Krishna, personal communication)

(80) म तिम््रो घर आउ-न सक्-छु?
ma timro ghar aauna sakchu?
 1sg 2sg.h.gen home come-inf can-1sg.pres
 Can I come to your house?'

(81) तिमी मेरो घर आउ-न सक्छौ?
timi mero ghar aauna sakchau?
 2sg.h 1sg.gen home come-inf can-1sg.pres
 Can you come to my house?'

Languages of the second case are Spanish, Japanese, Thai, and possibly Chinese.⁵⁸ In this case, the deictic center can only be the speaker, as illustrated in Spanish (e.g., (82)) and in Chinese (e.g., (85)). The deictic center cannot be the addressee in these languages, as shown in (83) and (86), which are unacceptable. Otherwise, the GO should be used, as in (84) and (87).⁵⁹

⁵⁷ The abbreviations used in Nepali are as follows: GEN genitive, H honorifics, INF infinitive, PRES present, and SG singular.

⁵⁸ Gathercole (1978: 76) points out that one speaker places Chinese belonging to the first case.

⁵⁹ Gathercole (1978: 76) notes one exception for Thai that allows *mah* 'come' to be used for motion towards the addressee if the particular lexical item has been used previously in the discourse. Hijazo-Gascón (2017: 309) also notes that in Spanish, *venir* 'come' can be used for motion towards the deictic center unless the speaker is at the addressee's house at the utterance time. Lewandowski (2014:



Spanish⁶⁰

(adapted from Hijazo-Gascón 2017: 309)

- (82) *¿Puedes venir a mi casa?*
can.2SG.PRS come.INF all 1SG.GEN house
'Can you come to my house?'
- (83) **¿Puedo venir a tu casa?*
can come all 2SG.GEN house
'Can I come to your house?'
- (84) *¿Puedo ir a tu casa?*
can.1SG.PRS go.INF all 2SG.GEN house
'Can I go to your house?'

Chinese

- (85) 你能来我家吗?
nǐ néng lái lái lái wǒ jiā ma?
2SG can come 1SG home Q
'Can you come to my house?'
- (86) *我能来你家吗?
**wǒ néng lái lái lái nǐ jiā ma?*
1SG can come 2SG home Q
'Can I come to your house?'
- (87) 我能去你家吗?
wǒ néng qù nǐ jiā ma?
1SG can go 2SG home Q
'Can I go to your house?'

The third case is much less prominent than the first and second cases since the use of 'come' and 'go' does not require any presuppositional elements (i.e., presence or absence of the speaker or addressee) at all. The language concerned is Indonesian, in which

44) points out that: "recent cross-linguistic research has revealed that [...] languages such as Spanish or Portuguese, in others, the deictic center of COME can be shifted to other goals of movement, e.g., the addressee or even another goal of movement beyond the speech act participants".

⁶⁰ The gloss of examples (82)-(84) was not provided in the original work and was added with the help of Magdalena Lemus, a native speaker of Spanish in Colombia. The abbreviations used in Spanish are as follows: 1 first person, 2 second person, GEN genitive, INF infinitive, and PRS present.



the verbs *datang* 'come' and *pergi* 'go' are used almost with the same meaning and can be omitted from the sentence without changing the meaning (Hijazo-Gascón 2017), as illustrated in (88) and (89).

	Indonesian		(Gathercole 1978: 76)
(88)	<i>Apakah kamu akan datang/pergi ke rumah ku?</i>		
	QM you FUT come/go to house my		
	'Will you come/go to my house?'		
(89)	<i>Saya akan datang/pergi ke rumah saudara.</i>		
	I FUT come/go to house you		
	'I will come/go to your house.'		

The deictic center can not only be based on the speaker's, the addressee's, and other participants' perspectives but can also be shifted from the speaker's location to the addressee's location or from the speaker's physical location to his/her psychological location. This phenomenon is described as deictic projection by Lyons (1977: 579) and Yule (1996: 13).⁶¹ As stated by Yule (1996: 12): "It is important to remember that location from the speaker's perspective can be fixed mentally as well as physically". He (ibid.) further explains his statement as follows:

Speakers temporarily away from home location will often continue to use 'here' to mean the (physically distant) home location, as if they were still in that location. Speakers also seem to be able to project themselves into other locations prior to actually being in those locations, as when they say 'I'll come later' (= movement to addressee's location). This is sometimes described as deictic projection.

⁶¹ Lyons (1977: 579) points out that 'come' in some languages (e.g., *venir* 'come' in French, *venire* 'come' in Italian) cannot be used in deictic projection as freely as in other languages (e.g., *come* in English).

Recall that (86) in Chinese is not acceptable since the deictic center cannot be the addressee, according to Gathercole (1978). However, in certain contexts, for instance, out of politeness, 来 *lái* 'come' can be used when the deictic center is projected to the addressee or another person related to the topic; also noted by Wen (2007). Imagine a situation in which the speaker hears someone knocking on the door outside his/her house. In approaching the door, the speaker usually uses the utterance in example (90) in which the deictic center is projected to the person outside the house.

(90) Chinese

马上就来!

mǎshàng

jiù

lái!

immediately

at.once

come

'(I) will come immediately!'

Besides deictic center and viewpoint, there are other linguists, such as Oshima (2006) who distinguishes between deictic center and what he calls reference point. The author (2006: 287) argues that: "COME/GO (English come/go and their counterparts in other languages) refer to a contextually provided set of individuals (i.e., reference point), rather than to a specific entity that serves as the 'deictic center'.

1.4. Rethinking the status of Deixis

As research on motion events has progressed, different opinions in regard to the status of Deixis have been put forward. In §1.3.1, we have introduced Talmy's (2000) position who considers Deixis one of the main components of Path, together with Vector and Conformation. However, in more recent studies (Koga, et al. 2008; Lamarre 2008; Morita 2011; Matsumoto et al. 2017), the status of Deixis has been questioned and challenged. In contrast to Talmy's point of view, it has been proposed that Deixis should be distinguished and treated separately from Path.

Although Talmy's (2000) considers Deixis as one of the component of Path, the author (2000: 57) himself also notes that the encoding of Deictic component behaves a little bit differently in certain languages, such as Korean:

Like Spanish, Korean can occupy its main verb slot with either type of Path verb – that is, with a Conformation verb or a deictic verb [...]. But unlike Spanish, Korean can represent both Path components concurrently in nonagentive sentences. [...] Thus, Korean is characteristically Path verb type of language, but it structurally distinguishes the Deictic component from the Conformation component of Path and accords it higher priority when both components are present.

Lamarre (2008a: 74) also points out that Japanese behave very similarly to Korean in that it frequently expresses deictic and nondeictic motion together in spotanenous motion, for example *deteike* 'go out' and *oritekita* '[she/he] came down'.

In Talmy's (2000: 60) typology, both Korean and Japanese are categorized as V-framed languages. Evidence of the specificity of Dynamic Deixis can also be found in the way that some S-framed languages encode this notion distinctively from other languages belonging to the same language type. In S-framed languages, Path is usually encoded in satellites rather than in verbs. This is the case for Russian and Polish since they lack synthetic deictic motion verbs which correspond to English *come* and *go* (Lamarre 2008a: 75). In both languages, Dynamic Deixis is encoded by satellites (i.e., verb prefixes) and is usually combined with a manner of motion verb. Such satellites are *pri-* 'centripetal direction' and *u-* 'centrifugal direction' in Russian when the ground object is not explicitly expressed (Koga et al. 2008: 16) and *przy-* 'centripetal direction' and *po-* 'centrifugal direction' in Polish (Kopecka 2004: 131). However, Dynamic Deixis can not only be encoded in satellites, but also in verbs in some other S-framed languages. Taking English and German as an example, both languages can encode Dynamic Deixis

in satellites (i.e., *hither* and *thither* in English and *her* 'hither' and *hin* 'thither' in German) and in verbs (i.e., *come* and *go* in English and *kommen* 'come' and *gehen* 'go' in German). It is worth noting that some morphemes mentioned above are not strictly deictic. As explained by Koga et al. (2008), *gehen* in German can specify manner of motion and can be combined with the venitive *her-* although such combination is quite strict (e.g., *her-gehen* 'follow'). In Russian, *pri-* and *u-* are often used to describe source-oriented ('away from') and goal-oriented ('to/towards') motion.

Grinevald (2011) mentions Slobin's (2005) and Levinson's (2008) works by listing the constitutive elements of motion events.⁶²

Slobin (2005) identifies seven elements constituting a motion event:

(1) Figure, (2) Path; (3) Deixis; (4) Contour; (5) Extent; (6) Manner; (7) Ground.

Levinson (2008) includes more items in his list:

(1) Figure; (2) Source; (3) Goal; (4) Via; (5) Vector; (6) Trajectory;
(7) Vehicle; (8) Instrument; (9) Medium; (10) Landscape; (11) Rate;
(12) Kinematics; (13) Translocation; (14) Aspect; (15) Deixis; (16)
Affect.

As we can see from the lists mentioned above, Deixis is presented on an equal footing with other elements as a constitutive element of a motion event.

We shall now take a closer look at the works of Morita (2011) and Matsumoto et al. (2017). Both of them question the relationship between Deixis and Path by examining the function of deictic verbs across different languages.

⁶² Both Slobin's (2005) and Levinson's (2008) listings are taken from the handout and the references are not specified in Grinevald (2011).

1.4.1. Deixis as a distinct semantic component: aspectual and pragmatic evidence

Morita's (2011) work focuses on deictic and path verbs in Japanese and French. He suggests that deictic verbs have a double function which is observed in both languages:

- First function: deictic verbs orient motion events from the perspective of the speaker;
- Second function: deictic verbs confer the telicity to motion events.

Regarding the first function, the examples from Japanese (91) and French (92) show a general use of deictic verbs that represent deictic direction.⁶³

(91) Japanese (Morita 2011: §56)
Taroo=ga eki=ni it-ta / ki-ta.
 Taroo=NOM station=DAT go-PST / come-PST
 'Taro went/came to the station.'

(92) French (ibid.)
Paul est allé / venu à la gare.
 Paul AUX go.PP / come.PP at the station
 'Paul went/came to the station.'

Concerning the second function, the author explains that Manner verbs, such as 'walk,' cannot be used with the goal marker =*ni* in Japanese and *à* in French. Examples illustrated in (93) and (95) are not acceptable. However, these goal markers turn out to be possible when adding deictic verbs which introduce telicity, as in (94) and (96).

⁶³ The abbreviations used in Japanese and French in examples (91)-(100) are as follows: ACC accusative, AUX auxiliary, CVB converb, DAT dative, EMPH emphatic, GEN genitive, GER gerundive, INDEF indefinite article, NOM nominative, PL plural, PP past participle, PROG progressive, and PST past.



Japanese

(Morita 2011: §58)

- (93) **Taroo=ga* *eki=ni* ***arui-ta.***
 Taroo=NOM *station=DAT* *walk-PST*
- (94) *Taroo=ga* *eki=ni* ***arui-te*** **{*it-ta*** / ***ki-ta*}.
 Taroo=NOM *station=DAT* *walk-CVB* {*go-PST* / *come-PST*}
 ‘*Taroo went/came to the station on foot.*’**

French

(Morita 2011: §60)

- (95) ?? // ***a*** ***couru*** *à* *la* *gare.*
 He AUX run.PP to the station
- (96) ?? // ***est*** **{*allé*** / ***venu*}** *à* *la* *gare* ***en courant.***
 He AUX {*go.PP* / *come.PP*} to the station run.GER
 ‘He went/came to the station running.’

Regarding the second function of deictic verbs, Morita (2011: §62) believes that as long as deictic verbs exhibit the same aspectual property (i.e., telicity) as the other path verbs, they can be considered as path verbs.⁶⁴ However, Morita further claims that there is a loss of the path verb property of Japanese deictic verbs. Example (97) shows that the event remains atelic in spite of the presence of the deictic verb. The author explains that in Japanese, as long as the scene is described from the perspective of *wareware* ‘us’, the use of *kuru* ‘come’ is obligatory. If the motion is described by the viewpoint of *inu* ‘dog’ or neutral perspective, *tsui-te iku* ‘follow-CVB go’ is to be used. The verb *tsuku* ‘follow’ cannot be used autonomously and is always followed by the two deictic verbs. It is important to note that whether *iku* ‘go’ or *kuru* ‘come’ is used, the physical relation between the follower and one being followed is the same, and the telicity remains invariant: atelic.

⁶⁴ In previous part of the article, Morita (2011: §19) states that: “the lexical aspect in terms of telicity correlates with the absence/presence of a boundary in motion events. For example, in the use of telic verbs such as *entrer* (enter), *sortir* (exit), *partir* (leave), or *arriver* (arrive), a boundary such as a source or goal is obligatory”. The telic verbs mentioned by Morita are typical path verbs.

- (97) Japanese (Morita 2011: §63)
- | | | | | |
|-----------------------|---------------------|------------------|--------------------|--------------|
| <i>Inu=ga</i> | [...] | <i>shibaraku</i> | <i>wareware=no</i> | <i>ato=o</i> |
| dog=NOM | | briefly | us=GEN | behind=ACC |
| <i>tsui-te</i> | <i>ki-ta</i> | <i>ga,</i> | [...] | |
| follow-CVB | come.PST | but | | |
- ‘The dog followed us for a time, but [...]’

Morita (2011: §66) argues that:

Indeed, deixis is a kind of direction, but it does not arise from the physical relation between a figure and a ground; it is rather determined by the viewpoint of a speaker or narrator. Therefore, the functional level of a deictic direction is distinct from that of a physical direction in the sense of linearity determined by the relation between a figure and a ground.

We attempt to represent schematically Morita’s view in Figure 4. Deixis and Path share the same semantic property: the vector (a kind of direction). In addition to that common characteristic, each of them possesses their exclusive property: Deixis takes the point of view of a speaker or narrator as its property, whereas Path has the conformation as its property.

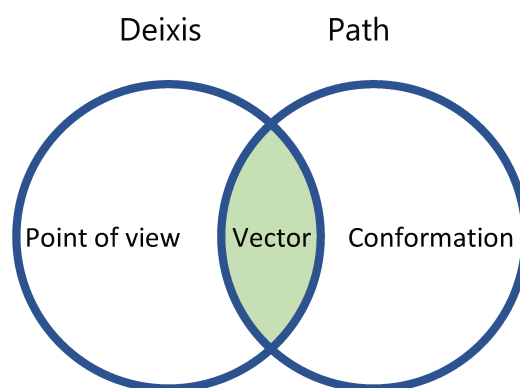


Figure 4. Specific and shared properties of Deixis and Path (J.-K. Song, Bunkham, & Mouton 2019)

Another distinction between Japanese deictic verbs and French deictic verbs is their combination with Path. Morita (2011) points out that Japanese can combine Path and Deixis, as

exemplified in (98). By contrast, this combination is completely absent from the French data. Both (99) and (100) are not acceptable. He (2011: §72) explains that “the difference can be attributed to the varying degree of grammaticalization of deictic verbs in the two languages”. Japanese deictic verbs show a diverse degree of grammaticalization in accordance with verbs that precede them. When deictic verbs follow other motion verbs, they are more grammaticalized than when combined with manner of motion verbs. In the latter case, deictic verbs retain spatial meaning (as explained by Morita, according to Shibatani 2007). As for French deictic verbs, they are also grammaticalized to express near future/past or intention, but they are not pure indicators of deictic direction as for the expressions of motion events.

Japanese (Morita 2011: §67)

- (98) *Boku=ra=ga shokuji=o shi-te iru aida=ni=mo nan'ninka=ga*
 I=PL=NOM meel=ACC do-CVB PROG during=DAT=EMPH some.people=NOM
hait-te (ki-te), nan'ninka=ga de-te (it-ta).
 enter-CVB (come-CVB) some.people.NOM exit-CVB (go-PST)
 ‘Even while we were eating, some people entered, other exited.’

French (Morita 2011: §70)

- (99) **Des gens entrèrent en venant, d'autres sortirent*
 INDEF people enter.PST come.GER others exit.PST
en allant/partant.
 go/leave.GER

- (100) **Des gens vinrent en entrant, d'autres allèrent/partirent*
 INDEF people come.PST enter.GER others go.PST/leave.PST
en sortant.
 exit.GER
 ‘Some people came, others left.’

Morita’s cross-linguistic comparative study shows that deictic verbs can be treated as path verbs as long as they express direction and introduce telicity in motion events as path verbs do. However, deictic verbs should be distinguished from path verbs as long as

Japanese deictic verbs lose the telicity property when combined with telic or directional path verbs, knowing that this combination is impossible in French. In addition, the fact that Deixis and Path exhibiting their own property (i.e., point of view for Deixis and conformation for Path) is also in favor of treating the two semantic elements separately.

1.4.2. Morphosyntactic and functional evidence

Matsumoto et al. (2017; forthcoming) have conducted an experimental study that aims to examine the nature of linguistic expressions of Deixis. By looking at the use of deictic verbs, especially venitive verbs, they argue that deictic verbs are not merely spatial in meaning but also functional. Evidence from English, Japanese, and Thai reveals that this functional nature of deictic verbs can account for the reason why Deixis is often coded differently from other components of Path and should be treated separately from Path.

Before presenting the functional nature of deictic verbs, it is important to note that Deixis has its own morphosyntactic slot in some languages distinct from non-deictic Path, for example, Chinese, as observed in Lamarre (2008a: 71). Examples (101) and (102) from Japanese and Thai illustrate this view. As explained by Matsumoto et al., in Japanese, deictic verbs (e.g., *ku* 'come') always occur as the final verb of multi-verb complexes, with manner (e.g., *arui* 'walk') and path verbs (e.g., *de* 'exit') preceding them. In Thai, deictic verbs (e.g., *maa* 'come') occupy a position after Manner verbs (e.g., *dəən* 'walk') and most path verbs (e.g., *ɔ̀ɔ̀k* 'exit') but before arrival verbs (e.g., *hǎa* 'approach') in a serial verb construction.



(101) Japanese⁶⁵ (Matsumoto et al. 2017: 99)

Otoko ga heya kara arui-te de-te ku-ru.
man NOM room from walk-CONJ exit-CONJ come-NPST
'A man comes out of the room walking.'

(102) Thai⁶⁶ (Matsumoto et al. 2017: 100)

Phûu chaaj dǽn ɔ̀ɔ̀k maa hǎa chán
man walk exit come approach 1SG
'A man came out toward me walking.'

Matsumoto et al. (2017) add that the fact that a slot is allocated to Deixis has also been observed in other languages, such as German (e.g., *hin-aus-laufen* [thither-out-run]), Jakaltek (Craig 1993), and Kupsapiny (Kawachi 2014).

Besides, Talmy (2000) also notices a similar phenomenon in Korean. He (2000: 56-57) mentions that Korean is a language that structurally distinguishes the Deictic component from the Conformation component of Path and accords Deixis higher priority when both components are present. Example (103) extracted from Choi & Bowerman (1991) shows an expression of spontaneous motion in Korean.⁶⁷ The authors explain that the main (rightmost) verb is usually *kata* 'go' or *ota* 'come', in which motion is conflated with Deixis. The deictic verb is preceded by a Path verb, which in turn may be preceded by a Manner verb. And it forms the following pattern: [Manner] [Path] [Motion + Deixis].

⁶⁵ The abbreviations used in Japanese are as follows: CONJ conjunctive, NOM nominative, and NPST nonpast.

⁶⁶ The abbreviation used in Thai is as follows: 1SG first person singular.

⁶⁷ It is important to note that expressions for caused motion differ from those for spontaneous motion with respect to Deixis.

(103) Korean ⁶⁸			(Choi & Bowerman 1991: 88)	
<i>John-l</i>	<i>pang-ey</i>	<i>(ttwui-e)</i>	<i>tul-e</i>	<i>o-ass-ta.</i>
J.-SUBJ	room-LOC	(run-CONN)	enter-CONN	come-PST-DECL
[Figure]	[Ground]	([Manner])	[Path]	[Motion + Deixis]
'John came in(to) the room (running).'				

Now we shall move to the functional nature of deictic verbs, an important finding observed by Matsumoto et al. (2017). By conducting a video-based speech elicitation, their study mainly focuses on the use of venitive verbs in English, Japanese, and Thai. These three languages are tested in different scenes (e.g., open space, classroom, and staircase), which differ not only in terms of the direction of the motion but also in terms of two functional factors. As explained by the authors, one factor involves the speaker's space; that is to say, whether the goal of the motion is within the speaker's space or not.⁶⁹ The other factor is interactional behavior; in other words, whether the moving person moves to the speaker with or without greeting and smiling. The results of this study reveal that the effects of these two factors show up in different ways in the three languages reflecting typological differences among them. In general, the use of deictic verbs in English is infrequent compared to their use in Japanese and Thai. This is probably due to the competition between Manner and Deixis as to the main verb slot in English and the absence of this competition in the other two languages. Although the effects of these factors show up differently in the three languages, both speaker's functional space and the interactional behavior trigger the use of deictic verbs in the three languages under study. To conclude, Matsumoto et al. (2017: 119) suggest that: "the functional nature of deictic verbs, which is not shared by other path verbs, is a crucial factor

⁶⁸ The abbreviations used in Korean are as follows: CAUS causative suffix, CONN connecting suffix, DECL declarative ending, LOC locative marker, OBJ object marker, PST past tense marker, and SUBJ subject marker.

⁶⁹ The speaker's space refers to room, floor, and visible space in the elicitation.

accounting for why Deixis is often coded differently from other components of Path”.

1.5. Summary

Deixis is at the interface of semantics and pragmatics, and it is an important concept in the domain of space. In this chapter, we have reviewed previous main research on Deixis within the framework of semantics/pragmatics and the framework of motion events. Deixis is a context-dependent notion comprising mainly Person Deixis, Place Deixis, and Time Deixis within the framework of semantics and pragmatics. (Dynamic) Deixis can be expressed using *verbs*, *directionals*, and *associated motion markers* within the framework of motion events. Besides, we have outlined Talmy’s (1985, 2000) typology and some major revisions in regard to the classification of languages in the world within the framework of motion events (Wälchli 2001; Matsumoto 2003; Slobin 2004; Beavers, Levin, & Tham 2010; Croft, Barðdal, Hollmann, Sotirova, & Taoka 2010; *inter alia*). In addition, we have also discussed the status of Deixis with regard to Path (i.e., either as a component of Path or as an independent component from Path).

Chapter 2

LINGUISTIC DEVICES IN STANDARD CHINESE ENCODING CONCEPTUAL COMPONENTS OF MOTION EVENTS

2.1. Introduction

In chapter 1, we have reviewed Deixis as a conceptual notion within the framework of motion events. In chapter 2, we attempt to present different linguistic devices that Standard Chinese makes available to express various conceptual components of a motion event, including Figure, Ground, Path, and in particular Dynamic Deixis --- as both a component of Path and a component to be distinguished from Path, as well as Co-event which comprises Manner, Cause and other relations with regard to a motion event.

Before examining the encoding of each component in a motion event in Standard Chinese, a terminological clarification is needed for the language under examination in this dissertation. "In common English usage today, [...] Mandarin and Chinese are used interchangeably and loosely to refer to Standard Chinese" (Huang & Shi 2016: 2). However, it is important to distinguish the following two terms (i.e., Chinese vs. Mandarin).

As stated by Halliday & McDonald (2004: 305):

Chinese is the name given to a group of languages, now referred to as the Sinitic languages. [...] The whole Sinitic group is referred to by its speakers as one language, Chinese (中国话



zhōngguóhuà, more formally 汉语 *hànyǔ*), and the varieties are referred to as dialects (方言 *fāngyán*). [...] Mandarin, the major dialect, referred to in Chinese as 北方话 *Běifānghuà* ('northern speech'), is the basis for the standard language; it is spoken roughly north of the Yangtse river, and in the west and south-west regions of China.

A similar definition can also be found in Wiedenhof (2015):

Chinese is by far the most common term in popular usage, denoting any or all of the Sinitic languages and dialects, past and present. [...] The English name *Mandarin*, or *Mandarin Chinese*, denotes the Sinitic varieties distributed across the North China Plain and beyond, where the educated speech of Běijīng functions as prestige dialect.⁷⁰

The Chinese language described in our study refers to Standard Chinese (or standard Mandarin), a term that refers to Běijīng Mandarin as a standard language. This standard language is called *Pǔtōnghuà* 普通话 'common speech or ordinary talk' in Mainland China, *Guóyǔ* 国语 'national language' in Taiwan, and *Huáyǔ* 华语 'Mandarin' in Singapore (Anderson 2015; Wiedenhof 2015). For the sake of precision and consistency, we use the term 'Standard Chinese' to refer to the language we work on in this dissertation.

It is known that "the basic units to write Chinese are not letters, as in an alphabetical system, but characters. In modern Standard Mandarin Chinese (*Pǔtōnghuà* 普通话), a character typically represents a whole syllable of the spoken language with a tone" (Bottéro 2015).⁷¹ For each example in Standard Chinese, we provide

⁷⁰ According to Wiedenhof (2015): "The English term *Mandarin* was borrowed from Portuguese *mandarim* 'high-ranking official', matching the Chinese term *Guānhuà* 官话, i.e., literally the *huà* 'talk' of *guān* 'officials'".

⁷¹ Characters (or Chinese characters 汉字 *hànzì*) are logographic symbols encoding both phonetic and semantic information (Huang & Shi 2016: 7).

both Chinese characters and their phonetic transcriptions in *pinyin* (i.e., the romanization system).

The term Deixis in Talmy's (2000: 161) work can refer to Path Deixis (deictic spatial direction) and Site Deixis (deictic spatial location). The former one is found usually incorporated in verb roots (e.g., *come/go* in English) or marked by satellites, and the latter one by adverbs or particles (e.g., *here/there* in English). In this dissertation, we don't use the term Path Deixis since the relationship between Path and Deixis is more complex than it seems to be, as discussed in Chapter 1, §1.4. For this reason, we choose the term **Dynamic Deixis** based on the definition proposed within the DEIXIS DYNAMIQUE project (2015-2018). This term corresponds to Talmy's Path Deixis and is distinct from Static Deixis (i.e., pronouns, demonstratives).

Chapter 2 does not aim to give a full description of Standard Chinese, but to select only some aspects of this language that are tightly relevant to the study of motion events. By adopting a functional-typological approach, this chapter is organized as follows: section 2.2 sketches different linguistic devices available in Standard Chinese to encode Figure, Ground, and Co-event; sections 2.3 and 2.4 outline the linguistic encoding of Path and Dynamic Deixis, respectively; section 2.5 gives a summary of the chapter.

2.2. Linguistic encoding of Figure, Ground, and Co-event

As reviewed in Talmy's (2000) theoretical framework of motion events (see §1.3.1), both Figure and Ground are basic internal elements in a motion event. In a translational motion, the Figure refers to the moving object (or moving entity), and the Ground is the reference object with respect to which the Figure moves. Co-event, as an external element, bears the relation (e.g., Manner or Cause) to a motion event. In the following subsections, we look at

how Figure, Ground, and Co-event can be encoded in Standard Chinese.

2.2.1. Figure

In Standard Chinese, Figure is expressed by noun phrases (henceforth NPs) and can refer to an animate entity in spontaneous motion events and an animate or inanimate entity in caused motion events. Lamarre (2007: 6; see also Liú 1998) briefly presents the syntactic positions that a Figure has in two types of motion: in spontaneous motion events, the NP expressing the Figure (henceforth Figure NP) appears as the subject in a sentence. It can either precede the verb, as 她 *tā* 'she' in (104), or follow the verb in presentative sentences, as 一个客人 *yí-gè kèrén* 'a guest' in (105). A presentative sentence is defined by Li & Thompson (1981: 509) as performing "the function of introducing into a discourse a noun phrase naming an entity". Moreover, the authors (*ibid.*) also point out that: "In most languages of the world, the noun phrase naming the entity being presented in a presentative sentence is indefinite. It represents new information, information that the speaker assumes the hearer does not have at the time, and it typically occurs after the main verb of the presentative sentence". Therefore, the Figure NP which follows the verb in a presentative sentence can generally be schematized as (Ground NP) + V + Figure NP.⁷²

(104) ... 她慢慢地走出了病房。 (adapted from Lamarre 2007: 6)

<i>Tā</i>	<i>mànmǎnde</i>	<i>zōu-chu-le</i>	<i>bìngfáng.</i>
3SG	slowly	walk-exit-PFV	hospital.room
'She slowly walked out of the sickroom, ...'			

(105) 来了一个客人。 (adapted from Li & Thompson 1981: 509)

<i>Lái-le</i>	<i>yí</i>	<i>gè</i>	<i>kèrén.</i>
come-PFV	one	CL	guest
'Here comes a guest.'			

⁷² Ground NP refers to a noun phrase which expresses the Ground.



In caused motion events, the Figure NP can appear either as the subject or the object in a sentence. When appearing as the subject, it precedes the verb in passive sentences, as 她 *tā* 'she' illustrated in (106). When appearing as the object in a sentence, it can either precede the verb or follow the verb. The Figure NP preceding the verb is usually introduced by the object marker 把 *bǎ*, as 裤子 *kùzi* 'pants' in (107). According to Xu (1996: 148), 把 *bǎ* tends to be used in the context when two conditions are fulfilled: at the semantic level, 把 *bǎ* is used to express a change, a result, or a purpose of someone or something that the speaker already knows. At the pragmatic and syntactic levels, 把 *bǎ* is used when the direct object is definite or referential, and when the verb is transitive (or is used transitively) (see also Li & Thompson 1981: 482-487). Xu (ibid.) also explains that in Chinese there are no (in)definite articles. In general, a noun phrase under the form 'NUM (numeral) + CL (classifier) + N (noun)' is considered as indefinite (e.g., 一个箱子 *yí gè xiāngzi* 'a suitcase' in (108)) and a bare noun without a numeral and classifier preceding the verb is considered as definite (e.g., 裤子 *kùzi* 'pants' in (107)).⁷³ The respective order of deictic verbs / deictic satellites and Figure NPs will be discussed in detail in §2.4.1 and §2.4.2.1.

- (106) 当她被缠上绷带推出手术室时, ... (adapted from Lamarre 2007: 6)
Dāng tā bèi chánshàng bēngdài tuī-chu shǒushùshì shí...
 at 3SG PASS wind bandage push-out operating.room time
 'When she had been bandaged all over and was pushed out [on a wheelchair] of the operating room,...'

⁷³ In addition to 把 *bǎ*, 将 *jiāng* is also used as object maker. The main difference between the two object markers is that the former one is widely used in spoken language whereas the latter one in formal writings.



(107) 你把裤子穿上! (adapted from Li & Thompson 1981: 467)

<i>Nǐ</i>	<i>bǎ</i>	<i>kùzi</i>	<i>chuān-shang!</i>
2SG	OM	pants	wear-up

'Put on your pants!'

(108) 他/她送来了一个箱子。 (adapted from Li & Thompson 1981: 59)

<i>Tā</i>	<i>sòng-lai-le</i>	<i>yí</i>	<i>gè</i>	<i>xiāngzi.</i>
3SG	send-hither-PFV	one	CL	suitcase

'S/He sent over (towards the deictic center) a suitcase.'

2.2.2. Ground

In Standard Chinese, Ground is also expressed by NPs and can refer to an (in)animate entity indicating the location of the Figure in both spontaneous and caused motion events. An NP expressing Ground may either behave like a common noun or a *place word* (Lamarre 2007a: 2).⁷⁴ An NP expressing Ground (henceforth Ground NP) may behave like a common noun, as is the case when it acts as the object of a Path verb, for instance, 桥 *qiáo* 'bridge' in 过桥 *guò qiáo* 'cross the bridge'. In some syntactic environments, a Ground NP is required to be a place word. Chao (1968: 519) uses the term *place words* (处所词 *chùsuǒcí*) to refer to substantives which can fill the following positions: 在... *zài...* 'to be at...', 到... *dào...* 'arrive at...', 到... 去 *dào...qù* 'go to...', 上...去 *shàng...qù* 'go to...', 从...来 *cóng...lái* 'come...from', and 往...走 *wǎng...zǒu* 'go...toward', etc. The author explains that one cannot say *到门去 *dào mén qù* [to door go] 'go to the door', nor *从老张到我来 *cóng Lǎo Zhāng dào wǒ lái* [from old Zhang to 1SG come] 'comes from old Zhang to me'. Therefore, nouns like 门 *mén* 'door' and proper names and pronouns like 老张 *Lǎo Zhāng* 'old Zhang' and 我 *wǒ* 'me' cannot be considered as place words. However, one can say 到门那儿去 *dào mén nàr qù* [to door there go] 'go to the door', and 从张家到我这儿来 *cóng Zhāng jiā dào wǒ zhèr lái* [from Zhang home to 1SG here come] 'comes from Zhang's home to my place'. In the latter case, 门那儿 *mén nàr* 'the

⁷⁴ The term 'place word' is used following Chao (1968: 519-532).

door over there', 张家 *Zhāng jiā* 'Zhang's home', and 我这儿 *wǒ zhèr* 'my place or my home' are place words.

According to Chao (1968: 520-533), (see also Peyraube (2003) and Chappell & Peyraube (2008: 16)), place words can be:

- (i) Place names or geographical locations that usually designate countries, cities, towns, etc., such as 法国 *Fǎguó* 'France', 上海 *Shànghǎi* 'Shanghai';
- (ii) Nouns with an inherently locative value and used to refer to specific place, such as 学校 *xuéxiào* 'school', 教堂 *jiàotáng* 'church', and 飞机场 *fēijīchǎng* 'airport', etc. Chao (1968: 531-532) notes that most of these words take the definite article in English, for instance, 在飞机场见! *Zài fēijīchǎng jiàn!* 'See you at the airport!';
- (iii) Dissyllabic localizers such as 里头 *lǐtōu* 'inside', 右边儿 *yòubiānr* 'the right side', 南边儿 *nánbianr* 'the south side';
- (iv) Common nouns followed by monosyllabic or disyllabic localizers (see Table 7), such as 椅子上 *yǐzi=shang* [chair=upside] 'on the table', 盒子里面 *hézi=lǐmian* [box=inside] 'the inside of the box';
- (v) Demonstrative locative pronouns, such as 这儿 *zhèr* 'here', 那儿 *nàr* 'there', and 哪儿 *nǎr* 'where'.

Localizers (方位词 *fāngwèicí*) form a closed class and usually express (spatial and temporal) locations of things (Chao 1968: 621-622).⁷⁵ More specifically, they indicate the spatial relationship of the Figure relative to the Ground in a motion event, i.e., the conformation, as pointed in Lamarre (2003b: 2), and correspond to the adnominal type of encoding the Path (Lamarre 2008a, 2013). Table 7 presents monosyllabic and disyllabic localizers based on Peyraube (1980: 18, 2003: 183-184). In this table, the first column shows the monosyllabic localizers. Among which 上 *shàng* 'upside'

⁷⁵ Localizers are called 'locative particles' in Li & Thompson (1981: 391).

and 里 *lǐ* 'inside' are the two most widely used ones whereas the versatility of the others are quite low in the spoken language (Peyraube 2003: 183; Lamarre 2007a: 2). Most of the time, the monosyllabic localizers are unstressed and follow common nouns, changing them into place words (see (iv) above). They cannot be used alone, except in certain fixed phrases based largely on classical Chinese, such as 上有天堂，下有苏杭 *Shàng yǒu tiāntáng, xià yǒu Sū Háng* [above there.is Heaven, below there.is Sūzhōu and Hángzhōu] 'Above there is Heaven, below there are Suzhou and Hangzhou', or as objects of the prepositions like 往 *wǎng* 'to, toward', 向 *xiàng* 'to, toward' or 朝 *cháo* 'to, toward' as in 往前走 *wǎng qián zǒu* [to front move] 'move forward' (Chao 1968: 523-526; Peyraube 1980: 30-31; Chappell & Peyraube 2008: 17). Disyllabic localizers are usually formed by adding a suffix (typically 边 (儿) - *bian(r)* 'side, border', 面 (儿) - *mian(r)* 'side, face', or 头 - *tou* 'end' as illustrated in the first line in Table 7) to the monosyllabic localizers.⁷⁶ Apart from the localizers listed in Table 7, Chao (1968: 626-627) and Li & Thompson (1981: 391) also include in their inventories monosyllables 这儿 *zhèr* 'here' and 那儿 *nàr* 'there' (这里 *zhèli* 'here' and 那里 *nàli* 'there' as formal disyllabic variants) and disyllables in which they can be followed by the suffixes 边 (儿) - *bian(r)* 'side and border', 面 (儿) - *mian(r)* 'side, face'. As stated by Chao (ibid.), "these localizers indicate the general location of whatever is expressed by the preceding substantive". We treat these two deictic demonstrative locative pronouns separately, together with 哪儿 *nǎr* 'where' (哪里 *nǎli* 'where') as place words in the list above (see (v)).

⁷⁶ Disyllabic localizers can also be formed by adding a prefix (i.e., 以 *yǐ* 'with' or 之 *zhī* 'of') borrowing from classical Chinese. "Their combinations are either belonging to a literary style or mainly used to express something else than the place or the position" (Peyraube 2003: 183). For this reason, we didn't include them in our table.



	边 (儿) - <i>bian(r)</i> 'side, border' ⁷⁷	面 (儿) - <i>mian(r)</i> 'side, face'	头 - <i>tou</i> 'end'	meaning
上 <i>shàng</i>	<i>shàngbian(r)</i>	<i>shàngmian(r)</i>	<i>shàngtou</i>	'upside, on top of, above'
下 <i>xià</i>	<i>xiàbian(r)</i>	<i>xiàmian(r)</i>	<i>xiàtou</i>	'downside, under, below'
前 <i>qián</i>	<i>qiánbian(r)</i>	<i>qiánmian(r)</i>	<i>qiántou</i>	'in front of'
后 <i>hòu</i>	<i>hòubian(r)</i>	<i>hòumian(r)</i>	<i>hòutou</i>	'in back of'
*内 <i>nèi</i>	-	-	-	'inside'
里 <i>lǐ</i>	<i>lǐbian(r)</i>	<i>lǐmian(r)</i>	<i>lǐtou</i>	'inside'
外 <i>wài</i>	<i>wàibian(r)</i>	<i>wàimian(r)</i>	<i>wàitou</i>	'outside'
左 <i>zuǒ</i>	<i>zuǒbian(r)</i>	<i>zuǒmian(r)</i>	-	'left of'
右 <i>yòu</i>	<i>yòubian(r)</i>	<i>yòumian(r)</i>	-	'right of'
东 <i>dōng</i>	<i>dōngbian(r)</i>	-	-	'east of'
南 <i>nán</i>	<i>nánbian(r)</i>	-	-	'south of'
西 <i>xī</i>	<i>xībian(r)</i>	-	-	'west of'
北 <i>běi</i>	<i>běibian(r)</i>	-	-	'north of'
旁 <i>páng</i>	<i>pángbian(r)</i>			'beside'
**中 <i>zhōng</i>	-	-	-	'in the center of'
间 <i>jiān</i>	-	-	-	'in the center of'

Table 7. Localizers (adapted from Peyraube 1980: 18, 2003: 183-184)

*内 *nèi* 'inside' cannot be followed by a suffix as its synonym 里 *lǐ* 'inside' does. Apart from this difference, 内 *nèi* 'inside' is more literary than 里 *lǐ* 'inside'. As a monosyllabic localizer, the former one can be followed by a verb whereas the latter one cannot (Chao 1968: 524, 526).

**中 *zhōng* 'in the center of' and its synonym 间 *jiān* 'in the center of' do not combine actively with a suffix. The two monosyllabic localizers can combine to form 中间 *zhōng jiān* 'middle interspace'. Such combinations and all the other possible combinations that are not listed in Table 7 can be seen in Peyraube (2003: 184).

Previous studies haven't reached an agreement concerning whether Chinese localizers should be considered as a distinct word

⁷⁷ Fāng's (2004) also includes the suffix 边 (儿) *-bian(r)* 'side, border' as a localizer. We agree with this view and gloss 边 (儿) *-bian(r)* 'side, border' as a localizer when it follows NPs such as 河边儿 *hé=biānr* [river=side] 'riverside'.

class or just as a subtype of nouns. Chao (1968) and Zhū (1982) consider place words and localizers as distinct word classes on the same level as other nouns, within a larger category of substantives (Chao's term, 体词 *tǐcí* in Zhū), whereas Lù (2013 [2003]: 46-47) does not distinguish place words and localizers from other nouns considering the fact that they are small in number, although he recognized their specific characteristics.

Chǔ (2006) addresses the necessity to treat place words separately from nouns from a diachronic-typological perspective. He argues that in Chinese, place words, such as 纽约 *Niǔyue* 'New York', can only follow the preposition but cannot be followed by the localizer at the same time when expressing a location. For example, 纽约 *Niǔyue* 'New York' can follow the preposition 在 'zài' 'at' in 在纽约 *zài Niǔyue* 'at New York' [at New York] 'at New York'; whereas, *在纽约上 *zài Niǔyue=shang* [at New York=upside] would be incorrect. By contrast, common nouns follow the preposition and are followed by the localizer at the same time, like 桌子 *zhuōzi* 'table' in 在桌子上 *zài zhuōzi=shang* [at table=upside] 'on the table'. Chappell & Peyraube (2008: 17) remark that:

[...] not everyone agrees with the judgment of place words as belonging to the category of nouns. It could be a case of an autonomous category of words, which, unlike common nouns, do not have the possibility of being modified by classifier phrases of the form *Numeral + Classifier*, but which may, by contrast, be objects of the prepositions 在 *zài* 'at' or 到 *dào* 'to' or have an adverbial function, precisely what common nouns are able to do.

With respect to localizers, Chappell & Peyraube (*ibid.*) point out that nearly every viewpoint has been put forward. They have been considered to be nominal suffixes, pronouns, adjectives, adverbs, postpositions forming a discontinuous constituent with the prepositions they frequently co-occur with, and clitics. Concerning different status assigned to localizers, a detailed review except that of clitics can be found in Peyraube (1980: 53-59). Localizers being

treated as clitics can be seen in Liu's (1998) article *A clitic analysis of locative particles*. Linguists who consider localizers as nouns usually argue that expressions consisting of localizers can appear in certain positions where only NPs are allowed. In Campbell et al. (1986: 545), the locative words are called 'relational nouns' which express locative and related notions, and are composed of a noun root and possessive pronominal affixes. Scholars who treat localizers as postpositions only acknowledge monosyllabic localizers as postpositions, and consider disyllabic localizers sharing more properties with nouns (Hagège 1975; Peyraube 1980; Ernst 1988). The way that monosyllabic localizers in Chinese are treated as postpositions is quite similar to what Ameka (1995) considers as postpositions in Ewe, a Niger-Congo language. This language has two sets of adpositions (i.e., prepositions and postpositions). Like in Chinese, names of places and regions in Ewe cannot be followed by postpositions. One can say *le Leiden* [be-at: PRES Leiden] 'in Leiden' but not **le Leiden me* [be-at: PRES Leiden containing.region.of]. Ewe also behaves the same way as Chinese in which postposition is obligatorily required when common nouns are used. Thus one should say *le dzo-a me* [be-at fire-DEF containing.region.of] 'in the fire', but not **le dzo-a* [be-at fire-DEF]. We believe that whether localizers in Standard Chinese are treated as nouns or postpositions, the use of either category corresponds to Wälchli's adnominal encoding, which plays an important role in encoding Path in a motion event (Lamarre 2008a, 2013); this will be discussed in §2.3.3 when we present the adnominal encoding.

In the following parts, we briefly present the elements that can introduce the information of Ground in Standard Chinese.⁷⁸ We use locative NP (henceforth NPloc) to refer to any NP (i.e., place words listed above according to Chao (1968)) indicating the Ground.⁷⁹ Lamarre (2007a) presented mainly three syntactic elements that can

⁷⁸ A detailed description of these elements which can take NPloc will be discussed in §2.3.

⁷⁹ In this dissertation, locative NP = Ground NP.

take an NPloc. They are Path verbs, Path satellites, and prepositions, as exemplified in (109), (110) and (111) respectively.

(109) 进站 (Lamarre 2007a: 5)

jìn *zhàn*
 enter station
 'get into the station'

(110) 方方跑进电梯。 (adapted from Lamarre 2007b: 5)

Fāngfāng *pǎo-jìn* *diàntī*
 Fangfang run-into elevator
 'Fangfang ran into the elevator.'

(111) 从教室里跑出来 (adapted from Lamarre 2007b: 2)

cóng *jiàoshì=li* *pǎo-chu-lai*
 from classroom=inside run-out-hither
 'run out of the classroom'

2.2.3. Co-event

In his framework, Talmy (2000) considers Figure, Ground, Motion, and Path as the core components in a Motion event. He (ibid.: 26) points out that in addition to these internal components, a Motion event can be associated with an external Co-event that bears a relation to it, in particular Manner and Cause of motion. Besides the two relations, the author (ibid.: 28) provides a non-exhaustive list including other relations, such as, Precursion, Enablement, Concomitance, Concurrent Result, and Subsequence. Based on Talmy's (2000) semantic relations, Lamarre (2003b: 4-6) discusses how Co-event is expressed in Standard Chinese with reference to English. More specifically, the author illustrates various types of semantic relationships observed between the Co-event and the motion in Verb-directional compounds. In the following part, we focus on the two relations Manner and Cause in English and Standard Chinese.

- Cause

In the relation of Cause, “the Co-event is construed as bringing about the occurrence of this Motion. That is, the Motion event would not take place if the Co-event did not occur” (Talmy 2000: 45). In examples (112) and (113), the motion of the keg and the stone is caused directly by the act of pushing and throwing respectively, without which the two motion events could not take place.

(112) *I pushed the keg into the storeroom.* (Talmy 2000: 28)

(113) 他投过来一块石头。 (adapted from Lamarre 2003: 5)

Tā	tóu-guo-lai	yí	kuài	shítou.
3SG	throw-across-hither	one	CL	stone

‘He threw a stone (towards the deictic center).’

- Manner

In order to distinguish the relation of Manner from that of Cause, Talmy (2000: 28) states that: “the assessment of whether it is Manner or Cause that is conflated in the verb is based on whether the verb’s basic reference is to what the Figure does or to what the Agent or Instrument does”. For example, in (114), *rolled* refers to what *the keg* (i.e., the Figure) did and so expresses Manner where as in (112), *pushed* refers to what *I* (i.e., the Agent) did and thus expresses the Cause of the event. In the same way, 跑 *pǎo* ‘run’ expresses Manner since it is the Figure (i.e., 一个人 *yí gè rén*) did.

(114) *I rolled the keg into the storeroom.* (Talmy 2000: 28)

(115) 从楼梯上跑下来一个人。 (adapted from Lamarre 2003: 5)

Cóng lóutī=shang pǎo-xia-lai yí gè rén.
 from stairs=upside run-down-hither one CL person
 'A man ran down the stairs.'

Besides the above semantic relations that Co-event bears, the slot of Co-event can also be filled with generic (dummy) verbs. According to Talmy (2000), in the general pattern for a satellite-framed language, the co-event verbs usually refer to some specific ancillary event. However, a system of generic or dummy verbs has been developed for maintaining the general pattern syntactically while semantically bypassing the expression of an unnecessarily specific ancillary event. As stated by Talmy (2000: 284): "Such verbs can act, in effect, as syntactic 'placeholders' while conveying relatively generic or neutral semantic content and thus permitting the sentence to proceed to the satellite, whose semantic content is the relevant factor". Talmy (2000: 284-285) points out that English exhibits a system of this generic (dummy) verbs, such as *go*, *put*, *do*, and *make*. German largely uses *machen* 'make' and *gehen* 'go' as generic verbs with its extensive system of framing satellites. Lamarre (2007a: 12) observes that Chinese also makes frequent use of generic (dummy) verbs, such as 弄 *nòng* and 搞 *gǎo* (colloquial variants for the verb 'to make, to do'). For instance, in example (116), the author explains that "弄 *nòng* replaces verbs expressing more concretely the way they brought the wounded person to the hospital (i.e., they carried the wounded man into a car, then drove the car to the hospital, then carried him from the car into the hospital)".

(116) 他就在路边儿躺着呢，我们就给他弄来了。

(adapted from Lamarre 2007b: 12)⁸⁰

<i>Tā</i>	<i>jiù</i>	<i>zài</i>	<i>lù=biānr</i>	<i>tǎng-zhe</i>	<i>ne,</i>
3SG	just	on	road=side	lie-DUR	PR
<i>wǒmen</i>	<i>jiù</i>	<i>gěi</i>	<i>tā</i>	<i>nòng-lai</i>	<i>le</i>
1PL	then	BEN	3SG	dummy-hither	CRS
'He was just lying on the roadside, and we took [got] him here.'					

2.3. Linguistic encoding of Path

With regard to the controversy between Path verbs and Path satellites, Lamarre (Lamarre 2003b, 2007a: 7) claims that there is no question that Chinese uses Path verbs alone to express motion events, however this does not imply that Path satellites (= directionals) are full verbs and cannot belong to a distinct category although they did grammaticalize from Path verbs. By providing various kinds of evidence (i.e., phonetic, morphologic, syntactic and semantic evidence), she argues that both Path verbs and Path satellites coexist in the contemporary language. A more detailed discussion on this issue can be seen in her article.

In this section, we attempt to present the linguistic encoding of Path in Standard Chinese following Wälchli's (2001) typology (i.e., verbal encoding, adverbial encoding, and adnominal encoding) (see §1.3.1). By connecting the studies of Talmy and Wälchli, Berthele (2004: 98) points out that "Wälchli's verbal encoding is thus the predominant lexicalization pattern in typical V-languages, and the two other categories (i.e., adnominal and adverbial encoding) are the loci of the core schema in S-languages".

2.3.1. Verbal encoding

Although historical evidence shows that Chinese is undergoing a typological shift changing from a V-language to an S-language (F.

⁸⁰ The abbreviations used in the example of Chinese are: 1 first person, 3 third person, BEN benefactive, CRS current relevant state, DUR durative marker, PL plural, PR ongoing present state, and SG singular.

Li 1997; Peyraube 2006; Shǐ 2011; Shi & Wu 2014), this language still retains the use of verbs to express core path notions. As stated in Lamarre (2003b: 8, 2007a: 5), Path verbs in Standard Chinese can be used to describe self-agentive motion but have no causative meaning. They can only express spontaneous motion either by taking Ground NPs as objects (e.g., (117)) or by being followed by satellites (e.g., (118)) but can not express caused motion, as in (119). Lamarre points out that (2008a: 70):

Languages using verbs to encode core path meanings sometimes have Path verbs expressing both autonomous and caused motion, as is the case with French *sortir* expressing both ‘exit’ and ‘make exit’, and Japanese *deru* and *dasu* expressing, respectively, autonomous and caused motion ‘out’ (infix -s- is causativizing in Japanese). Others like Thai and Chinese lack path verbs expressing caused, and so have to combine them in serial verb constructions or in verbal compounds to obtain causative motion meaning.

- (117) 进站 (Lamarre 2007a: 5)
jìn *zhàn*
 enter station
 ‘get into the station’
- (118) 进来! (ibid.)
Jin-lai!
 enter-hither
 ‘Come in!’
- (119) *进钱包 (ibid.)
**jìn* *qiánbāo*
 enter purse
 ‘put your purse in’ (intended meaning)

Lamarre (2013) cites the same example (118) from her paper 2007a and categorizes this example as the type in which the Path is encoded in the verb and behaves like a verb-framed language. However, we argue that this example might have two

interpretations depending on the status of Dynamic Deixis with respect to Path. If one follows Talmy's position and considers that Dynamic Deixis is a component of Path, then the coding strategy of (118) would rather be double framing (as the term suggested by Croft et al. (2010)) since the notion of Path is encoded twice, in both the verb 进 *jìn* 'enter' and the satellite 来 *-lai* 'hither'. If one follows Morita (2011) and Matsumoto et al.'s (2017) position and considers that Dynamic Deixis should be treated separately from Path, then the coding strategy of (118) would be verb-framing since Path is encoded only in the verb 进 *jìn* 'enter'.

It is important to note that the Path verbs mentioned in Lamarre (2007a: 5) are only restrained to those listed in Table 8, which can also grammaticalize into Path satellites that form a closed-class category, and thus can appear after verbs expressing the Manner or Cause of motion.⁸¹ This Table contains the most frequently used Path verbs, including simple verbs (see the first column) and compound verbs (see the second column beginning with the second line) which combine simple verbs and satellites 来 *-lai* 'hither' and 去 *-qu* 'thither' (see first line).

⁸¹ Lamarre (2007a: 5) notes that "Path verbs take Figure NPs with a causative meaning only in a few lexicalized items where they have lost their spatial meaning, for instance, 出书 *chū shū* [exit book] can only mean 'publish a book' and not 'take out a book from some place' (compared with Japanese *hon o dasu*, or French *sortir un livre*, which may take both meanings)".



Path verbs	来 <i>-lai</i> 'hither'	去 <i>-qu</i> 'thither'
上 <i>shàng</i> 'ascend'	上来 <i>shàng-lai</i>	上去 <i>shàng-qu</i>
起 <i>qǐ</i> 'rise'	起来 <i>qǐ-lai</i>	-
下 <i>xià</i> 'descend'	下来 <i>xià-lai</i>	下去 <i>xià-qu</i>
进 <i>jìn</i> 'enter'	进来 <i>jìn-lai</i>	进去 <i>jìn-qu</i>
出 <i>chū</i> 'out'	出来 <i>chū-lai</i>	出去 <i>chū-qu</i>
回 <i>huí</i> 'return'	回来 <i>huí-lai</i>	回去 <i>huí-qu</i>
过 <i>guò</i> 'cross'	过来 <i>guò-lai</i>	过去 <i>guò-qu</i>
开 <i>kāi</i> 'open'	开来 <i>kāi-lai</i>	开去 <i>kāi-qu</i>
到 <i>dào</i> 'arrive'	到...来 <i>dào...lai</i>	到...去 <i>dào...qu</i>

Table 8. Path verbs

In §2.2.2, we have mentioned that Path verbs can take NPloc indicating the Ground. Regarding the semantic relationship of the Path verbs (Table 8) and its object NPloc, Lamarre (2007a: 5) has briefly discussed this issue. According to the author, some Path verbs can take only one portion of Path, such as 过 *guò* 'cross' which takes Medium NPloc in 过桥 *guò qiáo* [cross bridge] 'cross the bridge'. Some other Path verbs can take one of the two portions of Path, such as 上 *shàng* 'ascend' which can take either Medium or Goal NPlocs in 上坡 *shàng pō* [ascend slope] 'go/come up a slope' or 上台 *shàng tái* [ascend stage] 'go/come up onto the stage', respectively. There are also some Path verbs that can take one of the three portions of Path (i.e., Source, Medium, or Goal NPlocs), for instance 下 *xià* 'descend' can take Source NPloc in 下船 *xià chuán* [descend boat] 'disembark', Medium NPloc in 下山 *xià shān* [descend mountain] 'descend the mountain', or Goal NPloc in 下海 *xià hǎi* [descend sea] 'go to sea'.⁸²

⁸² The terminology, Source, Medium, and Goal, used in this dissertation not only refers to the noun phrases expressing the initial, the intermediate, and the final Grounds, but also includes verbal, adverbial, and adnominal expressions that indicate Source-oriented, Medium-oriented, and Goal-oriented Paths. We use the term Medium following Slobin (2004); this notion is also expressed in other terms, such as Route by Jackendoff (1983, 1991), also used by Lamarre (2007a).

In addition to the Path verbs shown in Table 8, Chu (2004: 191) presents a number of some frequently used Path verbs. These verbs are illustrated in the following five groups according to different information of Path (a.-e.) they encode:

a. Up/Down

升 *shēng* 'rise/raise', 上升 *shàngshēng* 'rise', 升腾 *shēngténg* 'leap-up', 降 *jiàng* 'fall/descend', 下降 *xiàjiàng* 'descend', 掉 *diào* 'fall', 降落 *jiàngluò* 'land', 落 *luò* 'fall', 滴 *dī* 'drop', 沉没 *chénmò* 'sink', 沉 *chén* 'sink'

b. Forward/Backward

进 *jìn* 'move-forward/advance', 前进 *qiánjìn* 'move-forward', 退 *tuì* 'move-back', 后退 *hòutuì* 'move-back', 倒 (车) *dào (chē)* 'back (a car)'

c. Arrival + Region of attention

到达 *dàodá* 'reach', 抵达 *dǐdá* 'reach, arrive at'

d. Departure + Anchorage

离开 *líkāi* 'leave', 撤离 *chèlí* 'withdraw from'

e. Convergent + Region of attention

凑 *còu* 'move convergently to', 聚 *jù* 'gather together'

Lamarre (2008a: 73 - 74) also states that the Path verbs mentioned in Table 8 would be only a small part of the Path verbs used in the language.⁸³ She observes that:

Other Path verbs like 升 *shēng* 'rise', 沉 *chén* 'sink', 钻 *zuān* 'make one's way into', 退 *tuì* 'move back, return', or 穿 *chuān* 'pass through' are semantically very similar to 上 *shàng* 'ascend', 下 *xià* 'descend', 进 *jìn* 'enter', 回 *huí* 'move back', or 过 *guò* 'pass through', but did not grammaticalize into path

⁸³ Lamarre (2008a) didn't include 开 *kāi* 'open' in her table.



satellites (or ‘directional complement’, as they are generally called in the literature).

Lamarre (2007a: 13) points out that although the Path verbs mentioned above can not grammaticalize into Path satellites, they can usually combine with non-deictic Path satellites to encode Path information, and this entails a semantic redundancy. For example, 升起 *shēng-qǐ* [rise-up] ‘rise’, 沉下 *chén-xià* [sink-down] ‘sink’, 钻进 *zuān-jìn* [make.one’s.way.into-into] ‘make one’s way into’, 退回 *tuí-huí* [return-back] ‘return’, and 穿过 *chuān-guò* [pass.through-across] ‘pass through’. Such cases correspond to Croft et al.’s (2010) double framing construction. These verbal compounds can sometimes be followed by an NPloc or satellites 来 *-lái* ‘hither’ and 去 *-qù* ‘thither’.

Lamarre (2008a) further explains that Path verbs, such as 掉 *diào* ‘fall’, which can function as a satellite when it occurs after a manner-of-motion verb or a cause-of-motion verb, are not generally included in the list of path satellites (see §2.3.2) because they cannot be followed by satellites 来 *-lái* ‘hither’ and 去 *-qù* ‘thither’. One can say 吹掉 *chuī-diao* [blow-fall] ‘blow off’, but not *吹掉来 **chuī-diao-lái* [blow-fall-hither] ‘blow off’. However, when 掉 *diào* ‘fall’ is used as a verb, it can combine with 下来 *-xià-lái* [-down-hither], as in 掉下来 *diào-xià-lái* [fall-down-hither] ‘fall down hither’. As pointed out by the author, such verbs frequently enter the paradigm of manner-of-motion verbs. In this dissertation, following Wälchli (2001), we consider such coding strategy as a combination of verbal and adverbial encodings since Path is encoded in both the verb 掉 *diào* ‘fall’ and the satellites 下来 *-xià-lái* [-down-hither].

There exist verbs which can be used in both spontaneous motion and caused motion. For instance, the verb 搬 *bān* ‘move, carry’ can be used either in spontaneous motion as in 搬家 *bān jiā* [move house] ‘move’ or in caused motion like in 搬砖 *bān zhuān* [carry brick] ‘carry the brick’. Besides, we can find verbs which lexicalize Cause and Path to express caused motion (or other relations that a Co-event bears to a framing event), for instance, 脱

tuō 'take off' in 脱鞋 *tuō xié* [take.off shoe] 'take off one's shoes'. However, such verbs are usually categorized in verbs encoding Cause (or Manner, or other relations) of motion as Co-event verbs.

2.3.2. Adverbial encoding

By adverbial encoding, Standard Chinese uses directional complements (趋向补语 *qūxiàng bǔyǔ*) (or satellites, Talmy's (2000) term) which express the direction of an action. Directional complements come from verbs and have gone through a grammaticalization process. They are normally unstressed, that is they have undergone phonetic reduction and have lost their original lexical tone (T. 林焘 Lín 1957: 62-65; J. 范继淹 Fàn 1963: 144-148; Z. 陆志韦 Lù 1964: 79; Chao 1968: 436, 459), as 出来 *-chu-lai* [-out-hither] in 拿出来 *ná-chu-lai* 'take out (towards the deictic center)'.⁸⁴ One exception that the directional complements are marked by stressed syllables is when they are in potential form. "A potential complement compound is one in which an infix is inserted between the first verb and the complement to express possibility or impossibility of the result. Possibility is expressed by 得 *-de-*, and impossibility by 不 *-bu-*" (Chao 1968: 452). This can be exemplified by 拿得出来 *ná-de-chū-lái* 'can take out (towards the deictic center)' and 拿不出来 *ná-bu-chū-lái* 'cannot take out (towards the deictic center)'.

Directional complements in Standard Chinese form a closed-class category. However, there is no consensus on their number in previous literature (Chao 1968; Li & Thompson 1981: 59; Liú 1998: 458). One of the most important and reliable works on this issue might be the book *Directional complements: a compendium* (趋向补语通释 *Qūxiàng bǔyǔ tōngshì*) edited by Liú (1998). Based on a corpus of 4 million characters, the examples in this book are taken from 14 novels written by 13 contemporary writers whose language

⁸⁴ "In Chinese linguistics, tones are described in terms of pitch height and pitch movement over the duration of the unit that bears the tone, which is typically the syllable" (Bao 2015).

reflects Northern Mandarin. Liú (1998: II) explains that she chose narrative novels because, at the expressive function level, directional complements appear the most frequently in this literature genre. The book provides in detail the use of 11 simple complements (来 -*lai* 'hither', 去 -*qu* 'thither', 上 -*shang* 'up', 下 -*xia* 'down, off', 进 -*jin* 'into', 出 -*chu* 'out', 回 -*hui* 'back', 过 -*guo* 'across, over, past, through', 起 -*qi* 'up', 开 -*kai* 'apart, away', and 到 -*dao* 'to') and 17 complex complements (i.e., the combination of 来 -*lai* 'hither', 去 -*qu* 'thither' with the rest of the simple complements, see Table 9), as well as the frequency (i.e., token numbers) of these directional complements when they are combined with different types of verbs. We follow Liú's (1998) inventory of directional complements and adapt it slightly by adding the English translation, as presented in Table 9.

Directional complements	来 - <i>lai</i> 'hither'	去 - <i>qu</i> 'thither'
上 - <i>shang</i> 'up'	上来 - <i>shang-lai</i>	上去 - <i>shang-qu</i>
起 - <i>qi</i> 'up'	起来 - <i>qi-lai</i>	-
下 - <i>xia</i> 'down, off'	下来 - <i>xia-lai</i>	下去 - <i>xia-qu</i>
进 - <i>jin</i> 'into'	进来 - <i>jin-lai</i>	进去 - <i>jin-qu</i>
出 - <i>chu</i> 'out'	出来 - <i>chu-lai</i>	出去 - <i>chu-qu</i>
回 - <i>hui</i> 'back'	回来 - <i>hui-lai</i>	回去 - <i>hui-qu</i>
过 - <i>guo</i> 'across, over, past, through'	过来 - <i>guo-lai</i>	过去 - <i>guo-qu</i>
开 - <i>kai</i> 'apart, away'	开来 - <i>kai-lai</i>	开去 - <i>kai-qu</i>
到 - <i>dao</i> 'to'	到...来 - <i>dao...lai</i>	到...去 - <i>dao...qu</i>

Table 9. Directional complements (=Path satellites) in Standard Chinese (adapted from Liú 1998)

Table 9 lists 9 simple Path satellites (the first column), 2 deictic satellites (the first line), and 17 bipartite Path satellites (i.e., the combination of simple Path satellites and deictic satellites).⁸⁵

⁸⁵ We use the terms 'simple Path satellites' and 'bipartite Path satellites' following Lamarre (2008a: 72).

In §2.2.2 dedicated to the linguistic encoding of Ground, we have mentioned that the NPloc indicating the Ground can follow Path satellites.⁸⁶ Previous studies (Liú 1998; Kang 2001; Lamarre 2007a, 2008b; *inter alia*) have examined the semantic roles (i.e., Source, Medium, and Goal) of NPlocs when they follow Path satellites in the construction [V + SATpath + NPloc] (see Lamarre 2007a: 56 for a detailed review of this issue).⁸⁷

Based on Lamarre (2008b: 216), Table 10 lists the semantic roles (i.e., Source, Medium, and Goal) of NPlocs that can follow Path satellites.

As shown in the table, some satellites can be followed by NPlocs expressing Source, Medium, and Goal, as is the case for 下 *-xia* 'down, off' and 出 *-chu* 'out'. For example, in 跳下床 *tiào-xia chuáng* [jump-down bed] 'jump out of bed' and 走出教室 *zǒu-chu jiàoshì* [walk-out classroom] 'walk out of the classroom', 床 *chuáng* 'bed' and 教室 *jiàoshì* 'classroom' indicate Source; in 走下楼梯 *zǒu-xia lóutī* [walk-down stairs] 'walk down the stairs' and 扔出窗户 *rēng-chu chuānghu* [throw-out window] 'throw out of the window', 楼梯 *lóutī* 'stairs' and 窗户 *chuānghu* 'window' indicate Medium; in 跳下水 *tiào-xia shuǐ* [jump-down water] 'jump into the water' and 踢出门外 *tī-chu mén=wai* [kick-out door=outside] 'kick out the door', 水 *shuǐ* 'water' and 门 *mén* 'door' indicate Goal.⁸⁸

Some satellites can be followed by NPlocs expressing Medium and Goal, as is the case for 上 *-shang* 'up' and 进 *-jin* 'into'. For instance, in 走上山 *zǒu-shang shān* [walk-up mountain] 'walk up the mountain' and 跨进门 *kuà-jin mén* [step-through door] 'step through the door', 山 *shān* 'mountain' and 门 *mén* 'door' express Medium; in 跳上讲台 *tiào-shang jiǎngtái* [jump-up platform] and

⁸⁶ Two satellites (i.e., 起 *-qi* 'up', 开 *-kai* 'open') cannot be followed by an NPloc.

⁸⁷ SATpath refers to a Path satellite.

⁸⁸ Lamarre (2008b) points out that the NPlocs indicating Goal that follow 出 *-chu* 'out' usually take the localizer 外 *wài* 'outside'.

走进屋 *zǒu-jìn wū* [walk-into room], 讲台 *jiǎngtái* 'platform' and 屋 *wū* 'room' express Goal.

Some satellites, like 回 *-hui* 'back' and 到 *-dao* 'to', can only be followed by Goal, as 家 *jiā* 'home' in 拿回家 *ná-hui jiā* 'take home' and 地 *dì* 'ground' in 放到地上 *fàng-dao dì=shang* [put-to ground=upside] 'put on the ground'.

The satellite 过 *-guo* 'across, over, past, through' can only be followed by Medium, as 丛林 *cónglín* 'jungle' in 穿过丛林 *chuān-guo cónglín* [cross-through jungle] 'cross the jungle'.

Path satellites	Source	Medium	Goal
下 <i>-xia</i> 'down, off'	x	x	x
出 <i>-chu</i> 'out'	x	x	x
上 <i>-shang</i> 'up'		x	x
进 <i>-jìn</i> 'into'		x	x
回 <i>-hui</i> 'back'			x
到 <i>-dao</i> 'to'			x
过 <i>-guo</i> 'across, over, past, through'		x	

Table 10. Semantics roles of NPlocs that can follow Path satellites (adapted from Lamarre 2008b: 216)

Below we briefly provide examples to illustrate the basic usage of the 28 Path satellites (i.e., 2 deictic satellites, 9 simple Path satellites and 17 bipartite Path satellites).⁸⁹ We start by looking at the deictic satellites 来 *-lai* 'hither' and 去 *-qu* 'thither', and then at simple Path satellites 上 *-shang* 'up', 下 *-xia* 'down, off', 进 *-jìn* 'into', 出 *-chu* 'out', 回 *-hui* 'back', 过 *-guo* 'over, past, through', 起 *-qi* 'up', 开 *-kai* 'apart, away', 到 *-dao* 'to', and their combination with 来 *-lai* 'hither' and 去 *-qu* 'thither' as bipartite Path satellites.

⁸⁹ Previous literature usually treats 来 *-lai* 'hither' and 去 *-qu* 'thither' as Path satellites. In this section, we use the term 'deictic satellites' for 来 *-lai* 'hither' and 去 *-qu* 'thither' in order to address their deictic feature.



We present these Path satellites in the following order:

[1] 来 *-lai* 'hither'

[2] 去 *-qu* 'thither'

[3] 上 *-shang* 'up';

上来 *-shang-lai* 'up towards the deictic center';

上去 *-shang-qu* 'up away from the deictic center'

[4] 起 *-qi* 'up';

起来 *-qi-lai* 'up towards the deictic center'

[5] 下 *-xia* 'down, off';

下来 *-xia-lai* 'down, off towards the deictic center';

下去 *-xia-lai* 'down, off away from the deictic center'

[6] 进 *-jin* 'into';

进来 *-jin-lai* 'into towards the deictic center';

进去 *-jin-qu* 'into away from the deictic center'

[7] 出 *-chu* 'out';

出来 *-chu-lai* 'out towards the deictic center';

出去 *-chu-qu* 'out away from the deictic center'

[8] 回 *-hui* 'back';

回来 *-hui-lai* 'back towards the deictic center';

回去 *-hui-qu* 'back away from the deictic center'

[9] 过 *-guo* 'across, over, past, through';

过来 *-guo-lai* 'across, over, past, through towards the deictic center';

过去 *-guo-qu* 'across, over, past, through away from the deictic center'



[10] 开 *-kai* 'apart, away';

开来 *-kai-lai* 'apart, away towards the deictic center';

开去 *-kai-qu* 'apart, away from the deictic center' (rare)

[11] 到 *-dao* 'to';

到...来 *-dao...-lai* 'to somewhere towards the deictic center';

到...去 *-dao...-qu* 'to somewhere away from the deictic center'

For each Path satellite, we present the meaning it conveys, its combination with NPlocs indicating different semantic meanings of the Path in either spontaneous motion or caused motion.

[1] 来 *-lai* 'hither' & [2] 去 *-qu* 'thither'

The deictic satellite 来 *-lai* 'hither' indicates that the moving entity (i.e., a person or an object) moves towards the deictic center, while the deictic satellite 去 *-qu* 'thither' indicates that the moving entity leaves the deictic center and moves to another location (Liú 1998).⁹⁰ According to Liú, both deictic satellites, 来 *-lai* 'hither' and 去 *-qu* 'thither', combine the most frequently with Path verbs (= directional verbs) such as 上 *shàng* 'ascend', 下 *xià* 'descend', 进 *jìn* 'enter', 出 *chū* 'exit', 回 *huí* 'return', 过 *guò* 'cross', 起 *qǐ* 'rise' (it can only combine with 来 *-lai* 'hither' but not 去 *-qu* 'thither'), and 到 *dào* 'arrive', etc. Examples (120) and (121) illustrate their combination.

(120) 你回来一趟吧! (adapted from Liú 1998: 52)

<i>Nǐ</i>	<i>huí-lai</i>	<i>yí</i>	<i>tàng</i>	<i>ba</i> ⁹¹
2SG	return-hither	one	come.and.go.back	SUG
'Come back (for a while)!'				

⁹⁰ In her book, Liú (1998) uses 'anchoring point' (立足点 *lìzú diǎn*). We understand anchoring point as the same notion as deictic center and use the latter one in this dissertation.

⁹¹ The morpheme *tàng* is used for a round trip (go and come back / come and go back). In the context of example(120), it indicates 'come and go back'.

(121) 前边是外滩公园，他买了门票进去了。 (ibid.: 67)

Qiánbian shì Wàitān gōngyuán, tā mǎi-le ménpiào jìn-qu le.
 front be Bund.Park 3SG buy-PFV entrance.ticket enter-into CRS
 'In front is the Bund Park, he bought an entrance ticket and went in.'

Apart from Path verbs, Standard Chinese also uses Manner verbs and Cause verbs which are usually combined with -来 *-lai* 'hither' and 去 *-qu* 'thither'. In the expression of spontaneous motion, we can find Manner verbs like 走 *zǒu* 'walk', 跑 *pǎo* 'run', and 奔 *bēn* 'rush', etc., as in (122). In the expression of caused motion, Cause verbs like 拿 *ná* 'take', 端 *duān* 'carry', and 寄 *jì* 'send', etc. are often used, as in (123).

(122) 这时，赵天辉陪着秦波朝内科病房走来。 (ibid.: 53)

Zhè shí, Zhào Tiānhuī péi-zhe Qínbō cháo
 this time Zhao Tianhui accompany-DUR Qin Bo towards
 nèikē bìngfáng zōu-lai.
 medical.ward walk-hither
 'Then Zhao Tianhui is walking towards the medical ward (towards the deictic center) with Qin Bo for company.'

(123) 这儿有封信，你们拿去看吧！ (ibid.: 71)

Zhèr yǒu fēng xìn, nǐmen ná-qu kàn ba!
 here have CL letter 2PL take-thither see Sug
 'There is a letter here. Take it (away from the deictic center) and read it!'

The use of two deictic satellites -来 *-lai* 'hither' and 去 *-qu* 'thither' is in relation with deictic center. The deictic center can be the speaker when someone utters the sentence in the first person. In (124), *wǒ* 'I' is the deictic center. Besides, the deictic center can be anchored in someone or something other than the speaker. In narration, the deictic center can be the position of someone or something being narrated. In (125), *lǎo shīfu* 'old master' is considered as the deictic center.

(124) 我看见人们向山上跑去。 (ibid.:3)

Wǒ kànjiàn rénmen xiàng shān=shang pǎo-qu.
 1SG see people towards mountain=upside run-thither
 'I saw that people ran towards the mountain (away from the deictic center).'

(125) 一天，老师傅把鲁班找来。 (ibid.)

Yī tiān, lǎo shīfu bǎ Lǔ Bān zhǎo-lai.
 one day old master OM Lu Ban find-hither
 'One day, the old master found Lu Ban (towards the deictic center).'

[3] 上 *-shang* 'up' & [4] 起 *-qi* 'up'

The simple Path satellites 上 *-shang* 'up' and 起 *-qi* 'up' indicate that the moving entity moves from the downside to the upside (Liú 1998). As we can see, both satellites can express the 'up' meaning. However, 上 *-shang* 'up' can be followed by an NPloc as in (126) and (127) when it is combined with Co-event verbs. By contrast, 起 *-qi* 'up' cannot be followed by an NPloc. Examples without NPloc, as illustrated in (128) and (130), are correct whereas examples with NPloc, as in (129) and (131), are not acceptable. Lamarre (2008a: 72) points out that 上 *-shang* 'up' is Goal-oriented while 起 *-qi* 'up' is Source-oriented. In addition, we agree with the idea that 上 *-shang* 'up' combined with NPloc such as 树 *shù* 'tree', 楼梯 *lóutī* 'stairs' can indicate the Medium, since such Grounds form a continuity which does not have any boundary. This is advocated and put forward by two Japanese scholars, cited in Lamarre (2007b, 2008b).

(126) 他们登上胡桃峪山顶， ...。 (ibid.: 81)

Tāmen dēng-shang hútaoyù shāndǐng, ...
 3PL ascend-up Hutaoyu top.of.a.mountain
 'They climbed to the top of Hutaoyu Mountain, ...'

(127) ..., 那几条汉子就把他推上了吉普车， ...。 (ibid.: 82)

..., nà jǐ tiáo hànzi jiù bǎ tā tuī-shang-le jípǔchē, ...
 that several CL man then OM 3SG push-up-PFV jeep
 '..., and then the men pushed him into the jeep, ...'



(128) 我们在黑夜中告别，相会时一定有灿烂的朝霞升起。(ibid.: 316)

Wǒmen zài hēiyè=zhong gàobié, xiānghuì shí
 1PL at night=in.the.center.of bid.farewell.to meet time
 yídìng yǒu cànlande zhāoxiá shēng-qǐ.
 certainly have glorious morning.glow ascend-up
 'We bid farewell in the dark night, and when we meet there must be a
 glorious morning glow.'

(129) *我们在黑夜中告别，相会时一定有灿烂的朝霞升起天空。

*Wǒmen zài hēiyè=zhong gàobié, xiānghuì shí
 1PL at night=in.the.center.of bid.farewell.to meet time
 yídìng yǒu cànlande zhāoxiá shēng-qǐ tiānkōng.
 certainly have glorious morning.glow ascend-up sky
 'We bid farewell in the dark night, and when we meet, there must be a
 glorious morning glow rising up in the sky.' (intended meaning)

(130) 张顺把曾皓抱起，向大客厅走。(ibid.: 318)

Zhāng Shùn bǎ Zēng Hào bào-qi,
 Zhang Shun OM Zeng Hao hold.in.the.arms-up
 xiàng dà kètīng zǒu.
 towards big drawing.room walk
 'Zhang Shun picked up Zeng Hao and walked to the big drawing room.'

(131) *张顺把曾皓抱起沙发，向大客厅走。

*Zhāng Shùn bǎ Zēng Hào bào-qi shāfā,
 Zhang Shun OM Zeng Hao hold.in.the.arms-up sofa
 xiàng dà kètīng zǒu.
 towards big drawing.room walk
 'Zhang Shun picked Zeng Hao up from the sofa and walked to the big
 drawing room.' (intended meaning)

**上来 -shanglai 'up towards the deictic center' & 上去 -
 shang-qu 'up away from the deictic center'**

The bipartite Path satellites 上来 -shang-lai 'up towards the deictic center' and 上去 -shang-qu 'up away from the deictic center' indicate that the moving entity moves from the downside to the upside. The deictic center of the former one is at the higher level whereas the deictic center of the latter one is at the lower level (Liú 1998).

Examples (132)-(135) illustrate the combination of 上来 -
shang-lai 'up towards the deictic center' and 上去 -*shang-qu* 'up
 away from the deictic center' with co-event verbs. Both of the
 bipartite Path satellites can be used without being combined with
 an NPloc, as in (132) and (135). They can also combine with an NPloc
 indicating the Goal, like 岸 *àn* 'shore' in (133) and 墙 *qiáng* 'wall' in
 (134).

(132) 有一个人影从墙外爬上来。 (ibid.: 117)

Yǒu yí gè rényǐng cóng qiáng=wài pá-shang-lai.
 have one CL figure from wall=outside climb-up-hither
 'There is a figure climbed up from the wall (towards the deictic center).'

(133) 他们把那条沉船拖上岸来。 (ibid.: 118)

Tāmen bǎ nà tiáo chénchuán tuō-shang-àn-lai.
 3PL OM that CL sunken.ship drag-up-shore-hither
 'They dragged the sunken ship ashore (towards the deictic center).'

(134) 我想弓身跳上墙去。 (ibid.: 127)

Wǒ xiǎng gōngshēn tiào-shang-qiáng-qu.
 1SG want bent.body jump-up-wall-thither
 '(I) want to hunch and jump on the wall (away from the deictic center).'

(135) 他吃力地扛上去一箱书。 (ibid.: 128)

Tā chīlìde káng-shang-qu yì xiāng shū.
 3SG with.difficulty carry.on.the.shoulder one CL book
 'He carried a box of books with difficulty (away from the deictic center).'

起来 -*qi-lai* 'up towards the deictic center'

Unlike 上 -*shang* 'up' which can combine with both 来 -*lai*
 'hither' and 去 -*qu* 'thither', 起 -*qi* 'up' can only combine with 来 -*lai*
 'hither', but not with 去 -*qu* 'thither'. Lamarre (2008a: 73) points out
 that the deictic opposition is neutralized for 起 -*qi* 'up' in Standard
 Chinese probably for cognitive reasons, but that is not necessarily
 the case for other dialects. The bipartite Path satellite 起来 -*qi-lai*
 'up towards the deictic center' indicates a moving entity moves from
 the downside to upside. The deictic center can be either at the

downside (e.g., (136)) or the upside (e.g., (137)) (Liú 1998). The same as 起 *-qi* 'up', 起来 *-qi-lai* 'up towards the deictic center' cannot be followed by an NPloc.

(136) 江涛一见严知孝，立刻站起来。 (ibid.: 341)

Jiāng Tāo yíjiàn Yán Zhīxiào, lìkè zhàn-qi-lai.
 Jiang Tao at.sight Yan Zhixiao, immediately stand-up-hither
 'Jiang Tao stood up as soon as he saw Yan Zhixiao (towards the deictic center).'

(137) 你先把画挂起来吧！ (ibid.: 343)

Nǐ xiān bǎ huà guà-qi-lai ba!
 2SG first OM picture hang-up-hither SUG
 'Hang up the picture first (towards the deictic center)!'

[5] 下 *-xia* 'down, off'

The simple Path satellite 下 *-xia* 'down, off' indicates that the moving entity moves from the upside to the downside (Liú 1998). The NPloc followed by 下 *-xia* 'down, off' can either indicate the Source, the Medium, and the Goal.

Examples (138) and (139) show that 下 *-xia* 'down, off' is followed by the NPloc 船 *chuán* 'the boat' and 水 *shuǐ* 'water' indicating Source and Goal respectively. Example (140) illustrates that 下 *-xia* 'down, off' when it is not combined with any NPloc indicates only the direction without specifying the Source and the Goal. Besides, 下 *-xia* 'down, off' can also be followed by NPlocs, such as 山 *shān* 'mountain', 坡 *pō* 'slope', to indicate the Medium.

(138) 王子走下船。

Wángzǐ zǒu-xia chuán.
 prince walk-off boat
 'The prince walked off the boat.'

(139) 他顾不上脱衣服，扑通跳下水，向着船游去。 (ibid.: 137)

Tā gù-bu-shang tuō yīfu, pūtōng
 3SG have.no.time.to.do.sth take.off clothes splash

tiào-xia shuǐ, xiàng-zhe chuán yóu-qu.
 jump-down water towards boat swim-thither

'He had no time to take off his clothes, and he jumped into the water and swam towards the boat.'

(140) 把东西放下，放下！ (ibid.: 140)

Bǎ dōngxi fàng-xia, fàng-xia!
 OM thing put-down put-down

'Put things down, put down!'

下来 -*xia-lai* 'down, off towards the deictic center' & 下去 -*xia-qu* 'down, off away from the deictic center'

The bipartite Path satellites 下来 -*xia-lai* 'down, off towards the deictic center' and 下去 -*xia-qu* 'down, off away from the deictic center' indicate that the moving entity moves from the upside to the downside. The deictic center of the former one is at the lower level and the deictic center of the latter one is at the higher level (Liú 1998). As is the case for simple Path satellite 下 -*xia* 'down, off', the bipartite Path satellites 下来 -*xia-lai* 'down, off towards the deictic center' and 下去 -*xia-qu* 'down, off away from the deictic center' too can combine with an NPloc being inserted between 下 -*xia* 'down, off' and 来 -*lai* 'hither' or 去 -*qu* 'thither' and indicating either the Source, the Medium, or the Goal.

According to Liú (1998), the NPloc combined with 下来 -*xia-lai* 'down, off towards the deictic center' or 下去 -*xia-qu* 'down, off away from the deictic center' indicates the Source when it is above the horizon line and the Goal when it is under the horizon line. In this case, Liú interprets 楼 *lóu* 'floor' in (141) and 山 *shān* 'mountain' in (142) as expressing the Source information of the action 'walk'. However, we consider these two examples as expressing the Medium. By contrast, we consider 床 *chuáng* 'bed' in (143) and 水 *shuǐ* 'water' (144) as expressing the Source and the Goal respectively. When there is no NPloc, 下来 -*xia-lai* 'down, off towards the deictic

center' indicates only the direction and the perspective, as exemplified in (145) and (146).

(141) 他走下楼来。 (ibid.: 160)

Tā zǒu-xia-lóu-lai.

3SG walk-down-floor-hither

'He walked down to the floor (towards the deictic center).'

(142) 我们走下山去。 (ibid.: 185)

Wǒmen zǒu-xia-shān-qu.

1PL walk-down-mountain-thither

'We went down the mountain (away from the deictic center).'

(143) (她) 悄悄溜下床来坐在道静的床上。 (ibid.: 160)

(Tā) qiāo-qiāo liū-xia-chuang-lai zuò zài Dào-jìng de

3SG quietly slip.away-down-bed-hither sit at Daojing DET

chuáng=shang.

bed=upside

'(She) slipped out of bed quietly (towards the deictic center) and sat on Daojing's bed.'

(144) 跳下水去! (ibid.: 185)

Tiào-xia-shuǐ-qu!

jump-down-water-thither

'Jump into the water (away from the deictic center)!'

(145) 大家喊：“拖下来！” (ibid.: 162)

Dàjiā hǎn: “tuō-xia-lai!”

everyone shout drag-down-hither

'Everyone shouted: “Drag (it) down (towards the deictic center)!”'

(146) 达生勉强强地被推下去。 (ibid.: 188)

Dáshēng miǎnmiǎnqiǎngqiǎngde bèi tuī-xia-qu.

Dasheng reluctantly PASS push-down-thither

'Dasheng was reluctantly pushed down (away from the deictic center).'

[6] 进 *-jin* 'into' & [7] 出 *-chu* 'out'

The simple Path satellite 进 *-jin* 'into' indicates that the moving entity moves from the outside to the inside. The simple Path satellite 出 *-chu* 'out' indicates that the moving entity moves from the inside to the outside (Liú 1998). Examples (147) and (148) show the

combination of 进 *-jin* 'into' and the verbs 钻 *zuān* 'sneak' and 捡 *jiǎn* 'pick up' respectively, followed by NPloc indicating the Goal. Examples (149) and (150) illustrate 出 *-chu* 'out' in combination with the Manner verb 走 *zǒu* 'walk' and the Cause verb 推 *tuī* 'push', followed by NPloc indicating the Source. Lamarre (2008b: 216) considers that 进 *-jin* 'into' and 出 *-chu* 'out' can not only be followed by NPloc expressing Goal and Source, but they can also be followed by NPloc expressing Medium, such as 进门 *jìn mén* [enter-door] 'enter the door' in which 门 *mén* 'door' should be better understood as the intermediate point by which the moving entity enters. Jackendoff (1990: 46) notices that 'enter' in *John entered* means not just 'John traversed some path' but also 'John went into something'. We consider that although 进 *-jin* 'into' and 出 *-chu* 'out' are intrinsically Goal-oriented and Source-oriented, they always involve a sort of Medium since these two actions are boundary-crossing events.

(147) ..., 自己先钻进车内。 (ibid.: 203)

..., *zìjǐ xiān zuān-jìn chē=nèi.*
 self first sneak-into car=inside
 '..., (he) sneaked into the car first.'

(148) 他[...], 捡了一颗扔进嘴里。 (ibid.: 204)

Tā [...] *jiǎn-le yì kē rēng-jìn zuǐ=li.*
 3SG pick.up-PFV one CL throw-into mouth=inside
 'He [...] picked up one and threw it into his mouth.'

(149) 朱老忠走出房门, 在院子里歇了一下。 (ibid.: 217)

Zhū Lǎozhōng zǒu-chu fángmén, zài yuànzǐ=li
 Zhu Laozhong walk-out door at courtyard=inside
xiē-le yíxià.
 have.a.rest-PFV a.while
 'Zhu Laozhong walked out of the door and took a rest at the courtyard.'

(150) 何教授被几个勇士推出楼门。 (ibid.: 218)

Hé jiàoshòu bèi jǐ gè yǒngshì tuī-chu lóumén.
 He professor PASS several CL warrior push-out building
 'Professor He was pushed out of the building by several warriors.'

进来 -*jin-lai* 'into towards the deictic center' & 进去 -*jin-qu* 'into away from the deictic center'

The bipartite Path satellites 进来 -*jin-lai* 'into a place towards the deictic center' and 进去 -*jin-qu* 'into a place away from the deictic center' indicates that the moving entity moves from the outside to the inside (Liú 1998). The deictic center of the former one is at the inside of the location, as in (151) and (152), and the deictic center of the latter one is at the outside of the location, as exemplified in (153) and (154).

(151) 繁漪由中门不做声地走进来。 (ibid.: 208)

Fányī yóu zhōngmén búzuòshēngde zǒu-jin-lai.
 Fanyi from middle.door silently walk-into-hither
 'Fanyi walked in silently through the middle door (towards the deictic center).'

(152) 你把炉子搬进来, ... (ibid.: 210)

Nǐ bǎ lúzi bān-jin-lai, ...
 2SG OM stove move-into-hither
 'Move the stove in (towards the deictic center), ...'

(153) 我看见刚才洞里钻进去几个孩子。 (ibid.: 212)

Wǒ kànjiàn gāngcái dòng=li zuān-jin-qu jǐ gè háizi.
 1SG see just.now cave=inside sneak-into-thither several CL child
 'I saw a few children sneaking into the hole just now (away from the deictic center).'

(154) [...], 拿进去。 (ibid.: 213)

[...], ná-jin-qu.
 ..., take-into-thither
 '[...], take (it) in (away from the deictic center).'

出来 -*chu-lai* 'out of a place towards the deictic center' & 出去 -*chu-qu* 'out of a place away from the deictic center'

The bipartite Path satellites 出来 -*chu-lai* 'out of a place towards the deictic center' and 出去 -*chu-qu* 'out of a place away from the deictic center' indicate that the moving entity moves from the inside to the outside. The deictic center of the former one is at the outside of the location and the deictic center of the latter one is



at the inside of the location (Liú 1998). According to Liú (ibid.), the NPloc which follows 出来 *-chu-lai* usually indicates the Source, as 教室 *jiàoshì* 'classroom' in 走出教室来 *zǒu-chu-jiàoshì-lai* [walk-out-classroom-hither] 'walk out of the classroom (towards the deictic center)'. Sometimes, the NPloc can also indicate the Goal, as in 走出门外来 *zǒu-chu-mén=wai-lai* [walk-out-door=outside-hither] 'walk out to the outside of the door (towards the deictic center)'. Lamarre (2008b: 216) notes that the NPloc indicating the Goal usually comprises the localizer 外 *=wai* 'outside' (see also Liú 1998: 10). Apart from the case in which the NPloc is inserted between 出 *-chu* 'out' and 来 *-lai* 'hither', prepositional phrases (hereafter PP) before the verbal phrase including an NPloc can also be used to express the Source, together with 出来 *-chu-lai* 'out of a place towards the deictic center', as in (155). Sometimes, when 出来 *-chu-lai* 'out of a place towards the deictic center' is combined with a Cause verb like 掏 *tāo* 'take out', the verb can also convey the meaning of the direction from the inside to the outside as in (156). Examples (157) and (158) show the use of 出去 *-chu-qu* 'out of a place away from the deictic center' combined with the Manner verb 走 *zǒu* 'walk' and the Cause verb 端 *duān* 'hold something level with both hands', respectively.

(155) 丁四从屋中跑出来。 (ibid.: 233)

Dīngsì cóng wū=zhong pǎo-chu-lai.
Dingsi from room=in.the.center.of run-out-hither
'Dingsi ran out of the room (towards the deictic center).'

(156) 晓燕把钱掏出来放在桌子上。 (ibid.: 235)

Xiǎoyàn bǎ qián tāo-chu-lai fàng zài zhuōzi=shang.
Xiaoyan OM money take.out-out put at table=upside
'Xiaoyan took out the money and put it on the table (towards the deictic center).'

(157) 他也走出门去, ...。 (ibid.: 251)

Tā yě zǒu-chu-men-qu, ...
3SG also walk-out-door-thither

'He also walked out of the door (away from the deictic center), ...'

(158) 李三随后端出两碗面去。 (ibid.: 252)

Lǐsān suíhòu duān-chu liǎng wǎn
Lisan soon.afterwards hold.sth.level.with.both.hands-out two CL
miàn-qu.

noodle-thither

'Lisan then brought out two bowls of noodles.'

[8] 回 *-hui* 'back'

The simple Path satellite 回 *-hui* 'back' indicates that the moving entity moves to the original place (e.g., place of departure, home, hometown, and motherland, etc.); the deictic center can be either at the original place or not (Liú 1998). The NPloc can be overtly expressed which follows 回 *-hui* 'back', as 厨房 *chúfáng* 'kitchen' in (159). The NPloc can also be covertly expressed and be implied in the sentence, as in (160) in which the original place is not mentioned.

(159) 老王跑回厨房, 拿了菜刀来。 (ibid.: 257)

Lǎo Wáng pǎo-hui chúfáng, ná-le càidāo-lai.
Old Wang run-back kitchen take-PFV knife-hither

'Old Wang ran back to the kitchen and brought a kitchen knife.'

(160) 他从西山拉回三十匹骆驼! (ibid.: 258)

Tā cóng Xīshān lā-hui sānshí pǐ luòtuó!
3SG from Xi Shan pull-back thirty CL camel

'He pulled back thirty camels from Xi Shan!'

回来 *-hui-lai* 'back towards the deictic center' & 回去 *-hui-qu* 'back away from the deictic center'

The bipartite Path satellites 回来 *-hui-lai* 'back towards the deictic center' and 回去 *-hui-qu* 'back away from the deictic center' indicate that the moving entity moves to the original location (e.g., place of departure, home, hometown, and motherland, etc.). The

deictic center of the former one is at the original location and the deictic center of the latter one is not at the original location (Liú 1998). Both bipartite Path satellites combine the most frequently with Manner verbs, as in (161) and (163). They can also combine with Cause verbs, as in (162) and (164). An NPloc indicating the original place of the moving entity can be inserted between 回 *-hui* 'back' and 来 *-lai* 'hither' or 去 *-qu* 'thither', as in (161) and (164).

(161) 他又绕回西安门来。 (ibid.: 261)

Tā yòu rào-hui-Xī'ānmen-lai.
 3SG again make.a.detour-back-Xi'anmen-hither
 'He made a detour to Xi'anmen again (towards the deictic center).'

(162) (周冲) 把头由门口缩回来, 做了一个鬼脸。 (ibid.: 262)

(Zhōuchōng) bǎ tóu yóu ménkǒu suō-hui-lai,
 Zhouchong OM head from door draw.back-back-hither
zuò-le yí gè guǐliǎn.
 make-PFV one CL grimace
 'Zhouchong retraced his head from the door (towards the deictic center) and made a face.'

(163) 娃子垂头丧气跟了回去。 (ibid.: 265)

Wázi chuitóusàngqì gēn-le-hui-qu.
 Wazi be.downcast follow-PFV-back-thither
 'Wazi was downcast and followed back (away from the deictic center)

(164) 我把您送回家去, ...。 (ibid.: 267)

Wǒ bǎ nín sòng-hui-jia-qu, ...
 1SG OM 2SG.HON send-back-home-thither
 'I (will) send you home (away from the deictic center), ...'

[9] 过 *-guo* 'over, past, through'

The simple Path satellite 过 *-guo* 'over, past, through' can indicate that the moving entity passes a place, or moves either approaching the deictic center, or leaves the deictic center and approaches another goal (Liú 1998). Example (165) illustrates that the moving entity passes the top of the wall by jumping and

example (166) shows that the moving entity 毛巾 *máojīn* 'towel' moves approaching the deictic center 我 *wǒ* 'I'.

(165) [...], 跳过墙头逃跑了。 (ibid.: 269)

[...], *tiào-guo* *qiángtóu* *táopǎo* *le*.
 jump-over top.of.a.wall run.away CRS
 '[...] (and) jumped over the top of the wall and ran away.'

(166) 他递过一条毛巾给我。 (ibid.: 269)

Tā *dì-guo* *yì* *tiáo* *máojīn* *gěi* *wǒ*.
 3SG give-over one CL towel BEN 1SG
 'He handed me a towel.'

过来 -*guo-lai* 'over, past, through towards the deictic center' & 过去 -*guo-qu* 'over, past, through away from the deictic center'

The bipartite Path satellite 过来 -*guo-lai* 'over, past, through towards the deictic center' indicates that the moving entity (passes a place and) moves towards the deictic center. The bipartite Path satellite 过去 -*guo-qu* 'over, past, through away from the deictic center' indicates that the moving entity leaves or moves away from the deictic center by passing by a place or by approaching to a goal (Liú 1998). Both bipartite Path satellites combine the most frequently with Manner verbs, as in (167) and (170). They can also combine with Cause verbs, as in (169) and (171). According to Liú (ibid.), the moving entity can only approach the deictic center without passing a place. This is usually the case when there is a PP (i.e., 向 *xiàng* 'towards'/朝 *cháo* 'towards' + NPloc) preceding the verbal phrase, as shown in (167) and (169). In addition, the author (ibid.: 288) also compares differences between V-*guo-lai* and V-*lai* since both of them can be used to indicate that the moving entity moves towards the deictic center without passing a place, as in (167) and (168). Firstly, directional verbs (e.g., 上 *shàng* 'ascend', 进 *jìn* 'enter', etc.) cannot combine with 过来 -*guo-lai* 'over, past, through towards the deictic center', but they can combine with 来 -*lai* 'hither'. Some verbs, such as 坐 *zuò* 'sit', 靠 *kào* 'lean against' cannot combine directly with 来 -*lai* 'hither' whereas they can combine

directly with 过来 *-guo-lai* 'across, over, past, through towards the deictic center'. And some other verbs, for instance, 摘 *zhāi* 'pick', 寄 *jì* 'send' cannot or rarely combine with 过来 *-guo-lai* 'over, past, through towards the deictic center'. However, they combine more frequently with 来 *-lai* 'hither'. Secondly, besides the meaning 'towards the deictic center', 过来 *-guo-lai* 'over, past, through towards the deictic center' can also indicate that the moving entity moves by passing a place and this is not possible by 来 *-lai* 'hither'. Thirdly, when expressing spontaneous motion events, 过来 *-guo-lai* 'over, past, through towards the deictic center' is used more in colloquial speech whereas 来 *-lai* 'hither' appears more frequently in literary works.

An NPloc can be inserted between 过 'over, past, through' and 来 *-lai* 'hither' or 去 *-qu* 'thither', such as in (170), 围墙 *wéiqiáng* 'fence' indicating the place through which the moving entity passes. Besides, with the help of PP (i.e., 从 *cóng* 'from') preceding the verbal phrase, the complex directional complements 过来 *-guo-lai* 'over, past, through towards the deictic center' and 过去 *-guo-qu* 'over, past, through away from the deictic center' can also indicate that the moving entity moves by passing a place, such as 从桥上走过去 *cóng qiáo=shang zǒu-guo-qu* [from bridge=upside walk-through-thither] 'walk through the bridge (away from the deictic center)'. Otherwise, the NPloc can be absent, as in (171) in which the moving entity 杯子 *bēizi* 'cup' moves away from the deictic center.

(167) 吴国强一步一步地向她走过来。 (ibid.: 285)

<i>Wú Guóqiáng</i>	<i>yíbùyíbùde</i>	<i>xiàng</i>	<i>tā</i>	<i>zǒu-guo-lai.</i>
Wu Guoqiang	step.by.step	towards	3SG	walk-past-hither

'Wu Guoqiang walked towards her step by step (towards the deictic center).'

(168) 吴国强一步一步地向她走来。

<i>Wú Guóqiáng</i>	<i>yíbùyíbùde</i>	<i>xiàng</i>	<i>tā</i>	<i>zǒu-lai.</i>
Wu Guoqiang	step.by.step	towards	3SG	walk-hither

'Wu Guoqiang walked towards her step by step (towards the deictic center).'

(169) 她[...], 将右手向他伸过来。 (ibid.: 286)

Tā [...] jiāng yòu shǒu xiàng tā shēn-guo-lai.
3SG JIANG right hand towards 3SG stretch-past-hither
'She [...] stretched out her right hand to him (towards the deictic center).'

(170) 趁着夜色, 跳过围墙去。 (ibid.: 302)

Chènzhe yèsè, tiào-guo-wéiqiáng-qu.
take.advantage.of darkness jump-over-fence-thither
'Taking advantage of the night, jump over the fence (away from the deictic center).'

(171) 他淡淡一笑, 接过杯子去。 (ibid.: 304)

Tā dàndàn yí xiào, jiē-guo-bēizi-qu.
3SG weakly one smile take-past-cup-thither
'He smiled weakly and took the cup (away from the deictic center).'

[10] 开 *-kai* 'away, apart'

The simple Path satellite 开 *-kai* 'apart, away' indicates that the moving entity moves apart or away from a place. The deictic center can be either at the place or not (Liú 1998). An NPloc can follow 开 *-kai* 'apart, away' indicating the Source when combining with a Manner verb, as exemplified in (172). No NPloc can follow 开 *-kai* 'apart, away' when it is combined with a Cause verb, such as (173).

(172) 咱们六点钟离开旅馆。 (ibid.: 9)

Zánmen liù diǎnzhōng lí-kai lǚguǎn.
1PL.INCL six o'clock leave-away hotel
'Let us leave the hotel at six o'clock.'

(173) 马腾推开顾向文。 (ibid.: 383)

Mǎ Téng tuī-kai Gù Xiàngwén.
Ma Teng push-apart Gu Xiangwen.
'Ma Teng pushed away Gu Xiangwen.'

开来 *-kai-lai* 'apart, away towards the deictic center' & 开去 *-kai-qu* 'apart, away from the deictic center'

The bipartite Path satellite 开来 *-kai-lai* 'apart, away towards the deictic center' expresses separation and fission and usually combines with verbs such as 张 *zhāng* 'spread', 睁 *zhēng* 'open'. This can be illustrated in (174). With regard to 开去 *-kai-qu* 'apart, away

away from the deictic center', it indicates that the moving entity moves away from the deictic center, as in (175). However, the use of 开去 *-kai-qu* 'apart, away away from the deictic center' is very rare in actual use (Liú 1998).

(174) 他慢慢睁开眼睛来, ... (ibid.: 396)

Tā *mànmàn* *zhēng-kai-yǎn-lai*, ...
3SG slowly open-apart-eye-hither
'He opened slowly his eyes (towards the deictic center), ...'

(175) 她的思绪漂移开去。 (ibid.: 398)

Tā *de* *sīxù* *piāoyí-kai-qu*.
3SG GEN thinking drift-away-thither
'Her thoughts drift away.'

[11] 到 *-dao* 'to'

The simple Path satellite 到 *-dao* 'to' indicates that the moving entity moves to a place (Liú 1998). 到 *-dao* 'to' behaves a little bit differently from other simple directional complements (i.e., [3] – [10]). It can combine not only with co-event verbs, as exemplified in (178) and (179), but also with the following Path verbs (= directional verbs) 上 *shàng* 'ascend', 下 *xià* 'descend', 进 *jìn* 'enter', 回 *huí* 'return', 过 *guò* 'cross', and 来 *lái* 'come', as shown in (176) and (177). The NPlocs that can be combined with 到 *-dao* 'to' indicate the arrival at the endpoint. The status of 到 *-dao* 'to' is controversial, some linguists, such as Liú (1998), consider that it shares most of the syntactic features with the non-deictic Path directionals (= Path satellites), agreed by Lamarre (2008a); other scholars consider it as a preposition. We will look at their respective arguments in §2.2.3 when presenting the adnominal encoding.

(176) 他寒假暑假回到家乡, ... (ibid.: 400)

Tā *hánjià* *shǔjià* *huí-dao* *jiāxiāng*, ...
3SG winter.vacation summer.vacation return-to hometown
'He returns home in winter and summer vacation, ...'

(177) 我帮她提着 小旅行袋，来到长安街上。 (ibid.: 400)

Wǒ bāng tā tí-zhe xiǎo lǚxíngdài, lái-dao Cháng'ānjiē.
 1SG help 3SG carry-DUR small travel.bag come-to Changan Street
 'I helped her carry the small travel bag and came to Chang'an Street.'

(178) 夏亦秋点点头，走到他身边。 (ibid.: 401)

Xià Yiqiū diǎn-diǎn tóu, zǒu-dao tā shēnbiān.
 Xia Yiqiu nod-RDP head walk-to 3SG at.one's side
 'Xia Yiqiu nodded and walked to him.'

(179) 周冲只好把药端到 蔡漪面前。 (ibid.: 402)

Zhōu Chōng zhǐhǎo bǎ yào duān-dao
 Zhou Chong have.to OM medicine hold.sth.level.with.both.hands-to
Fányī miànqián.
 Fanyi in.front.of
 'Zhong Chong had to carry the medicine to Fanyi.'

The bipartite Path satellites 到...来 *-dao...-lai* 'to somewhere towards the deictic center' and 到...去 *-dao...-qu* 'to somewhere away from the deictic center' indicate that the moving entity moves to a place either towards or away from the deictic center. When an NPloc is used, it should be placed between 到 *-dao* 'to' and 来 *-lai* 'hither' or 去 *-qu* 'thither', such as (180)-(183). The bipartite Path satellites can combine with either Path verbs, such as 钻 *zuān* 'sneak' in (180) and 探 *tàn* 'stretch forward' in (181), or co-event verbs, such as 跳 *tiào* 'jump' and 抬 *tái* 'lift' in (182) and (183) respectively.

(180) 他[...]突然钻到队伍前面来。 (ibid.: 414)

Tā [...] tūrán zuān-dao-duìwǔ=qiánmian-lai.
 3SG suddenly sneak-to-troops=front-hither
 'He [...] suddenly sneaked to the front of the troops (towards the deictic center).'

(181) 他把身子探到墙这边来，跟我们说话。 (ibid.: 414)

Tā bǎ shēnzi tàn-dao-qióng-zhèbian-lai, gēn wǒmen shuōhuà.
 3SG OM body stretch.forward-to-wall-here-hither with 1PL talk
 'He leaned over to the wall and talked with us (towards the deictic center).'

(182) 你灭了灯，打后院跳到王家去。 (ibid.: 417)

Nǐ miè-le dēng, dǎ hòuyuàn tiào-dào-Wángjiā-qu.
 2SG extinguish-PFVlight from backyard jump-to-Wang's.house-thither
 'After turning off the light, jump from the backyard to Wang's house (away from the deictic center).'

(183) 把你们那猪抬到大贵那里去吧，... .. (ibid.: 418)

Bǎ nǐmen nà zhū tái-dào-Dàguì-nàli-qu ba,
 OM 2PL that pig lift-to-Dagui-there-thither SUG
 'Take your pig to Dagui's place (away from the deictic center),'

Apart from the above 11 simple complements and 17 complex complements, there is another type of directional complements which do not combine with 来 *-lai* 'hither' and 去 *-qu* 'thither'. According to Chao (1968: 464-467), complements of such type are verbs of motion which can also be complements. They usually retain their lexical tone as complements and take *-le* in actual use, but do not take either 来 *-lai* 'hither' and 去 *-qu* 'thither' after them. Note that Chao was not followed on this by other reference grammars (e.g., Liú 1998), which consider these as resultative complements.

Following Chao (1968), we briefly introduce here four of these complements, i.e., 掉 *-diào* 'drop, fall (from a height)', 倒 *-dǎo* 'toppled over', 翻 *-fān* 'turn over', and 住 *-zhù* 'live, dwell', which appear in our data.⁹² As a complement, the verb 掉 *diào* 'drop, fall (from a height)' behaves like the German prefix *weg-* 'off', such as in 擦掉了 *cā-diào-le* 'wipe off'. As to the verb 倒 *dǎo* 'toppled over', we can find its use as a complement in 打倒了 *dǎ-dǎo-le* 'knock down'. The verb 翻 *fān* 'turn over' is used as a complement in an example like 打翻了锅 *dǎ-fān-le guō* 'upset the pot'. Chao explains that the verb 住 *zhù* 'live, dwell', when used as a complement, indicates a state of holding fast, somewhat like the progressive aspectual marker 着 *-zhe*, as illustrated in 拿住 *ná-zhù* 'hold fast'.

⁹² We do not aim to give an inventory of these complements, but only to provide an explanation to morphemes that are concerned in the data in Part 2 (chapters 4, 5, and 6).

In addition to the above complements, we also consider two complements 走 *-zou* 'away' and 入 *-rù* 'into' that can express Path. The complement 走 *-zou* 'away' can not morphologically combine with Path satellites whereas 入 *-rù* 'into' is usually combined with the Path verb 进 *jìn* 'enter' which form a lexicalized verb 进入 *jìnrù* 'enter'. As complements, both 走 *-zou* 'away' and 入 *-rù* 'into' can not be combined with deictic satellites 来 *-lái* 'hither' and 去 *-qù* 'thither'. We will discuss more about these two directional complements in Chapter 4 (§4.3) when showing adverbial encoding of Path in the Standard Chinese data.

2.3.3. Adnominal encoding

The adnominal encoding of Path information is realized by prepositions and localizers in Standard Chinese.

As we introduced in §2.2.2 when discussing the encoding of Ground, localizers play an important role in the encoding of Path. More specifically, they encode the conformation information, i.e., the geometrical configuration of the Ground with respect to the Figure (e.g., inside, outside, upside, downside, etc.) (Lamarre 2003b). The inventory of localizers in Standard Chinese are summarized in §2.2.2 (Table 7). In this section we focus on the prepositions and look at the use of localizers mainly when they are combined with prepositional phrases.

The inventory of prepositions that express Path can be found in previous studies (Chu 2004: 188-190; Fàn 2013: 134-147; Shǐ 2014: 94; Lin 2019: 181-190; *inter alia*). Based on these studies, we list in Table 11 an inventory that includes the most frequently used prepositions (henceforth PREPs) under study in this dissertation. Note that there are two positions of the prepositional phrases (henceforth PPs) with respect to the verb/verb phrase (henceforth V/VP), before the V (henceforth PP-V, also called preverbal PP) and after the V (henceforth V-PP, also called postverbal PP). Preverbal PPs can express the Source, the Medium, and the Goal of Path whereas postverbal PPs can only express the Goal.



Path portions	Positions of PPs with respect to the V	PREPs
Source	PP-V	从 <i>cóng</i> 'from', 由 <i>yóu</i> 'from', 在 <i>zài</i> 'at'
Medium	PP-V	沿 <i>yán</i> 'along', 从 <i>cóng</i> 'through, over'
Goal	PP-V	朝 <i>cháo</i> 'towards', 往 <i>wǎng</i> 'towards', 向 <i>xiàng</i> 'towards'
	V-PP	往 <i>wǎng</i> 'towards', 向 <i>xiàng</i> 'towards', 在 <i>zài</i> 'at'

Table 11. Prepositions encoding Path and their positions with respect to the verb

Let us illustrate in detail these prepositions expressing different portions of Path. The preposition 从 *cóng* 'from' in a PP-V expresses the Source and indicates the starting point and the origin of the Figure, as in (184). The preposition 由 *yóu* 'from' is similar to 从 *cóng* 'from' and expresses a similar meaning, as in (186). According to Lǚ (2019 [1980]: 130, 628), 从 *cóng* 'from' and 由 *yóu* 'from' are usually combined with place words.

(184) 我刚从农村回来。 (adapted from Lǚ 2019 [1980]: 130)

Wǒ gāng cóng nóngcūn huí-lai.
1SG just from countryside return-hither
'I just came back from the countryside.'

(185) *我刚回来从农村。

**Wǒ gāng huí-lai cóng nóngcūn.*
1SG just return-hither from countryside

(186) 由南到北 (adapted from Lǚ 2019 [1980]: 628)

yóu nán dào běi
from south to north
'from the south to the north'

The preposition 沿 *yán* 'along' in a PP-V expresses the Medium, as in (187). It often combines with the aspectual marker 着 *zhe*

'durative marker', as illustrated in (188).⁹³ More specifically, 沿 *yán* 'along' expresses the route along which the Figure passes and the NPlocs which follow it, such as 河 *hé* 'river' and 路 *lù* 'road'. Unlike the verbal encoding 过 *guò* 'cross' and the adverbial encoding 过 - *guo* 'across, over, past, through' which express the intermediate point and a boundary-crossing event, 沿 *yán* 'along' indicates the intermediate line. Another preposition which can combine with a Ground indicating the Medium is 从 *cóng* 'from, along', it can either be followed by an NPloc indicating the route along which the Figure moves, as in (189), or an NPloc indicating the place through which the Figure passes, as in (190). As pointed by Lin (2019: 181), "the orders of source PPs and route PPs are usually fixed, that is, they typically occur in preverbal position". Therefore, examples (185) and (191) are ungrammatical.

(187) 沿河边走 (adapted from Lǚ 2019 [1980]: 590)

yán hébiān zǒu
along riverside walk
'walk along the riverside'

(188) 她沿着河边儿走了一个小时候左右。(adapted from Lamarre 2007b: 4)

Tā yán-zhe hébiānr zǒu-le yí gè xiǎoshí zuǒyòu.
3SG along-DUR riverside walk-PFV one CL hour about
'She walked for about one hour along the river.'

(189) 从小路走 (adapted from Lǚ 2019 [1980]: 131)

cóng xiǎolù zǒu
along pathway walk
'walk along the pathway'

(190) 列车从隧道里穿过。(adapted from Lǚ 2019 [1980]: 131)

Lièchē cóng suìdào=li chuān-guo.
train from tunnel=inside pass.through-across
'The train passed through the tunnel.'

⁹³ Note that prepositions have a verbal origin and some of them can take 'fossilized' continuous marker *-zhe*.



(191) *列车穿过从隧道里。

* <i>Lièchē</i>	<i>chuān-guo</i>	<i>cóng</i>	<i>suidào=li.</i>
train	pass.through-across	from	tunnel=inside

In order to express the Goal, the most frequently used prepositions are 朝 *cháo* 'towards', 往 *wǎng* 'towards', and 向 *xiàng* 'towards'. We first look at similarity and differences among the three prepositions mentioned above, and then we discuss 在 *zài* 'at' and 到 *dào* 'to' separately.

Syntactically, 朝 *cháo* 'towards', 往 *wǎng* 'towards', and 向 *xiàng* 'towards' can be used in a preverbal PP. Among them, only 往 *wǎng* 'towards' and 向 *xiàng* 'towards' can be used in a postverbal PP.

Semantically, PPs with 朝 *cháo* 'towards', 往 *wǎng* 'towards', and 向 *xiàng* 'towards' express a direction (= an unbounded Path, term used in Lamarre (2007a: 4)), more precisely, a Goal-oriented direction. When one of the three prepositions is used, it implies that the Figure is moving towards a certain direction without reaching the endpoint or the destination. When used as a preverbal PP, 朝 *cháo* 'towards' and 向 *xiàng* 'towards' are almost interchangeable without changing the meaning of the sentence, as illustrated in (192) and (193).⁹⁴ Both of them can be followed by the aspectual marker 着 *zhe* 'durative marker', as shown in (194) and (195).

(192) 舰队朝海岛驶去。 (Lǚ 2019 [1980]: 115)

<i>Jiànduì</i>	<i>cháo</i>	<i>hǎidǎo</i>	<i>shǐ-qu.</i>
fleet	towards	island	sail-thither

'The fleet sailed towards the island (away from the deictic center).'

(193) 舰队向海岛驶去。

<i>Jiànduì</i>	<i>xiàng</i>	<i>hǎidǎo</i>	<i>shǐ-qu.</i>
fleet	towards	island	sail-thither

'The fleet sailed towards the island (away from the deictic center).'

⁹⁴ 朝 *cháo* 'towards' and 向 *xiàng* 'towards' can also be used as verbs meaning 'face'.



(194) 舰队朝着海岛驶去。

Jiànduì cháo-zhe hǎidǎo shǐ-qu.
fleet towards-DUR island sail-thither

'The fleet sailed towards the island (away from the deictic center).'

(195) 舰队向着海岛驶去。

Jiànduì xiàng-zhe hǎidǎo shǐ-qu.
fleet towards-DUR island sail-thither

'The fleet sailed towards the island (away from the deictic center).'

朝 *cháo* 'towards' and 向 *xiàng* 'towards' can be followed by an NP which belongs to either place words and localizers, as in (199) and (200), or pronouns and common nouns indicating a person and an object, as in (196) and (197). By contrast, 往 *wǎng* 'towards' cannot be followed by an NP belonging to pronouns and common nouns, and (198) would be ungrammatical. It can only be followed by an NP which is a place word, as in (201).

(196) 小王朝他走去。

Xiǎo Wáng cháo tā zǒu-qu.
young Wang towards 3SG walk-thither

'Wang walked towards him (away from the deictic center).'

(197) 小王向他走去。

Xiǎo Wáng xiàng tā zǒu-qu.
young Wang towards 3SG walk-thither

'Wang walked towards him (away from the deictic center).'

(198) *小王往他走去。

**Xiǎo Wáng wǎng tā zǒu-qu.*
young Wang towards 3SG walk-thither

'Wang walked towards him (away from the deictic center).'

(199) 小王朝他那儿走去。

Xiǎo Wáng cháo tā nàr zǒu-qu.
young Wang towards 3SG there walk-thither

'Wang walked towards his place (away from the deictic center).'

(200) 小王向他那儿走去。

Xiǎo Wáng xiàng tā nàr zǒu-qu.
young Wang towards 3SG there walk-thither

'Wang walked towards his place (away from the deictic center).'

(201) 小王往他那儿走去。

<i>Xiǎo</i>	<i>Wáng</i>	<i>wǎng</i>	<i>tā</i>	<i>nàr</i>	<i>zǒu-qu.</i>
young	Wang	towards	3SG	there	walk-thither

'Wang walked towards his place (away from the deictic center).'

As we mentioned earlier, 往 *wǎng* 'towards' and 向 *xiàng* 'towards' can be used in a postverbal PP. However, their use is limited to a restricted number of verbs. 往 *wǎng* 'towards' is usually preceded by the following verbs: 开 *kāi* 'drive', 通 *tōng* 'lead to', 迁 *qiān* 'move', 送 *sòng* 'deliver, carry, send', 寄 *jì* 'send', 运 *yùn* 'transport', 派 *pài* 'send, dispatch, assign', 飞 *fēi* 'fly', and 逃 *táo* 'escape' (Lǚ 2019 [1980]: 547). 向 *xiàng* 'towards' is usually preceded by verbs such as 走 *zǒu* 'walk', 奔 *bēn* 'rush', 冲 *chōng* 'rush', 飞 *fēi* 'fly', 流 *liú* 'flow', 飘 *piāo* 'float, flutter', 滚 *gǔn* 'roll', 转 *zhuǎn* 'turn', 驶 *shǐ* 'drive', 通 *tōng* 'lead to', etc. In addition, 向 *xiàng* 'towards' can be followed by the aspectual marker 了 *le* 'perfective marker' (Lǚ, 2019 [1980], p. 578). Examples (202) and (203) illustrate the use of 往 *wǎng* 'towards' and 向 *xiàng* 'towards' respectively in postverbal PPs.

(202) 车队开往拉萨。 (adapted from Lǚ 2019 [1980]: 547)

<i>Chēduì</i>	<i>kāi</i>	<i>wǎng</i>	<i>Lāsà.</i>
motorcade	drive	towards	Lhasa

'The motorcade was driving towards Lhasa.'

(203) 流向大海 (adapted from Lǚ 2019 [1980]: 578)

<i>liú</i>	<i>xiàng</i>	<i>dàhǎi</i>
flow	towards	sea

'flow into the sea'

Note that in Table 11, 在 *zài* 'at' is the only preposition which convey no directional information. Lin (2019: 181) adopts the term 'Location PP' for 在 *zài* 'at'. She specifies that this preposition does not express a specific spatial reference. Rather, it is especially the localizer that an object takes, that specifies the spatial reference. Take (205) as an example, the localizer 上 *-shang* 'upside' in 在马背上 *zài mǎbèi=shang* [at horseback=upside] 'on the horseback'.

The preposition 在 *zài* 'at' can be used in a preverbal PP and a postverbal PP. With regard to the positions, Tai (1975: 154) points out that: "[...] Chinese preverbal locatives denote the locations of actions and states of affairs, postverbal ones denote the locations of participants of actions". Comparing the following two examples, the preverbal PP 在马背上 [*zài mǎbèi=shang*] 'on the horse's back' in (204) specifies the location where the little monkey was performing the action of jumping 跳 *tiào* 'jump' and there does not entail any change of location of the little monkey. By contrast, the postverbal PP 在马背上 [*zài mǎbèi=shang*] 'on the horse's back' in (205) specifies the location, that is the destination (the Goal) of the little monkey after it has jumped from another location implied in the context except the horse's back itself and in this case, thus the PP in this case denotes a change of location.

(204) 小猴子在马背上跳。 (adapted from Tai 1975: 158)

<i>Xiǎo</i>	<i>hóuzi</i>	<i>zài</i>	<i>mǎbèi=shang</i>	<i>tiào</i> .
little	monkey	at	horseback=upside	jump

'The little monkey was jumping on the horse's back.'

(205) 小猴子跳在马背上。 (ibid.)

<i>Xiǎo</i>	<i>hóuzi</i>	<i>tiào</i>	<i>zài</i>	<i>mǎbèi=shang</i> .
little	monkey	jump	at	horseback=upside

'The little monkey jumped onto the horse's back.'

Although Tai's (1975) interpretation concerning the semantic principle of the two different positions (i.e., preverbal and postverbal) is sufficient to explain the cases as in (204) and (205), it cannot account for sentences including some verbs of posture and placement, as noted by Chirkova & Lamarre (2005: 173).⁹⁵ Based on Peyraube (1980: 231-234), we distinguish four types of PP formed

⁹⁵ As cited in Chirkova & Lamarre (2005: 173), verbs of posture can be understood as those denote postures or physical dispositions of an entity at a location, such as 坐 *zuò* 'sit', 站 *zhàn* 'stand', 蹲 *dūn* 'squat', 跪 *guì* 'kneel', and 躺 *tāng* 'lie', etc (Li & Thompson 1981: 219, 401). Verbs of placement can be understood as verbs that name actions that place the direct object in a certain location, for instance, 放 *fàng* 'put', 藏 *cáng* 'hide', 写 *xiě* 'write', 刻 *kè* 'carve, sculpt', and 洒 *sǎ* 'spill' (ibid.: 404).



with 在 *zài* 'at' relating to the position (i.e., preverbal and postverbal). As to the first type, the same PP can be used preverbally and postverbally and the meaning of the two sentences changes, as shown in examples (204) and (205). In the second type, the same PP can be used preverbally and postverbally and the meaning of the two sentences is almost the same, as illustrated in (206) and (207). Concerning the third type, only preverbal PP is acceptable, such as example (208), and the same PP following the verb would be unacceptable, as in (209). Regarding the fourth type, one can only use it postverbally, as in (210), and the same PP preceding the verb would be ungrammatical like in (211).

(206) 他在台上坐。 (adapted from Peyraube 1980: 232)

<i>Tā</i>	<i>zài</i>	<i>tái=shang</i>	<i>zuò.</i>
3SG	at	platform=upside	sit

'He was sitting on the platform.'

(207) 他坐在台上。 (ibid.)

<i>Tā</i>	<i>zuò</i>	<i>zài</i>	<i>tái=shang.</i>
3SG	sit	at	platform=upside

'He was sitting on the platform.'

(208) 他在屋里写。 (ibid.)

<i>Tā</i>	<i>zài</i>	<i>wū=li</i>	<i>xiě.</i>
3SG	at	room=inside	write

'He is writing at the room.'

(209) *他写在屋里。 (ibid.)

* <i>Tā</i>	<i>xiě</i>	<i>zài</i>	<i>wū=li.</i>
3SG	write	at	room=inside

(210) 她倒在床上。 (ibid.)

<i>Tā</i>	<i>dǎo</i>	<i>zài</i>	<i>chuáng=shang.</i>
3SG	fall	at	bed=upside

'She fell on the bed.'

(211) *她在床上倒。 (ibid.)

* <i>Tā</i>	<i>zài</i>	<i>chuáng=shang</i>	<i>dǎo.</i>
3SG	at	bed=upside	fall



Lin (2019: 182-183) further notices that:

[...], when the PPs occur in postverbal position, the preposition may incorporate into the preceding verb and the two elements form a verbal compound, which then leaves the NP of the PP functioning like an object argument. The process is called ‘preposition incorporation (PI)’ in the sense of Baker (1988).

According to the author, the PI is demonstrated by the suffixation of the perfective marker 了 *le* to the ‘V+PP’ compound. As can be seen in (212) and (213), 了 *le* has to occur after the compound 跳在 *tiào-zài* [jump-at] instead of the verb 跳 *tiào* ‘jump’. And the NPs 沙发上 *shāfā=shàng* [sofa=on] functions consequently as the object argument of the verbal compound. The same process of PI can also be found in the use of the preposition 向 *xiàng* ‘toward’, as evidenced in (214) and (215).

(212) 跳在了沙发上 (Lin 2019: 183)

tiào-zài-le shāfā=shàng
jump-at-PFV sofa-on
‘jumped onto the sofa’

(213) *跳了在沙发上

**tiào-le-zài shāfā=shàng*
jump-PFV-at sofa-on

(214) 跑向了森林 (ibid.)

pǎo-xiàng-le sēnlín
run-toward-PFV forest
‘ran toward the forest’

(215) *跑了向森林

**pǎo-le-xiàng sēnlín*
run-PFV-toward forest

Based on previous studies, Chirkova & Lamarre (2005: 174) point out that “In Standard Chinese, the [V + 在 *zài* ‘at’ + NPloc] construction is generally considered to have both the durative and terminative meaning with the verb 住 *zhù* ‘live’ and verbs of posture,

as well as to some extent with verbs of placement". According to the authors (*ibid.*: 170), *terminative* denotes a transition from one state into another and *durative* refers to a process or state seen as continuing for an appreciable time, as illustrated in (216) and (217) respectively.⁹⁶ In addition to Standard Chinese, Lamarre (2003c) furthermore notices that in many dialects spoken in Central and Southern China, sentences with the postverbal locative phrase can have both the terminative and durative reading. By contrast, regarding Northern Mandarin dialects, Lamarre (2003a) demonstrates that in the Jìzhōu dialect of Héběi, postverbal locative phrase constructions express a change of location exclusively. In this dissertation, we only focus on the postverbal PP formed with 在 *zài* 'at' which denotes the change of location in Standard Chinese.

(216) 他一屁股就坐在沙发上。(adapted from Chirkova & Lamarre 2005: 174)

Tá	yí	pigǔ	jiù	zuò	zài	shāfā=shang.
3SG	one	buttocks	just	sit	be.in	sofa=upside

'He flopped onto the sofa.' or
'He sat down with all his weight on the sofa.' (change of location)

(217) 他安安静静地坐在沙发上。(ibid.)

Tā	ān'ānjìngjìng	de	zuò	zài	shāfā=shang.
3SG	quiet.quiet	SUB	sit	be.in	sofa=upside

'He was quietly sitting on the sofa.' (durative)

Recalling that, in §2.3.2 on *Adverbial encoding*, we have already discussed the use of 到 *-dao* 'to'. Nevertheless, previous research didn't reach an agreement on its status. Some linguists put 到 *-dao* 'to' in the category of directional complements while others consider it as a preposition. As presented in previous section, we include 到 *-dao* 'to' in the category of satellites (= directional complements) following Liú (1998). We should note that 到 *-dao* 'to' is not a typical satellite if one follows Talmy (2000) since it cannot be combined with deictic satellites 来 *-lai* 'hither' and 去 *-qu* 'thither'

⁹⁶ Both examples extracted from Chirkova & Lamarre (2005: 174) are quoted from Fàn (1982: 84).

without being followed by an NPloc, unlike other satellites in Standard Chinese which can be combined directly with deictic satellites. We can also find evidence in Lamarre (2007a: 3) who argues that 到 *-dao* 'to' is not a prototypical preposition since typical PPs are preverbal. The postverbal PP formed with 到 *-dao* 'to' in (218) expresses the reached Goal. If the PP is moved to the verb which form a preverbal PP, then 到 *-dao* 'to' is no longer a preposition, but it is used as a full verb meaning 'arrive, to go/come to somewhere', as illustrated in (219).

(218) 推到屋里去 (adapted from Lamarre 2007b: 3)

<i>tuī</i>	<i>dao</i>	<i>wū=li-qu</i>
push	to	room=inside-thither
'push [it] into the room (away from the deictic center)'		

(219) 到屋里推去 (ibid.)

<i>dào</i>	<i>wū=li</i>	<i>tuī-qu</i>
arrive	room=inside	push-thither
* 'push [it] into the room (away from the deictic center)'		
'go inside the room to push [it]'		

The word order of prepositional phrases with respect to the verb is an important issue to address. Thus, Lamarre (2007a: 3-4) points out the difference between preverbal and postverbal PPs with regard to boundedness. By examining the co-occurrence of PPs and the duration phrase 'for + one hour', the author argues that, in Standard Chinese, preverbal PPs usually express an unbounded path whereas postverbal PPs a bounded path.⁹⁷

2.4. Linguistic encoding of Dynamic Deixis

As we presented previously in §1.3, Talmy (2000: 53) considers the Deictic (i.e., Dynamic Deixis) as one of the three components of Path,

⁹⁷ Lamarre (2007a: 3) explains that the term *unbounded path* and *bounded path* correspond generally to Goldberg & Jackendoff's (2004: 543) *end-bounded spatial PPs* (e.g., Bill floated into the cave (*for hours).) and *non-end-bounded spatial PPs* (e.g., Bill pushed Harry along the trail (for hours).).

together with the Vector and the Conformation. However, the status of Deixis has been reconsidered with respect to Path since it exhibits distinct features from Path in several aspects (i.e., aspectual and pragmatic evidence, morphosyntactic and functional evidence), as reviewed in §1.4. Concerning the basicness of basic motion verbs, Wilkins & Hills (1995: 209) argue that: “although the pragmatic and deictic ‘suppositional’ complexity of ‘come’ and ‘go’ expressions has long been recognized, [...] in any given language the analysis of these expressions is much more semantically and systemically complex than has been assumed in the literature”.

Given the complexity and specificity of Dynamic Deixis, in this section, we will examine Dynamic Deixis separately from Path and look at different coding strategies that can express this notion. Section 2.4.1 presents the verbal encoding of Dynamic Deixis by means of deictic verbs. Section 2.4.2 discusses the adverbial encoding of Dynamic Deixis by means of deictic satellites (section 2.4.2.1), and associated motion markers (section 2.4.2.2).

2.4.1. Verbal encoding: deictic verbs

During the past decades, a considerable amount of studies have been carried out in Standard Chinese on 来 *lái* ‘come’ and 去 *qù* ‘go’ in both diachronic (Zhōu 1959; Lǐ 2004; Liáng 2007; Shǐ 2015; Yang 2015) and synchronic perspective (Lù 1985; Xīn 1998b, 1998a; Lǐ 2004; Lǚ 2006; Wén 2007; Lamarre 2008a; *inter alia*).⁹⁸

At the semantic level, the two motion verbs 来 *lái* ‘come’ and 去 *qù* ‘go’ are frequently used to encode deictic information (i.e., Dynamic Deixis). More specifically, 来 *lái* ‘come’ usually encodes centripetal information (i.e., motion towards the deictic center) and 去 *qù* ‘go’ centrifugal information (i.e., motion away from the deictic center). It should be noted that “the GO form in at least some languages is not deictic, so if there is a universal deictic opposition

⁹⁸ In this section, we only review 来 *lái* ‘come’ and 去 *qù* ‘go’ when they are used to describe motion events and their figurative use is excluded.

manifested by COME and GO forms, it is at the level of pragmatic interpretation not lexical semantics" (Wilkins & Hill 1995: 251).

Although 来 *lái* 'come' and 去 *qù* 'go' in Standard Chinese can manifest a deictic opposition, the 'go' form manifests itself less deictically than the 'come' form. The use of 来 *lái* 'come' is usually in relation to the speaker whereas the use of 去 *qù* 'go' can be related to the speaker or not. For instance, the direction of the moving entity (i.e., the bus) in (220) is towards the speaker at the moment when he utters the sentence. In any situation, the direction of the bus cannot be other than towards the speaker. By contrast, the direction of the moving entity (i.e., he) in (221) could be interpreted as either away from the deictic center if *he* was with the speaker at the moment when the speaker pronounces the sentence or away from another place (e.g., his home) where the speaker is not present.

(220) 公共汽车来了。

<i>Gōnggòng</i>	<i>qìchē</i>	<i>lái</i>	<i>le.</i>
public	bus	come	CRS
'The bus is coming.'			

(221) 他去了火车站。

<i>Tā</i>	<i>qù-le</i>	<i>huǒchēzhàn.</i>
3SG	go-PFV	train.station
'He went to the train station.'		

The complexity of 去 *qù* 'go' might be due to its semantic evolution in diachrony. According to Shǐ (2014: 92), generally speaking, before the Eastern Han dynasty (25-220 AD), 去 *qù* meant 'leave'. As can be shown in Figure 5, when 去 *qù* expresses 'leave', the anchorage and the attention of focus is the starting point (A). Since the Eastern Han dynasty, the meanings of 去 *qù* have gradually developed into 'towards' and 'arrive', as illustrated in Figure 6 and Figure 7. At this stage, the anchorage is the starting point (A) whereas the attention of focus has shifted to the ending point (B). The difference between 去 *qù* expressing 'towards' and 去 *qù* expressing 'arrive' depends on their boundedness. The former one

去 *qù* 'towards' is unbounded and the latter one 去 *qù* 'arrive' is bounded.⁹⁹



Figure 5. 去 *qù* meaning 'leave' (adapted from Shǐ 2014: 92)

anchorage=A; attention of focus=A



Figure 6. 去 *qù* meaning 'towards' (ibid.)

anchorage=A; attention of focus=B



Figure 7. 去 *qù* meaning 'arrive' (ibid.)

anchorage=A; attention of focus=B

In addition to the centripetal and centrifugal information, some languages (e.g., East Uvean, Kiowa, etc.) also possess a morpheme that can express transverse information. However, no particular morpheme has been found yet to express such information in Standard Chinese.

At the syntactic level, both 来 *lái* 'come' and 去 *qù* 'go' can be used: (i) independently; (ii) in combination with an NPloc; (iii) in

⁹⁹ As for boundedness, Shǐ (2014) uses this term based on Jackendoff (1991) and Shěn (1995).

combination with another verb phrase; and (iv) in combination with both an NPloc and another verb phrase. Let us examine each case in use.

(i) 来 *lái* 'come' and 去 *qù* 'go' are used independently

When 来 *lái* 'come' and 去 *qù* 'go' are used independently, the Figure can be expressed overtly or covertly, as illustrated in (222) and (223) respectively. When the Figure is expressed overtly, 来 *lái* 'come' can be combined with either an animate Figure, as in (222), or an inanimate Figure, as in (220), whereas 去 *qù* is found usually combined with an animate Figure. The moving entity (i.e., the Figure in spontaneous motion events) can not only precede motion verbs, but also follow them, as exemplified in (224). When the Figure follows the motion verb, the semantic subject (i.e., here it refers to the Figure) is syntactically manifested as an object, showing a detopicalizing strategy (or detopicalization), in Lambrecht's term (2000: 626). We may say that the Figure is usually understood as definite when preceding the verb, and indefinite when following the verb, as in (225) and (224) respectively. When the Figure following the verb is definite, as in (226), such case would be unacceptable.

(222) 他来了。 (adapted from Wén 2007: 92)

<i>Tā</i>	<i>lái</i>	<i>le.</i>
3SG	come	CRS
'He is coming.'		

(223) 快去吧!

<i>Kuài</i>	<i>qù</i>	<i>ba!</i>
quickly	go	SUG
'Go quickly!'		

(224) 来了一个客人。 (adapted from C. N. Li & Thompson 1981: 509)

<i>Lái-le</i>	<i>yí</i>	<i>gè</i>	<i>kèrén.</i>
come-PFV	one	CL	guest
'Here comes a guest.'			



(225) 客人来了。

<i>Kèrén</i>	<i>lái</i>	<i>le.</i>	
guest	come	CRS	
'The guest is coming.'			

(226) *来了客人。

* <i>Lái-le</i>	<i>kèrén.</i>
come-PFV	guest
(intended meaning: 'Here comes the guest.')	

(ii) 来 *lái* 'come' and 去 *qù* 'go' in combination with an NPloc

In Standard Chinese, when the two deictic motion verbs 来 *lái* 'come' and 去 *qù* 'go' take place words as their argument, these two verbs can be followed directly by the NPloc, as shown in (227) and (228). This is different from English and French in which the deictic verbs (*come* and *go* in English, *venir* 'come' and *aller* 'go' in French) should be followed by a PP, which means that the NPloc needs to be introduced by a preposition. Examples (229)-(232) illustrate the prepositions *to* and *à* which are used to introduce the NPlocs *library* and *school* in English and French in the context of a deictic verb.

(227) 他来图书馆了。

<i>Tā</i>	<i>lái</i>	<i>túshūguǎn</i>	<i>le.</i>
3SG	come	library	CRS
'He came to the library.'			

(228) 我明天去学校。

<i>Wǒ</i>	<i>míngtiān</i>	<i>qù</i>	<i>xuéxiào.</i>
1SG	tomorrow	go	school
'I go to school tomorrow.'			

(229) *He came to the library.*

(230) *I go to school tomorrow.*

(231) <i>Il</i>	<i>est</i>	<i>venu</i>	<i>à</i>	<i>la</i>	<i>bibliothèque.</i>
3G	be	come	to	the	library
'He came to the library.'					

(232) *Je vais à l'école demain.*
 1SG go to school tomorrow
 'I go to school tomorrow.'

We have mentioned previously that the Figure can follow the deictic motion verbs in Standard Chinese when these verbs are used independently. When there is an NPloc combined with a deictic verb, the NPloc can either follow the deictic verb, as in (227) and (228), or precede it, as in (233). Sentences like (233) are known as 'existential sentence' (存现句 *cúnxiàn jù* [sentences of existence/appearance]) (Zhū 1982: 114-115, 184; Sòng 1987; Yuèhuá 刘月华 Liú, Pān, & Gù 2019: 712-723) or 'presentative sentence' in Chinese linguistics literature (C. N. Li & Thompson 1981: 509-519).¹⁰⁰ These sentences can express either something being located in a certain place or something appearing/disappearing. Our case study only concerns the (dis)appearance type which can be generally schematized as [(NPloc) + Vdei + Figure].¹⁰¹ More specifically, the (dis)appearance indicates that the Figure appears or disappears in the scene of discourse (or with reference to the Locus denoted by the NPloc preceding the verb, if expressed) (Lena 2020: 44).

(233) 我们家来了几个客人。(adapted from Liú, Pān, & Gù 2019 [2001]: 718)
Wǒmen jiā lái-le jǐ gè kèrén.
 1PL home come-PFV several CL guest
 'A few guests came to our house.'

Sentences expressing appearance basically involve the deictic verb 来 *lái* 'come' and related compound verbs comprising 来 *-lái* 'hither' in [Vpath-*lái*] construction (Lǚ 1946; Tai 1989). Sentences expressing disappearance normally involve 去 *qù* 'go' (Lǚ 1946; C.-

¹⁰⁰ A presentative sentence is defined by Li & Thompson (1981: 509) as "performing the function of introducing into a discourse a noun phrase naming an entity".

¹⁰¹ Vdei refers to deictic verbs. Although other verbs, such as 发生 *fāshēng* 'occur', 出 *chū* 'exit, appear' and compound verbs including such morphemes can also be used in such construction, they will be excluded in our discussion since we only focus on deictic verbs.

T. J. Huang 1987) and compound verbs including 去 *-qu* 'thither' in [Vpath-*qu*] construction (C. N. Li & Thompson 1981). We will discuss the use of compound verbs involving 来 *-lai* 'hither' and 去 *-qu* 'thither' in §2.4.2.

The locative inversion in English is usually involved with what Levin & Rappaport Hovav (1995: 240) called 'verbs of directed motion', such as *arrive*, *come*, and *go*. The authors have examined particularly the verb *come*, given by its frequency. "As a verb of motion, the verb *come* takes a nonabstract NP, whether animate or inanimate, as its theme argument, as shown in (234).

(234) ...out of the house came a tiny old lady and three or four enormous people...
[L. Bromfield, *The Farm*, I] (Levin & Rappaport Hovav 1995: 241)

Levin & Rappaport Hovav (1995: 241) further explain the reason why *come* is frequent in use:

This verb of inherently direction motion lexicalizes a particular deictic orientation for the motion. Simplifying somewhat, the verb *come* describes motion onto the scene identified with or by the speaker. Because of this deictic orientation, this verb naturally can be used to describe appearance on the scene, and thus provides a context for the presentation of less familiar information via the postverbal NP in the context of more familiar information (the NP in the preverbal PP).

(iii) 来 *lái* 'come' and 去 *qù* 'go' in combination with another verb phrase

When 来 *lái* 'come' and 去 *qù* 'go' are followed by a verb, they form the [来 *lái* 'come' / 去 *qù* 'go' + VP] construction. Such construction is usually considered as a subtype of serial verb construction in which the second verb or verb phrase expresses the purpose of the first verb (Liú et al. 2019 [2001]: 695-696; Lamarre 2020: 140). Examples (235) and (236) extracted from Liú and her colleagues (ibid.) illustrate a conversation between two persons A

and B. In both sentences, the verb phrases 干什么 *gàn shénme* 'do sth' and 缴电费和房租 *jiǎo diànfèi hé fángzū* 'pay the electricity bill and the rent' indicate the purpose of 来 *lái* 'come'.

(235) A: 你来干什么? (Liú et al., 2019 [2001], p. 696)

<i>Nǐ</i>	<i>lái</i>	<i>gàn</i>	<i>shénme?</i>
2sg	come	do	what
'What do you come for?'			

(236) B: 我来缴电费和房租。 (ibid.)

<i>Wǒ</i>	<i>lái</i>	<i>jiǎo</i>	<i>diànfèi</i>	<i>hé</i>	<i>fángzū.</i>
1SG	come	pay	electricity.bill	and	rent
'I come to pay the electricity bill and the rent.'					

Due to the different features of 来 *lái* 'come' and 去 *qù* 'go' manifested in the [来 *lái* 'come'/去 *qù* 'go' + V] construction, we will discuss them separately.

In previous studies (Zhōu 1959; Guō 1987; Xīn 1998b; Ikeda 2005; Lǚ 2006; Aihara 2010), two interpretations of 来 *lái* 'come' in the [来 *lái* 'come' + VP] construction were examined. It can be understood as either expressing a motion or being motionless. We use thus *lái*_[+motion] + VP and *lái*_[-motion] + VP to represent the two cases. Regarding the different interpretations of 来 *lái* 'come' between the two constructions (i.e., *lái*_[+motion] + VP and *lái*_[-motion] + VP), Guō (1987: 242) and Xīn (1998b: 53) point out that in the *lái*_[+motion] + VP construction in which 来 *lái* 'come' expresses the motion, an NPloc can be added directly after 来 *lái* 'come' and also after 去 *qù* 'go'. By contrast, in the *lái*_[-motion] + VP construction in which 来 *lái* 'come' does not express the actual motion, an NPloc cannot be added directly after 来 *lái* 'come' and neither after 去 *qù* 'go'. Besides, Xīn (1998b: 53) specifies that when 来 *lái* 'come' is a typical directional verb expressing motion, it cannot be omitted in the construction and 这里/这儿 *zhèlǐ/zhèr* 'here' can be added between 来 *lái* 'come' and the VP. Taking (237) as an example, in this sentence, 来 *lái* 'come' is a directional verb expressing motion. According to the author, the sentence would not be acceptable if 来

lái 'come' was omitted, as in (239). However, 这里 *zhèli* 'here' being added after the verb is acceptable, as in (238). The author (ibid.: 54) argues that when 来 *lái* 'come' has a motionless interpretation, it can be omitted in the sentence, and 这里/这儿 *zhèli/zhèr* 'here' cannot be added directly after it since it does not involve any change of location. For instance, 来 *lái* 'come' in (240) has a motionless reading. Therefore, one can omit 来 *lái* 'come', as shown in (241). However, one cannot add 这里/这儿 *zhèli/zhèr* 'here' after the verb 来 *lái* 'come', as shown in (242).

(237) [...], 他昨天来看我, [...]. (adapted from Xīn 1998b: 53)

[...], *tā* *zuótiān* *lái* *kàn* *wǒ*, [...]
 3sg yesterday come see 1SG
 '[...], he came to see me yesterday, [...]'

(238) [...], 他昨天来这里看我, [...].

[...], *tā* *zuótiān* *lái* *zhèli* *kàn* *wǒ*, [...]
 3SG yesterday come here see 1SG
 '[...], he came here to see me yesterday, [...]'

(239) * [...], 他昨天看我, [...].

* [...], *tā* *zuótiān* *kàn* *wǒ*, [...]
 3sg yesterday see 1SG
 '[...], he saw me yesterday, [...]'

(240) 我来回答这问题。 (adapted from Xīn 1998b: 54)

Wǒ *lái* *huídá* *zhè* *wèntí*.
 1SG come answer this question
 *'I come to answer this question.'
 'Let me answer this question.'

(241) 我回答这问题。

Wǒ *huídá* *zhè* *wèntí*.
 1SG answer this question
 'Let me answer this question.'

(242) *我来这里回答这问题。

<i>Wǒ</i>	<i>lái</i>	<i>huídá</i>	<i>zhè</i>	<i>wèntí.</i>
1SG	come	answer	this	question

*‘I come here to answer this question.’
*‘Let me answer this question here.’

Guō (1987: 243) also points out that in the case when 来 *lái* ‘come’ does not express the actual motion in [来 *lái* ‘come’ + VP] construction, the subject of 来 *lái* ‘come’ is only restricted to the first person and the second person, such as in (243). The use of the third person, as in (244), would not be acceptable except in pivotal constructions (兼语式 *jiānyǔ shì*), illustrated in (245).¹⁰² Song (2019: 201) argues that the sentence shown in (244), which is unacceptable for Guō (1987: 243), is acceptable for him and his informants, depending on the context. For instance, one can use the third person, as in (245), and can also use the third person in (246) as a response to the question in (247).

(243) 我来介绍一下。 (Guō 1987: 243)

<i>Wǒ</i>	<i>lái</i>	<i>jièshào</i>	<i>yíxià.</i>
1SG	come	introduce	a while

‘Let me introduce (it).’

(244) *他来介绍一下。 (ibid.)

* <i>Tā</i>	<i>lái</i>	<i>jièshào</i>	<i>yíxià.</i>
3SG	come	introduce	a.while

‘Let me introduce (it).’

(245) (我们) 让他来介绍一下。 (ibid.)

(<i>Wǒmen</i>)	<i>ràng</i>	<i>tā</i>	<i>lái</i>	<i>jièshào</i>	<i>yíxià.</i>
1PL	let	3SG	come	introduce	a.while

‘Let him introduce (it).’

¹⁰² “The defining characteristic of the pivotal construction is that it contains a noun phrase that is simultaneously the subject of the second verb and the direct object of the first verb” (Li & Thompson 1981: 607).

(246) 这个计划，他来介绍一下。 (adapted from Song 2019: 201)

Zhè gè jìhuà, tā lái jièshào yíxià.
this CL plan, 3SG come introduce a.while
'This plan, it's him who will introduce (it).'

(247) 谁来介绍一下? (ibid.)

Shéi lái jièshào yíxià?
who come introduce a.while
'Who will introduce it?'

Now let us turn to the verb 去 *qù* 'go' in combination with another verb in different constructions. In his paper entitled *On the constructions 'qu+VP' and 'VP+qu'*, Lù (1985) has compared two constructions, namely [去 *qù* 'go' + VP] and [VP + 去 *qù/qu*] constructions.¹⁰³ His finding reveals different internal semantic relations between the two constructions. According to the author, the semantic relation is simple in [去 *qù* 'go' + VP] construction in which 去 *qù* 'go' usually expresses the motion of the moving entity (i.e., the Figure) and VP the purpose of the motion. This can be illustrated in (248). 去 *qù* 'go' in this sentence expresses the motion of the Figure (i.e., 我 *wǒ* 'I') and the VP 看了个电影 *kàn le gè diànyǐng* [see PFV CL film] indicates the purpose of 去 *qù* 'go' that is 'to see a film'.

(248) 我昨天去看了个电影。 (adapted from Lù 1985: 20)

Wǒ zuótiān qù kàn le gè diànyǐng.
1SG yesterday go see PFV CL film
'Yesterday I went to see a film.'

By contrast, the semantic relation is more complex in [VP + 去 *qù* 'go'] construction. Three cases are mainly distinguished. 去 *qù* 'go' in these cases always expresses the motion whereas the semantic relation between VP and 去 *qù* 'go' varies. In the first case, the VP expresses the way in which the motion is carried out. As is shown in (249), the VP 骑自行车 *qí zìxíngchē* [ride bicycle] expresses how the

¹⁰³ 去 *qu* can sometimes be atonal in [VP + 去 *qu*] construction. In this section, we only focus on 去 *qù* 'go' used as a full verb and examine the grammaticalized form 去 *-qu* in §2.4.2 and §2.4.3.

moving entity (i.e., 我们 *women* 'we') moves. In the second case, VP indicates the time of the moving entity when it moves and emphasizes that the motion takes place after the action of VP. Example (250) illustrates this second case in which the action of 'watching the television' occurs before the motion 去 *qù* 'go'. As to the third case, the moving entity is at the same time the direct object of the VP and the subject of 去 *qù* 'go'. This case corresponds to what Li & Thompson (1981: 607-610) called 'pivotal construction', a type of serial verb construction.¹⁰⁴ As we can see in (251), the moving entity 他 *tā* 'he' is at the same time the direct object of the verb 派 *pài* 'send' and the subject of the motion verb 去 *qù* 'go'.

(249) 我们都骑自行车去。 (adapted from Lù 1985: 21)

Wǒmen dōu qí zìxíngchē qù.
1PL all ride bicycle go
'We all go by bike.'
(Lit. 'We all take the bicycle to go.')

(250) 看完电视去行不行? (adapted from Lù 1985: 22)

Kàn wán diànshì qù xíng bù xíng?
watch finish television go all.right NEG.IRR all.right
'Is it all right to go after watching the television?'

(251) 最后决定派他去。

Zuìhòu juéding pài tā qù.
finally decide send 3SG go
'Finally, (we) decide to send him to go.'

Lù (1985) only examined sentences with 去 *qù* 'go'. However, the same is true for 来 *lái* 'come' in [来 *lái* 'come' + VP] construction which has two interpretations, 去 *qù* 'go' in [去 *qù* 'go' + VP] construction can also be interpreted in two ways. We use *qù*_[+motion] + VP for the case in which 去 *qù* 'go' expresses the motion, and *qù*_[-motion] + VP for the case in which 去 *qù* 'go' does not imply any motion. We will briefly discuss the differences between *qù*_[+motion] +

¹⁰⁴ Other linguists, such as Liú et al. (2019: 694-712), treated 'pivotal construction' as a type of sentence which is distinguished from serial verb construction.

VP construction and $qù_{[-motion]}$ + VP construction in order to better distinguish these two cases.

Guō (1987) point out that in $qù_{[+motion]}$ + VP construction, an NPloc can be inserted between the verb 去 $qù$ 'go' and the VP. Gān & Gān (2009: 80) hold similar idea and claim that 那里/那儿 $nàlǐ/nàr$ can be added after the verb 去 $qù$ 'go'. But in actual use, such words indicating the location are usually omitted for the principle of language economy and mutual knowledge shared between speakers and interlocutors. Taking (252) as an example, 去 $qù$ 'go' in this sentence expresses the motion. We can thus either insert an NPloc such as 餐厅 $cāntīng$ 'the restaurant' or 那儿 $nàr$ 'there' between 去 $qù$ 'go' and the VP 吃晚饭 $chī wǎnfàn$ 'dinner' to specify the location, as illustrated in (253) and (254) respectively. By contrast, it would not be acceptable to add an NPloc or 那儿 $nàr$ 'there' in (255).

(252) 我们一起去吃晚饭。 (adapted from Guō 1987: 242)

<i>Wǒmen</i>	<i>yìqǐ</i>	<i>qù</i>	<i>chī</i>	<i>wǎnfàn.</i>
1PL	together	go	eat	dinner

'Let us go to dinner together.'

(253) 我们一起去餐厅吃晚饭。

<i>Wǒmen</i>	<i>yìqǐ</i>	<i>qù</i>	<i>cāntīng</i>	<i>chī</i>	<i>wǎnfàn.</i>
1PL	together	go	restaurant	eat	dinner

'Let us go to the restaurant and have dinner together.'

(254) 我们一起去那儿吃晚饭。

<i>Wǒmen</i>	<i>yìqǐ</i>	<i>qù</i>	<i>nàr</i>	<i>chī</i>	<i>wǎnfàn.</i>
1PL	together	go	there	eat	dinner

'Let us go there and have dinner together.'

(255) 你自己去想想，这样做该不该？ (adapted from Guō 1987: 243)

<i>Nǐ</i>	<i>zìjǐ</i>	<i>qù</i>	<i>xiǎng-xiǎng,</i>	<i>zhèyàng</i>	<i>zuò</i>	<i>gāi-bu-gāi?</i>
2SG	oneself	go	think-RDP,	like.this	do	should-NEG-should

'Think about it yourself, should you do this?'

Apart from the test of insertion, the nature of VP might also play an important role in distinguishing the $qù_{[-motion]}$ + VP from $qù_{[+motion]}$ + VP construction. In his dissertation, Song (2019: 224)

examined 241 sentences in his corpus comprising the [去 *qù* 'go' + VP] construction in which he considers that 去 *qù* 'go' does not express motion. The author observed three common points of these sentences. Firstly, the VP used in these sentences usually denote a psychological or cognitive activity or a feeling, such as 爱 *ài* 'love', 后悔 *hòuhuǐ* 'regret', and 回忆 *huíyì* 'remember'; etc. which are considered as abstract action. This is illustrated in (256). Secondly, the VP often expresses an action that is difficult to accomplish or asks for great efforts, for example, 努力 *nǔlì* 'make great efforts', 研究 *yánjiū* 'study', etc. Thirdly, the negation often appears in the *qù*-[motion] + VP construction.

- (256) 你永不可能去爱你所恨的人。 (adapted from J. Song, 2019, p. 225)
Nǐ yǒng bù kěnéng qù ài nǐ suǒ hèn de rén.
 2SG always NEG.IRR possible go love 2SG PTCL hate REL person
 'It will never be possible for you to love (Lit.: to go and love) someone you hate.'

It is important to note that only the cases of 来 *lái* 'come' and 去 *qù* 'go' involving the motion interpretation in [来 *lái* 'come' + VP] and [去 *qù* 'go' + VP] constructions will be included in our data analyses (Part II. chapters 4, 5, and 6).

(iv) in combination with both an NPloc and another verb phrase

In this case, 来 *lái* 'come' and 去 *qù* 'go' can be combined with both an NPloc and a VP in the [来 *lái* 'come' / 去 *qù* 'go' + NPloc + VP] construction. In such construction, 来 *lái* 'come' and 去 *qù* 'go' always express the motion of the moving entity and the NPloc indicates the location to where the moving entity moves. The VP indicates the purpose of the action. Such case can be exemplified in (257) and (258).

- (257) 你来教堂做什么? (adapted from Gān & Gān 2009: 80)
Nǐ lái jiàotáng zuò shénme?
 2SG come church do what
 'What are you coming to the church for?'



(258) 他去美国深造了两年。

(ibid.)

Tā qù Měiguó shēnzào le liǎng nián.
 3SG go the.United.States pursue.advanced.studies PFV two year
 'He went to the United States for further training for two years.'

2.4.2. Adverbial encoding:

2.4.2.1. Deictic satellites

In §2.3.2, we have presented 11 simple satellites and 17 bipartite satellites which encode Path. Among them, two simple satellites 来 *-lai* 'hither' and 去 *-qu* 'thither' express specifically deictic information and the basic use of each deictic satellite as simple and bipartite satellites (i.e., 来 *-lai* 'hither' and 去 *-qu* 'thither' combined with other non-deictic Path satellites) has been given. In this section, we mainly focus on: (A) some word order issues related to 来 *-lai* 'hither' and 去 *-qu* 'thither' as simple and bipartite satellites with respect to other elements; (B) two constructions, namely [上 *shàng* 'move to' + NPloc + 来 *-lai* 'hither' / 去 *-qu* 'thither'] and [到 *dào* 'arrive' + NPloc + 来 *-lai* 'hither' / 去 *-qu* 'thither'].

A. Word order between the verb, the satellite (=directional complement), and the NPs

Concerning the issue of word order, it is not easy to classify Standard Chinese according to Greenberg's (1963) basic order typology since this language is not consistent with respect to the features that correlate with SVO or SOV orders. The aim of the following part is not to reexamine the above controversial issue, but shall attempt to outline possible word orders in motion event encoding since Standard Chinese exhibits in surface structure both SVO and SOV orders.

The word order between the verb, the satellite, and the NPs in a sentence has been largely discussed in previous studies (Fàn 1963; Zhāng & Fāng 1996; Jiǎ 1998; Máo 2000; Tián 2001; J. Lù 2002; Guō 2003; Lǚ 2019b [1980], 2019a [1985]).

We will review the word order between the verb, the satellite (specifically simple satellites 来 *-lai* 'hither' and 去 *-qu* 'thither' and bipartite satellites combined with 来 *-lai* 'hither' and 去 *-qu* 'thither'), with respect to the Figure and the NPloc.

Firstly, we look at the word order of the Figure with respect to the verb and the satellite. We have already mentioned the basic order of the Figure in §2.2.1. In the following part, we only discuss the cases in which 来 *-lai* 'hither' and 去 *-qu* 'thither' are concerned. When they are used as simple satellite, the Figure has three possible orders.

In the first pattern, the Figure can be placed before the verb and the satellite, as exemplified in (259) in spontaneous motion, and (260) and (261) in caused motion either without or with the object marker 把 *bǎ* 'OM'.

(259) 一群男孩子迎面跑来。 (adapted from Lǚ 2019b [1980]: 39)

Yì qún nánháizi yíngmiàn pǎo-lai.
 one CL boy head.on run-hither

'A group of boys ran head-on towards each other (towards the deictic center).'

(260) 包裹取来了。 (ibid.)

Bāoguǒ qǔ-lai le.
 package fetch-hither CRS

'The package was picked up (towards the deictic center).'

(261) 他把包裹取来了。

Tā bǎ bāoguǒ qǔ-lai le.
 3SG OM package fetch-hither CRS

'He picked the package up (towards the deictic center).'

In the second pattern, the Figure can be placed after the satellite, as in (262), (265) and (266). Regarding this order, Lù (2002: 8) claims that it is ungrammatical to use 去 *-qu* 'thither' when the Figure is an agent NP (i.e., in a spontaneous motion event), as in (263). Instead, 走 *-zou* 'away' can be used in such case, as in (264). When the Figure is a patient NP (i.e., in a caused motion event), both



来 *-lai* 'hither' and 去 *-qu* 'thither' can be used, as showed in (265) and (266).

(262) 飞来 (了) 一只苍蝇。 (adapted from J. Lù 2002: 8)

Fēi-lai (le) *yì* *zhī* *cāngyīng*.
fly-hither (PFV) one CL fly
'A fly flied (towards the deictic center).'

(263) *飞去 (了) 一只苍蝇。 (ibid.)

**Fēi-qu* (le) *yì* *zhī* *cāngyīng*.
fly-thither (PFV) one CL fly

(264) 飞走 (了) 一只苍蝇。 (ibid.)

Fēi-zou (le) *yì* *zhī* *cāngyīng*.
fly-away (PFV) one CL fly
'A fly flied away.'

(265) 她写来 (了) 三封信。 (ibid.)

Tā *xiě-lai* (le) *sān* *fēng* *xìn*.
3SG write-hither (PFV) three CL letter
'She wrote three letters (towards the deictic center).'

(266) 他们搬去 (了) 一张床。 (ibid.)

Tāmen *bān-qu* (le) *yì* *zhāng* *chuáng*.
3PL move-thither (PFV) one CL bed
'They moved one bed (away from the deictic center).'

In the third pattern, the Figure can be inserted between the verb and the satellite. However, according to Lù (2002), this order, shown in (267), is rarely used for 来 *-lai* 'hither' for spontaneous motion. When 去 *-qu* 'thither' is concerned, it is ungrammatical, as illustrated in (268). When the Figure is a patient, both 来 *-lai* 'hither' and 去 *-qu* 'thither' can be used, as exemplified in (269) and (270) respectively.

(267) ?飞 (了) 一只苍蝇来。 (adapted from J. Lù 2002: 8)

Fēi-lai (le) *yì* *zhī* *cāngyīng*.
fly-hither (PFV) one CL fly

(268) *飞 (了) 一只苍蝇去。 (ibid.)

**Fēi-qu* (le) *yì* *zhī* *cāngyīng*.
fly-thither (PFV) one CL fly



(269) 她写（了）三封信来。 (ibid.)

Tā xiě-lai (le) sān fēng xìn.
 3SG write-hither (PFV) three CL letter
 'She wrote three letters (towards the deictic center).'

(270) 他们搬（了）一张床去。 (ibid.)

Tāmen bān-qu (le) yì zhāng chuáng.
 3PL move-thither (PFV) one CL bed
 'They moved one bed (away from the deictic center).'

Comparing the examples given for the second and the third patterns, it seems that the change of the Figure's order does not entail any change of the meaning of the clauses. Xiāo (1992) points out that the choice of these two orders depends mainly on two aspects. Firstly, it depends on the verb. In the second order, the verb can be either intransitive, such as 飞 *fēi* 'fly' in (262), or transitive, as 写 *xiě* 'write' in (265). It would be ungrammatical to say * 飞苍蝇 [fly fly], but one can say 写信 *xiě xìn* [write letter]. When such intransitive verbs are used, one can only choose the second order as in (262), but not the third order as (267). By contrast, when such transitive verbs are used, one can choose both the second and the third orders, as illustrated in (265) and (269) respectively. Secondly, the choice of the second and the third orders also depends on the type of sentence. The second order is frequently used in declarative sentences which express a realis action, whereas the third order is frequently used in imperative sentences which express an irrealis action, as exemplified in (271) and (272) respectively.

(271) 小王送来两张票。 (adapted from Xiāo 1992: 61)

Xiǎo Wáng sòng-lai liǎng zhāng piào.
 Young Wang send-hither two CL ticket
 'Xiao Wang sent two tickets (towards the deictic center).'

(272) 搬把椅子来。 (ibid.)

Bān bǎ yǐzi-lai.
 move CL chair-hither
 'Bring a chair.'

In addition, Xiāo (1992: 61) emphasizes that when one chooses the third order and uses declarative sentences, the sentences must express a realis action and the perfective marker should be added after the verb. According to the author, (273) is not acceptable, and the perfective marker 了 *-le* should be added after the verb 买 *mǎi* 'buy' as in (274). Xiāo's point of view is different from that of Lù's in which the perfective marker is optional when the third order is concerned, as illustrated previously in (269) and (270). We agree with Xiāo and consider that the sentence in the third order is acceptable only when the perfective marker 了 *-le* follows the verb.

(273) *他从商店买一个录音机来。 (adapted from Xiāo 1992: 61)

**Tā cóng shāngdiàn mǎi yí gè lùyīnjī -lai.*
3SG from shop buy one CL tape.recorder -hither
'He bought a tape recorder from the shop.'

(274) 他从商店买了一个录音机来。

Tā cóng shāngdiàn mǎi le yí gè lùyīnjī-lai.
3SG from shop buy PFV one CL tape.recorder-hither
'He bought a tape recorder from the shop.'

When 来 *-lai* 'hither' and 去 *-qu* 'thither' are used in bipartite satellites, there are mainly four possible word orders of the Figure.

In the first order, the Figure is placed after the bipartite satellite. This can be found in both spontaneous motion and caused motion events, as illustrated in (275) and (276) respectively.

(275) 走进来一个孩子。 (adapted from J. Lù 2002: 12)

Zǒu-jin-lai yí gè háizi.
walk-into-hither one CL child
'A child walked in (towards the deictic center).'

(276) 他拿出来一本字典。 (adapted from J. Lù 2002: 13)

Tā ná-chu-lai yí běn zìdiǎn.
3SG take-out-hither one CL dictionary
'He took out a dictionary (towards the deictic center).'

In the second order, the Figure can be inserted between the bipartite satellite, as examples (277) and (278) show. Lù (2002: 15)

specifies that 开来 *-kai-lai* behaves a little bit different among the bipartite satellites. It can only be used in the second order.

(277) 跑过一群小孩来。

Pǎo-guo yì qún xiǎohái-lai.

run-past one CL child-hither

'A group of children ran past (towards the deictic center).'

Lit: Running past a group of children (towards the deictic center).

(278) 他搬进一张桌子去。

Tā bān-jìn yì zhāng zhuōzi-qu.

3SG move-into one CL desk-thither

'He moved a desk in (away from the deictic center).'

In the third order, the Figure can be placed between the verb and the non-deictic satellite, as in (279) and (280).

(279) 游了一个人过去。 (adapted from Lù 2002: 13)

Yóu le yì gè rén guò-qu.

swim PFV one CL person across-thither

'A person swam across (away from the deictic center).'

(280) 他买了两件衣服回来。

Tā mǎi le liǎng jiàn yīfu-hui-lai.

3SG buy PFV two CL clothes-back-hither

'He bought two clothes back (towards the deictic center).'

In the fourth order, the Figure can be placed before the predicate and can only be a definite NP, as illustrated in (281) and (282). When the Figure is a patient NP, that is to say, in caused motion events, the object marker 把 *bǎ* 'OM' should be used, as in (282).

(281) 那只苍蝇又飞进来了。 (adapted from Zhū 1982: 130)

Nèi zhī cāngying yòu fēi-jìn-lai le.

that CL fly again fly-into-hither CRS

'That fly flew in again.'

(282) 把这盘菜端过去吧。 (adapted from Jiǎ 1998: 44)

Bǎ zhè pán cài duān-guo-qu ba.
 OM this CL dish carry-over-thither SUG
 ‘Take this dish over (away from the deictic center).’

Secondly, we look at the word order of the NPloc with respect to the verb and the satellite. The order of NPloc is less flexible than NP expressing the Figure. As far as the simple satellites 来 *-lai* ‘hither’ and 去 *-qu* ‘thither’ are concerned, there is one possible order. The NPloc can only be placed between the verb and 来 *-lai* ‘hither’ / 去 *-qu* ‘thither’, as illustrated in (283) and (284).

(283) 外边很冷，快进屋来吧。 (adapted from Huǒ, 2008, p. 139)

Wàibian hěn lěng, kuài jìn wū-lai ba.
 outside very cold quickly enter room-hither SUG
 ‘It’s cold outside, come into the room quickly.’

(284) 别再吵了， [...], 送医院去吧。 (adapted from Wáng, 2005, p. 156)

Bié zài chǎo le, [...], sòng yīyuàn-qu ba
 do.not again argue CRS send hospital-thither SUG
 ‘Stop arguing, [...], send (him) to the hospital (away from the deictic center).’

Regarding the bipartite satellites including 来 *-lai* ‘hither’ and 去 *-qu* ‘thither’, there is only one possible position for the NPloc. It can only be inserted between the non-deictic satellite and 来 *-lai* ‘hither’ / 去 *-qu* ‘thither’, as exemplified in (285) and (286).

(285) 走进屋里来 (adapted from Zhū, 1982, p. 129)

zǒu-jìn wū=li-lai
 walk-into room=inside-hither
 ‘walk into the room’

(286) 拿出图书馆去 (ibid.)

ná-chu túshūguǎn-qu
 Take-out library-thither
 ‘take (it) out of the library (away from the deictic center)’



B. Two constructions

As we have mentioned in §2.4.1, both deictic verbs 来 *lái* ‘come’ and 去 *qù* ‘go’ can take directly an NPloc as an argument, as illustrated in (287) and (290). The same meaning can also be expressed by combining the two path verbs 上 *shàng* ‘ascend’ and 到 *dào* ‘arrive’, followed by the NPloc, and the deictic satellites 来 - *lai* ‘hither’ / 去 - *qu* ‘thither’, as in (288), (289), (291), and (292) respectively. As explained by Lamarre (2008a: 78):

In Chinese, ‘basic’ deictic motion verbs *lái* and *qù* also show an ‘analytic’ variant. Northern and central Chinese dialects often use an analytic type of encoding to express the deictic motion to a goal, by combining the semantically bleached path verb *shàng* ‘ascend’ or *dào* ‘arrive’ followed by the goal NP, then by the deictic directional *-lai/qu*. In this case these verbs lose their original meaning, *shàng* no longer conveys any motion upwards, and *dào* includes the motion before the ‘arrival’ instead of profiling the arrival itself, both just mean ‘move to’.

(287) 你去哪儿了？

<i>Nǐ</i>	<i>qù</i>	<i>nǎr</i>	<i>le?</i>
2SG	go	where	CRS

‘Where did you go? / Where have you been?’

(288) 你上哪儿去了？

<i>Nǐ</i>	<i>shàng</i>	<i>nǎr-qu</i>	<i>le?</i>
2SG	move.to	where-thither	PFV

‘Where did you go? / Where have you been?’

(289) 你到哪儿去了？

<i>Nǐ</i>	<i>dào</i>	<i>nǎr-qu</i>	<i>le?</i>
2SG	move.to	where-thither	PFV

‘Where did you go? / Where have you been?’



(290) 明天来我家！

<i>Míngtiān</i>	<i>lái</i>	<i>wǒ</i>	<i>jiā!</i>
tomorrow	come	1SG	home
'Come to my home tomorrow!'			

(291) 明天上我家来！

<i>Míngtiān</i>	<i>shàng</i>	<i>wǒ</i>	<i>jiā-lai!</i>
tomorrow	move.to	1SG	home-hither
'Come to my home tomorrow!'			

(292) 明天到我家来！

<i>Míngtiān</i>	<i>dào</i>	<i>wǒ</i>	<i>jiā-lai!</i>
tomorrow	move.to	1SG	home-hither
'Come to my home tomorrow!'			

Wáng (2005: 168) mentions a relatively rarely used construction, [NPloc + *lai*], in which 来 *-lai* is considered as a particle and pronounced unstressed, as illustrated in (293). According to the author, this construction is probably a remnant of ancient Chinese. We will examine this construction later on in our analyses.

(293) 这儿来！

(adapted from Wáng 2005: 168)

<i>Zhèr-lai!</i>
here-hither
'Come here!'

2.4.2.2. Associated motion markers

Before presenting 'associated motion markers' in Standard Chinese, let us compare two examples. In (294), the deictic motion verb 去 *qù* 'go' is followed by the verb indicating the purpose of the motion 'see' (hereafter purpose VP). In (295), the morpheme 去 = *qu* 'GO&DO' expressing motion is preceded by the purpose VP 'see'. Both sentences roughly convey the same meaning 'Go and see!', however sentences like (295) are typical of the Beijing colloquial style due to dialect background and register difference (written vs. spoken) (Chao 1968: 479; Lù 1985: 25; see also Lamarre 2020: 131). With regard to the grammatical category of 来 = *lai* and 去 = *qu* following the purpose VP, previous studies hold different opinions. Chao

(1968: 479) proposes to use the term ‘particles of purpose’, that is, final particles which are similar to, but different from, the directional complements (= deictic satellites) 来 *-lai* ‘hither’ and 去 *-qu* ‘thither’. Other scholars, such as Zhū (1982: 165-166), Lù (1985), and Gān & Gān (2009), although they do agree with the fact that 来 = *lai* and 去 = *qu* are usually unstressed when they appear after the purpose VP, consider them as a verb in a serial verb construction. Lamarre (2020: 143) argues that considering 去 = *qu* (and also 来 = *lai*) in sentences like (295) as a verb in a serial verb construction is far from satisfying since it “entails that we are dealing with SVCs where the motion predicate and the purpose predicate may appear indifferently as the first or as the second predicate without any significant change of meaning”. She (2020: 149) thus suggests that: “Clearly, a grammatical category is needed to which Chao’s ‘particles of purposes’ can be assigned: we [...] propose to show that *associated motion* is a plausible candidate”.¹⁰⁵

(294) 去看看! (adapted from Lù 1985: 24)

Qù kàn-kan!
go see-DUP
‘Go and see!’

(295) 看看去! (ibid)

Kàn-kan=*qu*!
see-dup=go&do
‘Go and see!’

As can be seen in the definition of ‘associated motion’ proposed by Guillaume and Koch (2021b: 3), the verb that the associated motion markers associate with is generally a non-motion verb, like 看看 *kàn-kan* [see-DUP] ‘see’ in example (295) given above. Sometimes, the associated motion markers can also be associated with the purpose VP, likely expressing the manner or the cause of the motion, such as 拿 *ná* ‘take’ in (296), extracted from Lamarre (2020). As explained by Lamarre, the patient NP (= the moving entity)

¹⁰⁵ Lamarre (2020) specifies that she follows Schmidtke-Bode (2009: 93-99) and uses ‘motion-cum-purpose’ for different patterns in her analysis.



in example (296) remains covert since it has already been uttered previously and is known to both the speaker and the hearer. Lamarre further explains that the situation in this sentence is the following: the father tells her daughter to go and take her notebook and bring it back. In such a situation, 去 =*qu* 'GO&DO' functions as an associated motion marker. However, it is not easy to identify the function of 去 =*qu* in 'VP + *qu*' construction especially when the patient NP is not expressed explicitly. When out of the context, 去 =*qu* / -*qu* in 拿去 *ná=qu* / *ná-qu* can have two interpretations, i.e., either as an associated motion marker or a deictic satellite (= directional complement). Lamarre emphasizes that although it is grammatical in northern Mandarin for patient NPs to be inserted between the verb and the deictic directional (= deictic satellite) in an imperative sentence, this word order would be unlikely for an NP denoting a specific entity known to both the speaker and the addressee (such as 'your homework' in (297)). Therefore, 去 =*qu* in 拿作业去 *ná zuòyè=qu* [take homework=GO&DO] can only function as an associated motion marker. Otherwise, the patient NP would typically be located before the verb, such as 这钱 *zhè qián* [this money] 'this money' in (298), with or without the object marker 把 *bǎ*, so that 去 -*qu* is a typical deictic satellite meaning 'away'.

(296) 你看，快拿去！ (adapted from Lamarre 2020: 146)

Nǐ kàn, kuài ná=qu!
2SG look quickly take=GO&DO

'Look! Go take it quickly!' (Situation: the father tells her daughter to go and take her notebook and bring it back.)

(297) 去去去，拿作业去！ (ibid.)

Qù qù qù, ná zuòyè=qu!
go go go take homework=GO&DO

'Go! Go and take your homework.' (and bring it back here)

(298) 这钱你拿去吧。 (ibid.)

<i>Zhè</i>	<i>qián</i>	<i>nǐ</i>	<i>ná-qu</i>	<i>ba.</i>
this	money	2SG	take-thither	SUG

‘Take this money (away, don’t refuse).’

The above examples (i.e., (295), (296), and (297)) show the use of 去 =*qu* ‘GO&DO’ as associated motion markers, now let us consider the use of 来 =*lai* ‘COME&DO’. Wáng (2005: 168) points out that the [VP + *lai*] construction came relatively late into being and its appearance is based on the [VP + *qu*] construction.¹⁰⁶ The [VP + *lai*] construction is often used in imperative sentences and 来 =*lai* is pronounced unstressed, as exemplified in (299).

(299) 吃饭来! 别玩儿了。 (adapted from Wáng 2005: 168)

<i>Chī</i>	<i>fàn=lai!</i>	<i>Bié</i>	<i>wánr</i>	<i>le.</i>
eat	meal=COME&DO	do.not	play	CRS

‘Come to eat! Stop playing.’

The information of Dynamic Deixis can not only be expressed by means of one of the linguistic devices mentioned above (i.e., deictic verbs, deictic satellites, and associated motion markers), but can also be expressed through a combination of two of these devices. Examples (300) and (301) illustrate a combination of deictic verbs and associated motion markers. Chao (1968: 479-480) and Zhū (1982: 165-166) mentioned this type of construction in which 来 *lái/lai* ‘come/COME&DO’ or 去 *qù/qu* ‘go/GO&DO’ occurs twice within the same clause.

(300) 我来看看来了。 (Zhū 1982: 166)

<i>Wǒ</i>	<i>lái</i>	<i>kàn-kàn=lai</i>	<i>le.</i>
1sg	come	see-rdp=come&do	crs

‘I came to see (it).’

¹⁰⁶ In this article, Wáng (2005) treats 来 =*lai* as a particle that denotes target or purpose.



(301) 我去买菜去。

(ibid.)

Wǒ qù mǎi cài=qū.
1SG go buy food=GO&DO
'I go buy food.'

In this dissertation, we use the term 'associated motion markers' for the two grammatical morphemes 来 =*lai* and 去 =*qu*, following Lamarre's (2020) proposal and gloss them as 'COME&DO' 'GO&DO'.¹⁰⁷

2.5. Summary

This chapter provided an overview of some typological characteristics of Standard Chinese in relation to expressions of motion events. By adopting a functional-typological approach, we reviewed the encoding of the most fundamental components of a motion event (i.e., Figure, Ground, Co-event, Path, and Dynamic Deixis). We briefly discussed the encoding of Figure, Ground, and Co-event and focused on the encoding of Path and Dynamic Deixis. As for Path encoding, three types of linguistic strategy can be used: verbal encoding (i.e., Path verbs), adverbial encoding (i.e., Path satellites), and adnominal encoding (i.e., prepositional phrases and localizers). With regard to Dynamic Deixis encoding, two types of linguistic coding strategy can be employed: verbal encoding (i.e., deictic verbs) and adverbial encoding (i.e., deictic satellites and associated motion markers).

¹⁰⁷ Lamarre (2020: 151) considers that "*lai* and *qu* are clitics, and therefore uses '=' in the transcription and glosses to link the verb and the deictic motion morphemes *lai* and *qu*".

Chapter 3

METHODOLOGICAL ISSUES AND CORPORA COMPOSITION

3.1. Introduction

This dissertation is a corpus-based study. To constitute our corpora, we adopted two approaches, namely, stimuli-based approach and TV series-based approach. The stimuli-based approach comprises elicited descriptive data and the TV series-based approach includes extracted dialogical data. The choice of these two approaches was motivated by the following two reasons.

To begin with, previous research related to the expressions of motion events in Standard Chinese relied mainly on traditional methods, such as written texts extracted from literary works (e.g., novels, plays, and short stories, etc.) (Lù 1985; Liú 1998; Chu 2004; Chen & Guo 2009; Lín 2011; *inter alia*). Although we can also find some research based on oral materials, such as data elicited with pictures describing a series of motion events (e.g., ‘Frog, where are you?’) (Arslangul 2007; Liú 2013), data extracted from TV series (Lamarre 2008a), and data elicited with animated cartoons (Ji, Hendriks, & Hickmann 2011c, 2011a, 2011b) or video-clips displaying human activities (Chen 2010, 2012), they are relatively rare compared to traditional methods. Our choice to work with both stimuli-based approach and TV series-based approach is based on their linguistic representativeness belonging to different data types. Data elicited with visual stimuli comprise individual descriptions of

single scenes described by native speakers of Standard Chinese from the perspective of the third person. By contrast, data extracted from TV series contain dialogues uttered by different protagonists from the perspective of the first, the second and the third person.

What's more, at the pragmatic level, stimuli-based data and TV series-based data are complementary when examining expressions of Dynamic Deixis which are highly context-dependent. The former type of data is decontextualized whereas the latter type of data provides a full range of contextualized knowledge and includes interaction between interlocutors.

We structure the present chapter as follows: section 3.2 presents the stimuli-based approach which contains *Trajectoire* stimuli set and *Put & Take* stimuli set. Additional information concerning the data collection, the participants, and their linguistic and geographical backgrounds are also provided; section 3.3 presents the TV series-based approach which comprises two TV series selected for our study, namely *Married for Ten Years* and *Loquacious Zhang Damin's Happy Life*; section 3.4 introduces the selection, transcription, and coding of the data; and section 3.5 summarizes the pros and cons of our methodological choices.

3.2. Stimuli-based approach

Recent years have witnessed the development of visual stimuli for language elicitation as a means of exploring semantics. Evidence can be found from the earliest pioneer studies, such as the wordless picture book *Frog, where are you?* (Mayer 1969) and the six-minute film *The Pear Stories* (Chafe 1975), to the latest works of video-clips to elicit data in various semantic domains.¹⁰⁸ This involves the

¹⁰⁸ The video-clips mentioned can be found from the website of Language & Cognition Department, Max Planck Institute for Psycholinguistics: <http://fieldmanuals.mpi.nl/>.

semantic domains as placement events, perception, emotion, body parts, and color, etc.

To carry out our study, we have firstly chosen the stimuli-based approach since it enables us to examine the conceptual domain of motion events in a systematic way.¹⁰⁹ In this dissertation, we use two elicitation tools: *Trajectoire* and *Put & Take* stimuli sets. In the following sections, we will present each stimulus set with more details.

3.2.1. The *Trajectoire* stimuli set, speaker and data collection

The *Trajectoire* stimuli set was developed by Ishibashi, Kopecka & Vuillermet (2006) within the cross-linguistic project TRAJECTOIRE 'Path (of motion)' (Fédération de Recherche en Typologie et Universaux Linguistiques, CNRS, France). Inspired by elicitation methods developed at the Max Planck Institute for Psycholinguistics (Nijmegen), the *Trajectoire* material consists of 76 video-clips in total, of which 55 are target clips, 19 are filler clips, and 2 are training clips. It includes 3 distinct versions arranging all the 76 video-clips in different orders to minimize possible routine effects with the speaker during the elicitation session (Ishibashi 2015; Vuillermet & Kopecka 2019). Each of the 76 video-clips lasts for 8 to 14 seconds. The 55 target clips show the moving entity (e.g., adult or child) moves spontaneously to or away from a location. The 19 fillers show either static scenes (e.g., a man reading a book) or other activities (e.g., two persons playing the ball) in order to distract the speakers' attention from the main goal of the elicitation (here producing the description of spontaneous motion events). The 2 training clips, always appearing at the beginning of the elicitation session, aims to help participants to familiarize the task and the nature of the

¹⁰⁹ The idea of eliciting data from visual stimuli to constitute the first corpus (stimuli-based data) for my dissertation came from the suggestion of my supervisor, Anetta Kopecka. I have worked with her on the expressions of caused motion events in Mandarin Chinese by using *Put & Take* stimuli for my master's thesis (J.-K. Song 2015).

materials (Vuillermet & Kopecka 2019). A complete description of each target scene can be consulted in Appendix 1.

According to the protocol for data elicitation, the main objectives of this stimulus set are: 1) to explore the type of morphosyntactic devices that different languages use to describe Path of motion and its different portions such as Source (initial portion), Goal (final portion), and Medium (intermediate portion); 2) to examine the hypothesis of the (a)symmetry of Source-Goal expressions in a cross-linguistic perspective.

We have collected data using the 76 video-clips with each speaker, however, only data of the 55 target clips expressing spontaneous motion events are of our interest and will be analyzed in this dissertation. These 55 video-clips vary in terms of the following five parameters: types of Figures, types of Grounds, Path, Manner, and Deixis (Kopecka & Ishibashi 2011; Ishibashi 2015; Vuillermet & Kopecka 2019), as illustrated in detail in Table 12.



Concepts	Parameters
Figure [F]	Individual(s): man, woman, child; group of people
Ground [G]	Places: building (cave), road (path, track, bridge), geographical location (sea, fields)
	Objects: basket, tree trunk, rock
	Humans: man, woman, child
Path [P]	Orientation: horizontal (<i>from, to</i>), vertical (<i>up, down</i>)
	Simple Path with vs. without boundary-crossing
	<ul style="list-style-type: none"> i. Source-oriented: <i>out of</i> vs. <i>from</i> ii. Medium-oriented: <i>across</i> vs. <i>past</i> iii. Goal-oriented: <i>into</i> vs. <i>to(wards)</i>
	Complex Path with vs. without boundary-crossing
Manner [M]	<ul style="list-style-type: none"> i. Source- & Goal-oriented (e.g., <i>from - to</i>) ii. Source- & Medium-oriented (e.g., <i>out of - up</i>) iii. Medium- & Goal (e.g., <i>down</i> and <i>into</i>) iv. Source & Medium & Goal-oriented (e.g., <i>out of - past - into</i>)
	Manner of motion: <i>walk, run, jump</i>
	Centrifugal (<i>away from a deictic center</i>) vs. centripetal (<i>toward a deictic center</i>) vs. transverse (<i>from left to right or from right to left with respect to a deictic center</i>) ¹¹⁰
Deixis [D]	

Table 12. The parameters underlying the design of the *Trajectorie* material (Vuillermet & Kopecka 2019: 103)

As we can see from the Table 12, there are two different types of Figures: either individual (man, woman, child) or a group of people (ranging from 2 to 5 person). As to the Ground, three main types are distinguished: places like *cave*, *bridge*, and *fields*; objects like *basket* and human beings as *man*.¹¹¹ Concerning the Path, specific attention has been paid to two orientations (i.e., horizontal and vertical axes) and different portions of Path, such as the Source (initial point), the Medium (intermediate points), and the Goal (final

¹¹⁰ The authors (Vuillermet & Kopecka 2019) were expecting the camera to be interpreted as the deictic center.

¹¹¹ The authors (Kopecka & Ishibashi 2011) mentioned that they follow the ontology of spatial entities proposed by Aurnague, Vieu & Borillo (1997) and Aurnague (2004) as to the types of Ground.

point). The stimulus set comprises scenes with both simple Path and complex Path in variation to (non-)boundary-crossing events. Since Manner of motion is not the focus to be examined, it is less varied in this material and contains mainly *walk*, *run*, and *jump*. In regard to the Deixis, the deictic information is varied in three ways: centripetal (towards the deictic center), centrifugal (away from the deictic center), and transverse (from the left to the right side or from the left to the right side with respect to the deictic center). More specifically, the video-clips show the Figure moving in different directions with respect to different reference points (i.e., the Ground) and from different perspectives (i.e., from the front, the back, and the side of the moving entity).

The still frames are examples of some of the scenes in the *Trajectoire* stimulus set.¹¹² They show someone walking out of the cave towards the speaker (Figure 8), someone walking towards the tree away from the speaker (Figure 9), and someone jumping from the cliff into the water on a transverse axis with respect to the speaker (Figure 10).¹¹³



Figure 8. Scene 023



Figure 9. Scene 061



Figure 10. Scene 064

¹¹² An arrow is added in each still frame (Figure 8-Figure 16) in order to indicate the direction of the moving entity when changing its location.

¹¹³ The perspective of the speaker equals that of the camera-observer.

The data collection of Standard Chinese with the *Trajectoire* stimulus set took place during the academic year 2016-2017 (December 2016-January 2017) with students at the University of Hebei (Baoding, China) and the University of Beijing (Beijing, China). Twelve speakers, including 5 males and 7 females, have participated in the elicitation session. Their age ranges from 19 to 24 (mean age = 21). The group of participants is linguistically homogeneous. All of them come from the Northern part of China and are native speakers of Standard Chinese (Table 13). More detailed information of each speaker can be found in Appendix 2.

Mother tongue	Region in China	Province/City
Standard Chinese	Northern, Northwestern	<i>Héběi</i> (9), <i>Běijīng</i> (1), <i>Hénán</i> (1), <i>Shānxī</i> (1)

Table 13. The information of speakers in data collected with the *Trajectoire* stimulus set

Each participant was interviewed individually in a quiet room. The speakers were asked to respond to the following question after seeing each scene: “What happened in this clip?” All the responses were audio recorded (in wav. audio format). However, only the descriptions expressing translational motion were transcribed. Any other expressions which are irrelevant to expressions of motion events, such as the background of the scene, are excluded in our transcription. There are 714 descriptions in total.

3.2.2. The *Put & Take* stimuli set, speaker and data collection

The *Put & Take* stimulus set was developed by Bowerman, Gullberg, Majid & Narasimhan (2004) for the cross-linguistic Put project.¹¹⁴ It

¹¹⁴ The *Put & Take* video-clips and the field manual instructions used for this dissertation are available at the website of the Language and Cognition

aims to explore the expression of caused motion events, especially placement (or ‘putting’) events and removal (or ‘taking’) events, across typologically varied languages. More specifically, “placement (or ‘putting’) events are events in which an agent causes an object to move to a location; and removal (or ‘taking’) events are events in which an agent causes an object to move away from a location” (Narasimhan, Kopecka, Bowerman, Gullberg, & Majid 2012: 5). This elicitation material is composed of 63 short video-clips (plus 3 warm-up clips) showing people placing things in place (e.g., *putting a candle into a candle holder*) and removing things from places (e.g., *taking a poster off wall*). Each video lasts for 3 - 4 seconds (see Appendix 3 for a complete description of each target scene) and there are 3 distinct versions arranging all the 63 video-clips in different orders to minimize possible routine effects. One version per speaker was used during the elicitation session.

According to Narasimhan et al. (2012), the 63 scenes vary along a number of different dimensions. They provide a listing of the kinds of semantic features involved in each dimension as follows (adapted from Narasimhan et al. 2012):

- a. The nature of the Figure: rigid vs. flexible (e.g., stone vs. flower), body part of the agent vs. separate object (e.g., head vs. book), granular vs. liquid vs. solid (e.g., fistful of rice vs. water vs. block), clothing item (e.g., hat, boot), size (big vs. small, e.g., suitcase vs. banana), shape (long vs. round, e.g., pen vs. apple);
- b. The nature of the Ground: animate vs. inanimate (e.g., head vs. floor), body part of the agent vs. separate location (e.g., foot vs. pocket), horizontal vs. vertical (e.g., shelf vs. wall), floor vs. higher levers (e.g., floor vs. tree branch), container vs. supporting surface (e.g., bucket vs. table);

Department, Max Planck Institute for Psycholinguistics (L&C Field Manuals and Stimulus Materials): <http://fieldmanuals.mpi.nl/volumes/2004/put-project/>.

- c. The spatial relation between Figure and Ground: containment vs. support (e.g., apple - bag vs. book - floor); Figure and Ground tightly or loosely fitted to each other (e.g., candle - candle holder vs. stone - pot of water); Figure horizontally vs. vertically oriented with respect to Ground (e.g., cucumber - recorder case vs. poster - wall), Figure suspended from a point (e.g., unhang rope - tree branch);
- d. Types of instruments: the agent's hand, another body part of the agent (e.g., mouth), or an instrument (e.g., tongs);
- e. Manner: e.g., dropping, throwing, pouring, and placing. Note that these events involve a certain loss of agentive control over the Figure: whether control is retained until the Figure reaches its goal (the end location) vs. relinquished before the Figure completes its motion; deliberate vs. accidental, the agent moves along with the Figure ('accompanied motion') vs. only extends a hand.

Among the 63 scenes, 3 of them (scene codes: 050, 051, and 052, see Appendix 3) were designed to explore whether placement and removal verbs allow to mention both Source and Goal in the same clause, since previous research has suggested there is cross-linguistic variation in this regard (Bohnenmeyer, Enfield, Essegbey, Ibarretxe-Antuñano, Kita, Lüpke, & Ameka 2007).

The still frames illustrate some of the scenes in *Put & Take* stimuli set showing placement and removal events. Placement events involve examples such as someone putting a book on the floor (Figure 11), someone putting a boot on her foot (Figure 12), and someone giving a cup to the other person (Figure 13). Removal events concern examples like someone taking a cucumber out of a recorder case (Figure 14) and someone taking off coat (Figure 15). There are 3 scenes showing the action of removal and placement in the same event, such as someone taking an apple from a pile of books and putting the apple to on top of the shoe (Figure 16).



T

1

2

3

4

5

6

A



Figure 11. Scene 007



Figure 13. Scene 022



Figure 15. Scene 133



Figure 12. Scene 026



Figure 14. Scene 115



Figure 16. Scene 051

The data collection in Standard Chinese with the *Put & Take* stimulus set took place during the academic year 2014-2015 (December 2014 - February 2015) in Lyon with Chinese students studying at the Université Lumière Lyon 2, the Université Jean Moulin Lyon 3 and at the institute Alliance Française de Lyon. Twelve speakers, 6 males and 6 females, participated in the *Put & Take* elicitation session. Their age ranges from 20 to 33 (mean age = 27). Ten of them come from the Northern part of China and are native speakers of Standard Chinese. Two of them come from the Southern part of China and speak both Standard Chinese and dialects of their hometowns as mother tongues (Table 14). More detailed information of each speaker can be seen in Appendix 4.

Mother tongue(s)	Region in China	Province/City
Standard Chinese	Northern, Northwestern, and Southwestern	<i>Běijīng</i> (1), Manchuria (5), <i>Shǎnxī</i> (2), <i>Qīnghǎi</i> (1), <i>Húběi</i> (1)
Standard Chinese & one dialect of <i>Xiāng</i>	Southern	<i>Húnán</i> (1)
Standard Chinese & one dialect of <i>Gàn</i>	Southern	<i>Jiāngxī</i> (1)

Table 14. The information of speakers in data collected with *Put & Take* stimulus set

The procedure of the data collection with the *Put & Take* stimulus set is similar to the procedure adopted with the *Trajectoire* stimulus set. Each participant was interviewed individually in a quiet room. The speakers were asked to respond to the following question after seeing each scene: “What did he/she do in this video-clip?” All the responses were audio recorded (in the wav. audio format) and only expressions describing translational motion were transcribed for the use of data analyses. There are 800 descriptions in total.

3.3. TV series-based approach and data extraction

Besides the stimuli-based approach, we have also adopted the TV series-based approach. The idea of choosing TV series-based approach as the second corpus for my dissertation was initially proposed by my co-supervisor Christine Lamarre who had noticed several significant differences in the encoding of motion events in the descriptive data (literary texts) and in the dialogical data (TV series) (Lamarre 2013). She provided generously some of her data that were collected within the project "A typological study of the linguistic encoding of motion events".¹¹⁵ This approach, which provides a different perspective, is complementary at the pragmatic level (i.e., context-based utterances) as compared to the stimulus-based approach. The second corpus comprises data extracted from dialogues in two TV series, namely, *Married for Ten Years* and *Loquacious Zhang Damin's Happy Life*.¹¹⁶ Both of the two TV series contain 20 episodes, and each episodes lasts 45 minutes approximately. There are about 15 hours in total for each TV series.

The first TV series is entitled *Married for Ten Years* [结婚十年 *Jiéhūn Shínián*]. It is a 20 episodes TV series, released in 2003. The main language employed by the actors is Standard Chinese. Professor Lamarre has transcribed the whole TV series (in docx.

¹¹⁵ Christine Lamarre was granted a funding in 2006 and 2007 for data extraction and treatment from the *Center for Evolutionary Cognitive Sciences* at the University of Tokyo, a 21st Century COE (*Center of Excellence*) Program (2003-2008). She was the leader in the section of this COE Program called: *Integrative Language Sciences Section: Research on Language Universals and Cross-linguistic Variation*. More detailed information can be found in the website: <http://ecs.c.u-tokyo.ac.jp/en/research/research03.html>.

¹¹⁶ The audiovisual material of the two TV series is available on the YouTube channel:

- *Married for Ten Years*:

https://www.youtube.com/watch?v=pj7-diBX1BE&list=PLRBCIVey5BqyOpssAin_lqKbVpKjJcS5j

- *Loquacious Zhang Damin's Happy Life*:

https://www.youtube.com/watch?v=-73h_hRLc7M&list=PLXMY9ZVGcxAUSVIEBGHM0Cd_jDcFgvo4u.

format in Word) which contain basic path verbs and path directionals (including deictic verbs and directionals). Among the total 20 episodes, we have selected the first 10 episodes and integrated her transcription as well as our own transcription by adding some missing sentences in our corpus (in xlsx. format in Excel). There are 1025 clauses in total.

The second TV series is entitled *Loquacious Zhang Damin's Happy Life* [贫嘴张大民的幸福生活 *Pínzǔ Zhāng Dàmín de Xìngfú Shēnghuó*]. It is a 20 episodes TV series, broadcast in 2000. The main language used by the actors is Beijing Mandarin. The first 10 episodes were selected for the data extraction (Professor Lamarre has transcribed the first 3 episodes and we have transcribed the rest of the 7 episodes). There are 967 clauses in total.

We carried out the data extraction with two steps: 1) watching each episode of the TV series with scrutiny in order to identify sentences containing translational motion and extract them into Excel tables; 2) comparing the existing data (provided by Christine Lamarre) with the newly selected sentences in order to complete the corpus.

3.4. Treatment of data

Once we have finished data collection and data extraction, we proceed to data transcription and coding in Excel sheets. All the data was transcribed in both Chinese characters and *pinyin* (i.e., Romanization system) and was coded in *pinyin*. The number of motion event descriptions varies among the four data sets, and there is a total of 3506 clauses in the corpora. Table 15 recapitulates the number of motion events in each data set.



Data set	Number of clauses
<i>Trajectoire</i> (Traj)	714
<i>Put & Take</i> (P&T)	800
<i>Married for Ten Years</i> (MFTY)	1025
<i>Loquacious Zhang Damin's Happy Life</i> (LZHL)	967
Total number	3506

Table 15. Number of clauses expressing translational motion per data set

3.4.1. Coding system

The coding system we applied to our data has been inspired by Slobin's (2005) *Coding of Motion Events in Texts*. As explained by the author (2005: 1):

This coding manual was designed for the analysis of the forms and functions of motion events descriptions in oral and written narrative. It has been applied to elicited narratives, short stories, and novels in various languages. The system was designed to examine questions of the influence of linguistic typology – especially lexicalization patterns – on the ways in which a narrator describes the movement of a protagonist from one place to another.

The data (see Table 15) was divided into clauses and coded only for translational motion events. By clause, we follow Berman & Slobin's (1994: 660) definition in which 'clause' is used as a unit of transcription. The definition is as follow:

We define a clause as any unit that contains a unified predicate. By unified, we mean a predicate that expresses a single situation (activity, event, state). Predicates include finite and nonfinite verbs, as well as predicate adjectives. In general, clauses will be



comprised of a single verbal element; however, infinitives and participles which function as complements of modal or aspectual verbs are included with the matrix verb as single clauses, e.g., *want to go*, *started walking*.

More specifically, as far as Standard Chinese is concerned, we distinguish single clause (i.e., one clause) from multiple clauses (i.e., more than one clause). As for single clause, taking the scene 059 (Path_C_run_into_sea_sideRL) in *Trajectoire* stimulus as an example, the event ‘running into the sea’ can be expressed either by a compound verb 跑进了 *pǎo-jìn-le* [run-into-PFV] ‘ran into’ followed by a noun phrase 海里 *hǎi=li* [sea=inside] ‘the inside of the sea’ in (302) or by a Path verb 进了 *jìn-le* [enter-PFV] ‘entered’ accompanied by a gerund 奔跑着 *bēnpǎo-zhe* [run.quickly-DUR] expressing the Manner of motion, followed by a noun phrase 海里 *hǎi=li* [sea=inside] ‘the inside of the sea’ in (303). We consider both cases the same as examples (302) and (303) as containing one single clause in the transcription and analyses.

(302) 一个小男孩儿从沙滩上跑进了海里。

Yí gè xiǎo nánhái'ér cóng shātān=shàng pǎo-jìn-le hǎi=li.
one CL little boy from sand=upside run-into-PFV sea=inside
‘A little boy ran into the sea from the sand.’ (Traj_059_S2)

(303) 一个小男孩儿奔跑着进了海里。

Yí gè xiǎo nánhái'ér bēnpǎo-zhe jìn-le hǎi=li.
one CL young boy run.quickly-DUR enter-PFV sea=inside
‘A little boy entered the sea running quickly.’ (Traj_059_S4)

As for multiple clauses, taking the scene 052 (push suitcase from car to tree) in *Put & Take* stimulus as an example, the speaker expressed the two events ‘pushing the suitcase from car’ and ‘moving the suitcase to the tree’ by using two different clauses, as illustrated in (304). We consider cases like example (304) as containing multiple clauses.

(304) 一个男的把一个箱子从他的车的后面移开，放在了树下。

(Traj_052_S1)

Yí gè nán de bǎ yí gè xiāngzi cóng tā de chē de
 one CL man OM one CL suitcase from 3SG GEN car GEN
 hòumian yí-kai, fang zài le shù=xia.
 back move-apart put at PFV tree=downside
 'A man moved a suitcase from the back of his car and placed it under the
 tree.'

Our coding system involves both the morphosyntactic elements and the semantic components related to expressions of motion events.

Concerning the morphosyntactic level, different morphosyntactic devices that were coded are "actual grammar-book elements – whether a word is a verb, a noun, a preposition, etc. (Slobin 2005)". We followed the three categories proposed by Wälchli (2001) who distinguishes three different 'loci' of the expression of displacement: verbal encoding, adnominal encoding, adverbial encoding. The 'V' (i.e., verb) was used for verbal encoding, the 'Prep' (i.e., preposition) for adnominal encoding, and the 'Sat' (i.e., satellite) for adverbial encoding. As to the rest of the elements, 'AM' was used for associated motion markers, 'N' for nouns, and 'Lz' for localizers.

Regarding the semantic level, different semantic components that were coded are "categories of the types of meanings that words can express" (Slobin 2005). We followed the categories proposed by Talmy (2000) and coded elements that can express the moving entity as 'f' (Figure), the reference object with respect to which the Figure moves or is located as 'g' (Ground), the manner of motion as 'man' (Manner), the cause of motion as 'cau' (Cause), the path of motion as 'path' (Path), the direction of the Figure's movement with respect to the deictic center as 'ctp' (Centripetal direction) and 'ctf' (Centrifugal direction). Several components which have subcomponents were also coded. For example, we further coded the three portions of Path as 's' for Source, 'm' for Medium, and 'g'

for Goal.¹¹⁷ Table 16 provides some examples illustrating our data coding, noting that information in annotation were not coded and are given here in order to help the reading.

Components	Form & meaning	Morphosyntactic semantic coding	Annotation
Figure	<i>nánrén</i> 'man'	N:fa	Noun:Figure:animate
	<i>làzhú</i> 'candle'	N:fia	Noun:Figure:inanimate
Ground	<i>shāndòng</i> 'cave'	N:g	Noun:goal
	<i>lǐ</i> 'inside'	Lz:g	Localizer:goal
Co-event	<i>pǎo</i> 'run'	V:man	Verb:manner
	<i>chōu</i> 'draw'	V:cau	Verb:cause
Path	<i>huí</i> 'return'	V:p:g	Verb:path:goal
	<i>jìn</i> 'into'	Sat:p:g	Satellite:path:goal
	<i>lái</i> 'hither'	Sat:p:ctp	Satellite:path:centripetal
	<i>qu</i> 'go&do'	Am:p:ctf	Associated motion marker:path:centrifugal
	<i>cóng</i> 'from'	Prep:d:s	Preposition:direction:source

Table 16. Morphosyntactic and semantic coding in the data

Besides the morphosyntactic and semantic coding of the fundamental components of a motion event, in order to carry out qualitative and quantitative analyses several supplementary information found in the data was also coded, as shown in Table 17.

¹¹⁷ We use the term 'Medium' in this dissertation to code the intermediate portion of Path. One can also find other terms in previous literature which refer to the same notion, such as Route (Jackendoff 1983, 1991; Lamarre 2007a) and Median (Vuillermet & Kopecka 2019).



Supplementary coding	Form	Annotation
The use of object marker	BA	object marker <i>ba</i>
Perspective	back	back
	front	front
	side	side
	sideLR	side from left to right
	sideRL	side from right to left
Visibility	iv-v	invisible to visible
	n	neutral
	v-iv	visible to invisible
Boundary-crossing	b	boundary-crossing
	nb	non-boundary-crossing
Portion of Path	S	Source
	M	Medium
	G	Goal
	SM	Source+Medium
	MG	Medium+Goal
	SG	Source+Goal
	SMG	Source+Medium+Goal
Coding strategies ¹¹⁸	verbal	verbal encoding
	adverbal	adverbal encoding
	adnominal	adnominal encoding
	verbal+adverbal	verbal+adverbal encoding
	verbal+adnominal	verbal+adnominal encoding
	adnominal+adverbal	adnominal+adverbal encoding
	adnominal+verbal+adverbal	adnominal+verbal+adverbal encoding
	verbal	adnominal+verbal+adverbal encoding
Number of loci	1	1 locus

¹¹⁸ When there is a combination of two or three coding strategies, we only provide the prototypical order of their combination. Take 'adnominal+adverbal' as an example, this combination comprises both adnominal + adverbial encoding and adverbial + adnominal encoding.



	2	2 loci
	3	3 loci
	4	4 loci
	5	5 loci
Event types	SM	Spontaneous motion
	CM	Caused motion
	AM	Associated motion
Sentence types	IMP	Imperative
	N-IMP	Non-imperative

Table 17. Supplementary coding in the data

3.4.2. Glossing system

In this dissertation, each example of Standard Chinese is given the following four-line format:

- First line: the sentence written in Chinese characters;
- Second line: the phonetic transcription of the sentence in *pinyin*;
- Third line: glosses following the Leipzig Glossing Rules (cf. the paragraph below);
- Fourth line: English translation and reference.

The glossing system we adopt is based on the Leipzig Glossing Rules, developed jointly by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology (Bernard Comrie, Martin Haspelmath) and by the Department of Linguistics of the University of Leipzig (Balthasar Bickel).¹¹⁹ The system consists of ten rules comprising interlinear glosses which indicate morphosyntactic and semantic information. Besides, an appendix containing the abbreviated category labels is also provided. Although these rules cover a large part of our needs in glossing examples in the data, we

¹¹⁹ More information of the conventions of the rules and the latest version (May 31, 2015) of the document can be consulted on the following website: <https://www.eva.mpg.de/lingua/resources/glossing-rules.php>.

also add certain category labels whenever language specific information in Standard Chinese is required.

3.5. Summary

In this chapter, we have presented stimulus-based approach and TV series-based approach used to carry out data collection. However, the two approaches provide both advantages and limitations.

Concerning the advantages, the stimulus-based approach is a good way for an onomasiological study. As stated by Majid (2012: 57) in her article *A guide to stimulus-based elicitation for semantic categories*: “A stimulus-based approach, [...], will enable the researcher to access one aspect of meaning, namely the extension. What things in the world are denoted by which forms in the languages?” Besides, the use of stimulus-based approach with pre-established scenes rather than merely searching certain forms extracted from language databases, grammar books, and dictionaries was also motivated by the intention to examine not only the concept Dynamic Deixis in Standard Chinese intra-linguistically, but also to investigate its expression in a cross-linguistic perspective. Majid (2012: 56) also points out other advantages as follows:

Speaker descriptions of non-linguistic stimuli do not require special training of consultants or specialized knowledge, so data can be collected easily. Knowing precisely what the speaker saw when they produced the description minimizes erroneous interpretations on the part of the analyst, as the exact stimulus can be referred to later in the analysis stage, long after the utterance was produced. And the constant platform of the stimulus enables cross-speaker and cross-language comparison.

As to the TV series-based approach, dialogues usually entail an interaction between the interlocutors. Linell (1998: 10) in his book *Approaching Dialogue (Talk, interaction and contexts in dialogical perspective)* gives a broad definition of ‘dialogue’ as roughly:

“interaction through symbolic means by mutually co-present individuals”. In addition, dialogues also provide a highly contextualized background. As stressed by Linell (2005: 6) in another study: “Situated discourse is interdependent with contexts. One cannot make sense of a piece of discourse outside of its relevant contexts”.

Nevertheless, there also exist limitations in both approaches. With regard to stimulus-based approach, the video-clips are designed specifically to elicit certain descriptions of ‘Putting & Taking’ and ‘Path of motion’ events. And the elicitation of individual scenes which are not interrelated does not provide a contextualized knowledge that the use of Dynamic Deixis expressions might require. With respect to TV series-based approach, although the sentences are uttered by different actors, the script is usually written by one screenwriter. Therefore, this might bias the output of dialogues and affect the results of the study.

Considering the advantages and limitations of each approach, we thus chose to combine both approaches in order to constitute the corpora with two different sources of data. Stimulus-based approach is a systematic method that allows to explore data across speakers and TV series-based approach is context-dependent and allows to explore data from a more pragmatic perspective. The use of two approaches is complementary, as stated by Majid (2012: 71): “The stimulus-based approach does not replace corpus and verbal elicitation methods but supplements them and is supplemented by them. By combining methods, the limits of any one technique are overcome and converging evidence provides more confidence in findings”.

Part II

DATA ANALYSES AND RESULTS

Chapter 4

ENCODING OF PATH AND DYNAMIC DEIXIS IN THE DESCRIPTIVE AND THE DIALOGICAL DATA

4.1. Introduction

Chapter 4 gives a general overview of the encoding of Path and Dynamic Deixis in the corpora collected in Standard Chinese. Previous works that are relevant to the expression of motion events in the language under study mainly focus on the individual coding strategy by using one or two morphosyntactic device(s) falling into the same word class, while the topic of how different strategies combine in a clause has not been much addressed, i.e., the use of two or three devices belonging to different word classes. What's more, there are very few researches that conduct a comparative study between two data types in spoken Chinese.

The purpose of this chapter is twofold: first, to present how Path and Dynamic Deixis are encoded by speakers of Standard Chinese, and to provide new insights on their coding strategies compared with previous literature, and second, to examine the similarities and differences in the expression of Path and Dynamic Deixis between the descriptive and the dialogical data.

To address the above objectives, we will investigate different morphosyntactic devices and coding strategies that speakers of Standard Chinese used to express Path and Dynamic Deixis. Based



on Wälchli's (2001) typology, in the language under study, verbs fall into the type of verbal encoding, directional complements and associated motion markers the adverbial encoding, and prepositions and localizers the adnominal encoding (cf. Lamarre 2008a).

The chapter is organized as follows. Section 4.2 describes different sentence features that characterize descriptive data collected with two elicitation stimulus sets and dialogical data extracted from two TV series (cf. Chapter 3, §3.2 and §3.3). Section 4.3 and section 4.4 present various coding strategies used in the descriptive and the dialogical data to express Path and Dynamic Deixis, respectively. Based on these two sections, section 4.5 summarizes the similarities and differences found between the expression of Path and Dynamic Deixis in two data sets.

Given the distinct features of Dynamic Deixis as compared to Path (cf. Chapter 1, §1.4), we treat these two semantic elements separately throughout the second part of the dissertation (including Chapters 4, 5, and 6) in order to further explore evidence in Standard Chinese showing how they behave differently in the expression of motion events.

4.2. Sentence features of descriptive and dialogical data

As recalled in the introduction of this chapter, the corpora involve two types of data: descriptive and dialogical data. The descriptive data was collected with two visual stimulus sets (i.e., *Trajectoire* for spontaneous motion and *Put & Take* for caused motion events). The dialogical data was extracted from two TV series (i.e., *Married for Ten Years* and *Loquacious Zhang Damin's Happy Life* including both spontaneous and caused motion events).¹²⁰ As revealed by the

¹²⁰ "Descriptive data" refer here to data collected with visual stimulus sets (descriptive data = visual stimuli data) and "dialogical data" refer to data extracted from TV series (dialogical data = TV series data). These two pairs of terms are interchangeable throughout this dissertation.

corpora, sentences of each data type present their own distinctive features. Concerning the descriptive data, since each target scene emphasizes different portions of Path, speakers can choose, depending on how they conceptualize the scene, to describe one, two, or three portions of Path with one clause or more. Therefore, it is important to investigate the interface between semantics and syntax because the number of clauses used to encode a given event and the information being encoded can vary. We will discuss this issue in §4.2.1. Regarding the dialogical data, it comprises not only declarative sentences, as found in the descriptive data elicited with two stimulus sets that triggered exclusively non contextualized descriptions, but also imperative sentences.¹²¹ We will address the use of imperatives in §4.2.2.

4.2.1. Descriptive data: one clause vs. multiple clauses

In this section, we analyze the descriptive data by investigating the correlation between the type of Path complexity and the number of clauses used to describe a motion event. By “simple Path”, we understand the type that includes only one portion of the Path, which is, Source, Medium, or Goal, as exemplified in (305) which describes the Medium. By “complex Path”, we understand two or three spatial portions of the Path, i.e., Source + Medium, Medium + Goal, Source + Goal, or Source + Medium + Goal. Examples (306) and (307) illustrate respectively the use of one clause and two clauses which describe the Source + Goal portions of Path.

¹²¹ It is important to note that the dialogues in TV series are not restricted to declarative and imperative sentences. They also include interrogative and exclamative sentences. In this dissertation, we only focus on declarative and imperative sentences since they account for the great majority of dialogues in both TV series.

(305) 三个人穿过树丛。 (Traj_041_S3)

Sān gè rén chuān-guò shùcóng.
three CL person pass.through-across grove
'Three men passed through the grove.'

(306) 他把苹果从一摞书上挪到了鞋子上。 (P&T_051_S3)

Tā bǎ píngguǒ cóng yì luò shū=shang nuó-dao-le xiézi=shang.
3SG OM apple from one CL book=upside shift-to-PFV shoe=upside
'He moved the apple from a pile of books to the shoe.'

(307) 一个女的把一包糖从桌子上拿起来，放到了椅子上面。

(P&T_050_S1)

Yí gè nǚde bǎ yì bāo táng cóng zhuōzi=shang
one CL woman OM one CL candy from table=upside
ná-qǐ-lai, fàng-dao-le yǐzi=shàngmian.
take-up-hither put-to-PFV chair=upside
'A woman took a bag of candy from the table (towards the deictic center)
and put it onto the chair.'

To express simple and complex Paths in a motion event (i.e., including both spontaneous and caused motion), do speakers of Standard Chinese use one or more than one clause in a sentence? This issue is interesting to examine for the following reasons.

Firstly, it will give us a general idea of how simple and complex Paths are expressed by speakers of Standard Chinese.

Furthermore, examining the number of clauses used to express simple and complex Paths will allow us to uncover how different speakers (i.e., 24 speakers in total, 12 for the *Trajectoire* data and 12 for the *Put & Take* data) conceptualize the same target event displayed in the video clip that shows either spontaneous or caused motion, and whether they express it in the same way, showing a possible intra-speaker variation.

In their paper *Principles of Event Segmentation in Language: The Case of Motion Events*, Bohmeyer et al. (2007) carried out a study on how conceptually comparable event representations are segmented across units of linguistic code. The authors (2007: 496) observed that,



[...], the relationship between linguistic and internal cognitive event representations is interestingly complex and mutable. Information about an event is usually not mapped onto a single lexical item, but is distributed across phrases, clauses, and larger chunks of discourse. Even within one language the same perceived event can be framed in various different ways.

The utterances from English in examples (308) and (309), among many other ways, describe the same perceived event in one and two clauses, respectively.

(308) Sally broke the vase. (Bohnmeyer et al. 2007: 496)

(309) Sally knocked over the vase and it broke. (ibid.)

Given this intralanguage variability, we may expect a variation in terms of the number of clauses used in expressing the same perceived event in our Chinese stimuli data too.

Last but not least, the investigation of the above issue will help us to better understand not only the linguistic structure of the language but also language in use.

Below we will look at the number of clauses contained first in the descriptions of the *Trajectoire* data, and then in the descriptions of the *Put & Take* data. Table 18 gives the number of descriptions produced by 12 speakers using one or more than one clause in reference to the 55 *Trajectoire* target scenes showing spontaneous motion. We note that, in general, the majority of the descriptions in the *Trajectoire* data are expressed with one clause, accounting for 94.7%. Descriptions expressed with multiple clauses (either 2 or 3) together, only account for 5.3%.



N° of clauses	Description (N=660)	
1 clause	94.7%	(625)
2 clauses	4.2%	(28)
3 clauses	1.1%	(7)

Table 18. Number of clauses per motion description in the *Trajectoire* data

To further examine the number of clauses produced by the speakers in reference to the 55 target scenes, we divided these scenes into two groups. One group contains 42 clips showing simple Path (see Appendix 5), and the other group comprises 13 clips showing complex Path (see Appendix 6). By distinguishing simple Path from complex Path, we note that although speakers use one clause as the dominant way to describe events showing both simple and complex Paths, the use of multiple clauses for describing complex Path events is relatively higher than its use for describing simple Path events (13.5% vs. 3%), as illustrated in Table 19. Moreover, there is no speaker who uses three clauses to describe events showing simple Path.

N° of clauses	Descriptions of clips showing simple Path (N=504)		Descriptions of clips showing complex Path (N=156)	
1 clause	97%	(489)	86.5%	(135)
2 clauses	3%	(15)	9%	(14)
3 clauses	0%	(0)	4.5%	(7)

Table 19. Number of clauses per motion description of clips showing simple vs. complex Path in the *Trajectoire* data

Let us first examine the number of clauses used to describe the 42 clips showing simple Path. Thirty-seven out of those 42 clips were described by the twelve speakers with one clause. The selected illustrations given below concern three of those scenes: scene 038 (Path_F_walk_outof_field_sideRL) showing Source-oriented Path

(e.g., (310)), scene 072 (Path_M_jump_over_tronc_back) showing Medium-oriented Path (e.g., (311)), and scene 036 (Path_M_walk_toward_F_back) showing Goal-oriented Path (e.g., (312)).

(310) 一位女士从玉米地里走了出来。 (Traj_038_S2)

Yí wèi nǚshì cóng yùmǐdì=li zǒu-le-chu-lai.
 one CL lady from corn.field=inside walk-PFV-out-hither
 'A lady walked out of the corn field (towards the deictic center).'

(311) 男人跨过树桩。 (Traj_072_S10)

Nánrén kuà-guo shùzhuāng.
 man step-over stump
 'The man stepped over the stump.'

(312) 一个男人走向躺在草坪上的女人。 (Traj_036_S4)

Yí gè nánrén zǒu xiàng tǎng zài cǎopíng=shang de nǚrén.
 one CL man walk towards lie at lawn=upside REL woman
 'A man walked to the woman who is lying on the lawn.'

As to the other five clips showing simple Path, more than half of the speakers described these clips with one clause, and only some speakers described them with more than one clause. Besides, we observed that these five clips display merely Source-oriented Path and Medium-oriented Path.

Taking the target scene 034 (Path_C_jump_from_stone_run_front) as an example, only the Source information (i.e., from the stone) is emphasized in the scene. Regarding the number of clauses, seven out of twelve speakers used one clause to describe this scene in which only the action 'jump' has been described while the action 'run' has been ignored, as in example (313). Five out of twelve speakers used two clauses by focusing on the two actions 'jump' and 'run' equally, as illustrated in (314). Concerning the information encoded, the speakers conceptualized this scene quite differently. Among the twelve speakers, four of them expressed only the Source information (e.g., (315)), three speakers the Source + Goal information (e.g., (313)),

three others the Source + Medium + Goal information (e.g., (314)),
and two speakers the Source + Medium information (e.g., (316)).¹²²

(313) 小男孩儿从一块岩石上跳到了沙滩上。 (Traj_034_S8)

Xiǎo nánháiér cóng yí kuài yánshí=shang tiào-dao-le
 little boy from one CL rock=upside jump-to-PFV
shātān=shang.
 beach=upside
 'The little boy jumped from a rock to the beach.'

(314) 一个孩子从礁石上跳到沙滩上，然后跑了过来。 (Traj_034_S6)

Yí gè háizi cóng jiāoshí=shang tiào-dao shātān=shang,
 one CL child from stone=upside jump-to beach=upside
ránhòu pǎo-le-guò-lai.
 then run-PFV-cross-hither
 'A child jumped from the stone to the beach and then ran over (towards the
 deictic center).'

(315) 男孩儿从石头上蹦下来。 (Traj_034_S10)

Nánháiér cóng shítou=shang bèng-xia-lai.
 boy from stone=upside jump-down-hither
 'The boy jumped down from the stone (towards the deictic center).'

(316) 小男孩儿从石头上跳下来，奔跑过沙滩。 (Traj_034_S1)

Xiǎo nánháiér cóng shítou=shang tiào-xia-lai, bēnpǎo-guo shātān.
 little boy from stone=upside jump-down-hither run.quickly-over beach
 'The little boy jumped down from the stone (towards the deictic center) and
 ran quickly over the beach.'

Taking another example of the scene 049
 (Path_M_walk_across_path_sideRL) which displays the Medium-
 oriented Path, we found that nine out of twelve speakers used one
 clause, as shown in (317), and only three speakers used two clauses,
 as exemplified in (318). As to the information encoded, four
 speakers described only the Medium (e.g., (317)), as emphasized in
 the schematic description of this scene. However, three speakers
 focused more on the destination of the Figure, and expressed the
 Goal only, as in (319). The five other speakers paid attention to more

¹²² Note that, when the Source + Medium + Goal information is expressed, the
 three speakers described first the Source and the Goal, and then the Medium.

than one portion of the Path when the Figure moves, i.e., the Source + Medium + Goal (e.g., (320)), the Medium + Goal (e.g., (318)), and the Source + Goal (e.g., (321)).

(317) 一个男人穿过林间小路。 (Traj_049_S1)

Yí gè nánrén chuān-guo lín=jiān xiǎolù.
one CL man pass.through-across woods=in.between pathway
'A man crossed the pathway among the woods.'

(318) 一个男人路过一棵树，走进了树丛。 (Traj_049_S6)

Yí gè nánrén lùguò yì kē shù, zǒu-jìn-le shùcóng.
one CL man pass.by one CL tree walk-into-PFV grove
'A man passed a tree and walked into the grove.'

(319) 那个男人走进了丛林。 (Traj_049_S11)

Nà gè nánrén zǒu-jìn-le cónglín.
that CL man walk-into-PFV jungle
'The man went into the jungle.'

(320) 一个男人从一个树丛穿过了小路，走到了另一个树丛里。

(Traj_049_S4)

yí gè nánrén cóng yí gè shùcóng chuān-guo-le xiǎolù,
one CL man from one CL grove pass.through-across-PFV pathway
zǒu-dao-le lìng yí gè shùcóng=li.
walk-to-PFV another one CL grove=inside
'A man past through the pathway from a grove, and walked into another grove.'

(321) 一个男人从小道右边儿走到了左边儿。 (Traj_049_S7)

Yí gè nánrén cóng xiǎodàoyòubiānr zǒu-dao-le zuǒbiānr.
one CL man from path the.right.side walk-to-PFV the.left.side
'A man walked from the right side of the path to the left side.'

Let us now examine the expression of complex Path. It would not be surprising that a video clip showing a complex Path is expressed with more than one clause since it contains more than one portion of Path. However, out of the thirteen video clips showing complex Path, eight were described with one clause exclusively by the twelve speakers. This is the case of the scene 075 (Path_C_jump_from_rock_to_rock_sideRL) which shows a Source-Goal Path described with one clause (e.g., (322)).

(322) 男孩儿从一个石头上跳到另一个石头上。 (Traj_075_S9)

Nánhái'ér cóng yí gè shítou=shang tiào-dào líng yí
 boy from one CL rock=upside jump-to other one
gè shítou=shang.
 CL rock=upside

'The boy jumped from one rock to the other.'

Concerning the five other clips that were not expressed exclusively with one clause, the majority of the speakers used one clause to describe these scenes, with the exception of the scene 024 (Path_F_walk_out_front_take_walk_into_cave_back) that will be discussed later. This scene was described unanimously with more than one clause by the twelve speakers.

We shall look at the case in which speakers used both one and multiple clauses to describe complex Path. Taking the target scene 060 (Path_M_walk_out_cave_pass_walk_into_cave_side) as an example, this scene shows Source-Medium-Goal-oriented Path. Out of twelve speakers, eight used one clause to depict this complex Path event, as illustrated in (323). Four other speakers used two or three clauses, as shown in (324) and (325). As far as the information encoded is concerned, the majority of the speakers (11 out of 12) described two or three portions of Path, as illustrated in (323) and (324) for Source + Goal information, and in (325) for Source + Medium + Goal information. Interestingly, one speaker conceptualized the same scene differently and only depicted the Medium overtly, thus leaving the Source and Goal information implicitly, as in (326).

(323) 这个男人从这个山洞走进了另一个山洞。 (Traj_060_S5)

Zhè gè nánrén cóng zhè gè shāndòng zǒu-jìn-le
 this CL man from this CL cave walk-into-PFV
líng yí gè shāndòng.
 another one CL cave

'The man walked from this cave to another cave.'

(324) 一个男人从山洞中走出来，进入另一个山洞。 (Traj_060_S12)

Yí gè nánrén cóng shāndòng=zhong zǒu-chu-lai,
one CL man from cave=in.the.center.of walk-out-hither
jìnrù líng yí gè shāndòng.
enter another one CL cave

'A man walked out of the cave (towards the deictic center) and entered another cave.'

(325) 一个男人从山洞里走出来，经过一个篮子，又走进了另一个山洞。 (Traj_060_S1)

Yí gè nánrén cóng shāndòng=li zǒu-chu-lai, jīngguò
one CL man from cave=inside walk-out-hither pass.by
yí gè lánzi, yòu zǒu-jìn-le líng yí gè shāndòng.
one CL basket again walk-into-PFV another one CL cave

'A man walked out of the cave, passed a basket, and walked into another cave again.'

(326) 男人穿过石洞。 (Traj_060_S9)

Nánrén chuān-guo shí dòng.
man pass.through-across stone cave

'The man past through the stone cave.'

As mentioned earlier, although multiple clauses produced by the speakers are relatively rare in the *Trajectoire* data, we still found one exception, scene 024 (Path_F_walk_out_front_take_walk_into_cave_back). This scene shows a woman walking out of the cave, taking a basket, and walking back into the cave. To describe this scene, the twelve speakers used either two (e.g., (327)) or three clauses (e.g., (328)).

(327) 一个女士从山洞里出来，将篮子提了进去。 (Traj_024_S2)

Yí gè nǚshì cóng shāndòng=li chū-lai, jiāng lánzi
one CL lady from cave=inside exit-hither OM basket
tí-le-jìn-qu.
lift-PFV-into-thither

'A woman exited the cave (towards the deictic center) and took the basket inside (away from the deictic center).'

(328) 一个女人走出山洞，拿起篮子，又回到了山洞中。

(Traj_024_S12)

Yí gè nǚrén zǒu-chu shāndòng, ná-qi lánzi,
one CL woman walk-out cave, take-up basket,
yòu huí-dao-le shāndòng=zhong.

again return-to-PFV cave=in.the.center.of

'A woman walked out of the cave, picked up the basket, and returned to the cave again.'

Now let us consider caused motion events and examine the *Put & Take* data. The stimulus set *Put & Take* consists of 63 video clips showing people placing things in places and removing them from places. Table 20 shows the number of occurrences produced by the speakers to describe the 63 target scenes with one or more than one clause. We observed that, in general, the majority of the descriptions consist in one clause, accounting for 96.3%. Descriptions with multiple clauses only account for 3.7%. What's more, no speaker describes these scenes using 3 clauses.

N ^o of clause	Descriptions	(N=756)
1 clause	96.3%	(728)
2 clauses	3.7%	(28)
3 clauses	0%	(0)

Table 20. Number of clauses per motion description in the *Put & Take* data

In order to further investigate the number of clauses that speakers used to describe caused motion events, we divided the 63 target scenes of *Put & Take* stimulus set into two groups. One group comprises clips showing simple Path (60 out of 63 scenes, see Appendix 7) and the other one includes clips showing complex Path (3 out of 63 scenes, see Appendix 8).

When considering simple Path and complex Path separately in the *Put & Take* data, we found that just as it was the case with the *Trajectoire* data, although speakers used predominantly one clause to describe the two types of events, the use of multiple clauses to

describe complex Path events is higher than its use to describe simple Path events (16.7% vs. 3.1%), as illustrated in Table 21.

N° of clause	Descriptions of clips showing simple Path (N=720)		Descriptions of clips showing complex Path (N=36)	
	Percentage	Count	Percentage	Count
1 clause	96.9%	(698)	83.3%	(30)
2 clauses	3.1%	(22)	16.7%	(6)

Table 21. Number of clauses per motion description of clips showing simple vs. complex Path in the *Put & Take* data

As far as simple Path events are concerned, fifty out of sixty clips were described with one clause by the twelve speakers. As for the rest of the ten clips, while more than half of the speakers used one clause, only a minority used two clauses.

To illustrate descriptions depicting simple Path events with one clause, we selected among the 50 clips the scene 106 (take box down from shelf) showing Source-oriented Path, and the scene 007 (put book on floor) showing Goal-oriented Path. Both clips were described unanimously with one clause, as exemplified in (329) and (330).

(329) 她把盒子从书架上拿了下来。 (P&T_106_S3)

Tā bǎ hézi cóng shūjià=shang ná-le-xia-lai.
3SG OM box from bookshelf=upside take-PFV-down-hither
'She took the book from the bookshelf (towards the deictic center).'

(330) 一个人把书放在了地上。 (P&T_007_S11)

Yí gè rén bǎ shū fàng zài le dì=shang
one CL person OM book put at PFV floor=upside
'A person put the book on the floor.'

Among the 10 clips depicted either with one or two clauses, we selected two scenes: the scene 131 (take saucer off cup) showing Source-oriented Path, and the scene 002 (put plastic cup on table with mouth) showing Goal-oriented Path. Regarding the scene 131

(take saucer off cup), most of the speakers (9 out of 12) focused on the action 'take' and described only the Source of motion (i.e., off the cup), as in example (331). By contrast, a few speakers (3 out of 12) also paid attention to the Goal of motion (i.e., the table) once the saucer was taken off, and expressed the action 'put' too. In such a case, speakers explicitly expressed both the Source and the Goal, as illustrated in (332). Concerning the scene 002 (put plastic cup on table with mouth), nearly all the speakers (11 out of 12) used one clause and only one speaker used two clauses. What is interesting about the descriptions with one clause is that nine speakers described only Goal of motion (i.e., on the table), as in (333), while the two others described both the Source (i.e., inside the mouth) and the Goal (i.e., on the table) of motion, as in (334). The speaker who used two clauses described both the Source and the Goal of motion, as illustrated in (335).

(331) 他把碟子从杯子上拿了下来。 (P&T_131_S9)

Tā bǎ diézi cóng bēizi=shang ná-le-xia-lai.
3SG OM saucer from cup=upside take-PFV-down-hither
'He took the saucer off the cup (towards the deictic center).'

(332) 一个人把茶杯上的茶碟拿下来了，放在了桌子上。 (P&T_131_S7)

Yí gè rén bǎ chábēi=shang de chádié ná-xia-lai le,
one CL person OM teacup=upside GEN saucer take-off-hither CRS
fàng zài le zhuōzi=shang.
put at PFV table=upside
'A person took the saucer off the teacup (towards the deictic center) and put it on the table.'

(333) 这个人用嘴把杯子放到了桌子上。 (P&T_002_S7)

Zhè gè rén yòng zuǐ bǎ bēizi fàng-dào-le zhuōzi=shang.
this CL person with mouth OM cup put-to-PFV table=upside
'The man put the cup on the table with his mouth.'

(334) 一个女的把嘴里叼着的杯子放在桌子上。 (P&T_002_S1)

Yí gè nǚde bǎ zuǐ=li diāo=zhe de bēizi
 one CL woman OM mouth=inside hold.in.the.mouth=DUR GEN cup
fàng zài zhuōzi=shang.
 put at table=upside

'A woman put the cup that was held in the mouth to the table.'

(335) 她叼起杯子，把杯子放在了桌子上。 (P&T_002_S9)

Tā diāo-qǐ bēizi, bǎ bēizi fàng zài le zhuōzi=shang.
 3SG hold.in.the.mouth-up cup OM cup put at PFV table=upside

'She picked up the cup, and put it on the table.'

As for complex Path events, all of the three scenes showing complex Path were described with two clauses at least once. However, only a minority of speakers (ranging from one to three) used two clauses to describe each scene. Let us take the scene 050 (take bag of corn from table and move to chair) as an example. Regarding the number of clauses, unlike the schematic description given in English, which contains two clauses, most of the speakers (10 out of 12) used one clause, as in (336), (337), and (339). By contrast, a few speakers (2 out of 12) used two different clauses, as in (338). Concerning the information encoded, nearly all the speakers expressed both the Source (i.e., table) and Goal (i.e., chair) information whereas only one speaker focused on the Goal (e.g., (339)).

In Standard Chinese, the Source information in a caused motion event can generally be expressed in three ways: a satellite (*ná-chu-lai* [take-**out**-hither] 'take out (towards the deictic center)'), a prepositional phrase and a localizer (*cóng shūjià=shang* [from bookshelf=**upside**] 'from the bookshelf') located before the verb, and a modifier (*qiáng=shang de* [wall-upside **GEN**] 'that was on the wall'). We observed that when speakers described complex Path with one clause, the Source information was often expressed by either the combination of a prepositional phrase and a localizer or by a modifier, as illustrated in (336) and (337), respectively. By contrast, when speakers described complex Path with two clauses,



Source is usually expressed by the combination of a prepositional phrase and a localizer, together with a satellite, as in (338).

(336) 这个人把一包糖从桌子上放到了椅子上。 (P&T_050_S8)

Zhè gè rén bǎ yì bāo táng cóng zhuōzi=shang
this CL person OM one CL candy from table=upside
fàng-dao-le yǐzi=shang.
put-to=upside chair=upside

'The person moved a bag of candy from the table to the chair.'

(337) 这个女生把桌子上的糖放在了椅子上。 (P&T_050_S7)

Zhè gè nǚshēng bǎ zhuōzi=shang de táng
this CL girl OM table=upside GEN candy
fàng zài le yǐzi=shang.
put at PFV chair=upside

'The girl put the candy that was on the table to the chair.'

(338) 一个女的把一包糖从桌子上拿起来，放到了椅子上面。

(P&T_050_S1)

Yí gè nǚde bǎ yì bāo táng cóng zhuōzi=shang
one CL woman OM one CL candy from table=upside
ná-qǐ-lai, fàng-dao-le yǐzi=shàngmian.
take-up-hither put-to-PFV chair=upside

'A woman took a bag of candy from the table (towards the deictic center) and put it onto the chair.'

(339) 一个女人将一包糖放在了椅子上。 (P&T_050_S11)

Yí gè nǚrén jiāng yì bāo táng fàng zài le yǐzi=shang.
one CL woman OM one CL candy put at PFV chair=upside

'A woman put a bag of candy onto the chair.'

The analysis of the descriptive data in this section reveals an intricate relationship between syntax (i.e., number of clauses used) and semantics (i.e., information encoded). In both the *Trajectoire* and the *Put & Take* data, we note that speakers of Standard Chinese used predominantly one clause to express clips showing simple Path (over 90%) and complex Path (over 80%). When resorting to multiple clauses, their use in describing complex Path events (over 10%) is relatively higher than in describing simple Path events (under 5%). Moreover, based on how the same target event is



conceptualized, speakers focused on different portion(s) of Path showing an intra-speaker variation. As far as simple Path events are concerned, the majority of the speakers depicted only one portion of Path and a small number of them described two or three portions of Path. Regarding complex Path events, most of the speakers depicted two or three portions of Path and a few of them described only one portion of Path.

4.2.2. Dialogical data: frequent use of imperatives

The analysis of the dialogical data extracted from two TV series (i.e., *Married for Ten Years* and *Loquacious Zhang Damin's Happy Life*) reveals several differences in sentence features with regard to descriptive data. Firstly, although both data sets are speech-based, descriptive data are scene-preset, whereas dialogical data are relatively free in terms of the content regardless of the prewritten script. Secondly, data elicited with visual stimulus sets are context-independent, while data extracted from TV series are context-dependent. At the discourse level, we found that, in dialogical data, some information is not expressed overtly and can be inferred from the context. Lastly, no interaction is involved in descriptive data in which each speaker describes each target scene individually. By contrast, an interaction is established in dialogues when speech exchange happens. Due to these differences, it is not surprising that all the descriptions in data collected with visual stimulus sets are declarative. In TV series data, besides declaratives, there are also a great number of imperatives.

Below we will review some syntactic, semantic, and pragmatic properties of imperatives, and look at how these properties are reflected in Standard Chinese in dialogical data which allow to trigger the use of deictic expressions.

Syntactically, the subject can be absent or present in imperatives. If present, it can either be a pronoun of second person singular / plural (i.e., 你 *nǐ* '2SG', 您 *nín* '2SG.HON', and 你们 *nǐmen* '2PL') or a pronoun of first person plural (i.e., 我们 *wǒmen* '1PL', and

咱们 *zánmen* '1PL.INCL').¹²³ In dialogical data, the imperative without subject is illustrated in (340), the imperatives with different subjects mentioned above are exemplified in (341)-(345). Examples (340) and (343) are two instances which illustrate respectively imperatives without subject and imperatives with subject in dialogical data.

(340) 来! (MFTY_2_1509)

Lái!
come
'Come!'

(341) 你回来! (LZHL_1_1509)

Nǐ huí-lái!
2SG return-hither
'Come back!'

(342) 您回去吧! (LZHL_3_1636)

Nín huí-qu ba!
2SG.HON return-thither SUG
'Go back!'

(343) 你们俩赶紧上去吧! (MFTY_8_2057)

Nǐmen liǎ gǎnjǐn shàng-qu ba!
2PL two immediately ascend-thither SUG
'(You two), go up immediately!'

(344) 我们俩一块儿去吧! (MFTY_8_3520)

Wǒmen liǎ yíkuàir qù ba!
1PL two together go SUG
'Let's go together!'

(345) 咱们俩回屋去吧! (MFTY_6_0355)

Zánmen liǎ huí-wū-qu ba!
1PL.INCL two return-room-thither SUG
'Let's go back to the room!'

To soften a command, one the following verbs, 请 *qǐng* 'please', 麻烦 *máfan* 'to trouble', and 劳驾 *láojià* 'trouble you' is often used

¹²³ We gloss 我们 *women* as '1PL' instead of '1PL.EXCL' since in Standard Chinese the difference between inclusive and exclusive forms of the first person plural pronoun is not strictly observed.

at the beginning of the sentence (C. N. Li & Thompson 1981: 453; see also Guo & Shen 2015 cited from Ramsey 1987). In dialogical data, we only find instances of 请 *qǐng* 'please' and 麻烦 *máfan* 'to trouble', as shown in (346) and (347). Li & Thompson (1981: 453-454) further point out that, among the three verbs, 请 *qǐng* 'please' is the most commonly used without any constraint on its usage in a command. In contrast, the uses of 麻烦 *máfan* 'to trouble', and 劳驾 *láojià* 'trouble you' are more constraint than 请 *qǐng* 'please' since they are typically used to soften a command requesting the addressee to do something that benefits someone other than the addressee himself/herself.

(346) 请进! (MFTY_1_4103)
Qǐng jìn!
 please enter
 'Come in please!'

(347) 麻烦你帮你嫂子把这凳子拿回去! (LZHL_5_1918)
Máfan nǐ bāng nǐ sāozi bǎ zhè dèngzi ná-hui-qu!
 trouble 2SG help 2SG sister-in-law OM this stool take-back-thither
 'Please help your sister-in-law take this stool back (away from the deictic center)!'

Imperatives can be further divided into affirmative and negative imperatives. Apart from the above three verbs, some auxiliary verbs, such as 应该 *yīnggāi* 'should', 必须 *bìxū* 'must', and the expression 给我 *gěi wǒ* 'for me' can also occur in affirmative imperatives in Standard Chinese (Guo & Shen 2015), as illustrated in (348)-(350).¹²⁴

(348) 你就应该找他去呀! (MFTY_10_4011)
Nǐ jiù yīnggāi zhǎo tā=qu ya!
 2SG at.once should find 3SG=GO&DO PRT
 'You should go and find him immediately.'

¹²⁴ Although we gloss the preposition 给 *gěi* as 'for' in the expression 给我 *gěi wǒ* 'for me'. In the imperative sentence, this preposition followed by 我 *wǒ* 1SG is used only for emphasis. (Oxford English-Chinese, Chinese-English Dictionary 2010: 247).

(349) 必须去！ (MFTY_1_3814)

Bìxū qù!
must go
'(You) must go!'

(350) 你给我出去！ (LZHL_5_3342)

Nǐ gěi wǒ chū-qu!
2SG BEN me exit-thither
'Get out (away from the deictic center)!'

Negative imperatives are always marked by negation markers. The most common one is 别 *bié* 'PROH' / 'do not', as instantiated in (351). According to Guo & Shen (2015), negative imperatives can also be expressed with such expressions as 不要 *búyào* 'don't', 不用 *búyòng* 'need not', 不必 *búbì* 'not necessarily', 不许 *bùxǔ* 'not allowed', and 不能 *bùnéng* 'cannot'. However, very few sentences in the dialogical data used the above expressions. Instead, another negative imperative marker 甭 *béng* 'needn't, a contracted form of 不用 *búyòng* 'need not' in certain norther Mandarin dialects was used for several times, especially in data of *Loquacious Zhang Damin's Happy Life*, a TV series based on Beijing Mandarin, as illustrated in (352).

(351) 别过去！ (LZHL_2_3707)

Bié guò-qu!
PROH corss-thither
'Don't go over (there)!'

(352) 妈，您甭管！您回去！ (LZHL_5_3528)

Mā, nín béng guǎn! Nín huí-qu!
mum 2SG.HON needn't be.concerned 2SG.HON return-thither
'Mum, you needn't to be concerned! Go back!'

Semantically, imperatives are used to express commands, suggestions, requests, prohibitions, and dissuasions, as suggested by Guo & Shen (2015). These five different meanings are exemplified in (353)-(357).

(353) 你给我出来! (MFTY_5_1641)

Nǐ gěi wǒ chū-lai!
2SG BEN 1SG exit-hither
'Get out (towards the deictic center)!'

(354) 咱们出去吃吧! (LZHL_10_3021)

Zánmen chū-qu chī ba!
1PL.INCL exit-thither eat SUG
'Let's go out to eat (away from the deictic center)!'

(355) 请明天中午以前到我公司来一趟! (MFTY_10_1510)

Qǐng míngtiān zhōngwǔ yǐqián dào-wǒ-gōngsī-lai
please tomorrow noon before arrive-1SG-company-hither
yí tàng!
one come.and.go.back
'Please come (for a while) to my company tomorrow before noon (towards deictic center)!'

(356) 您明天不能搬到这儿来! (MFTY_1_3637)

Nín míngtiān bù néng bān-dao-zhèr-lai!
2SG.HON tomorrow NEG can move-to-here-hither
'You can't move to here tomorrow (towards deictic center)!'

(357) 别走啊! (LZHL_8_2039)

Bié zǒu a!
PROH leave PRT
'Don't leave!'

Pragmatically, depending on the context, the imperatives can be expressed with the help of the following sentence final particles 吧 *ba*, 啊 *a*, and 呢 *ne*. As pointed out in Guo & Shen (2015): "Different types of imperatives reveal different shades of information about the relationship between the speaker and the addressee, as well as the attitudes and status of the two parties". Imperatives that convey suggestions, requests, and dissuasions tend to use the three above sentence final particles. In contrast, commands and prohibitions lack such particles.

Comparing the two examples (358) and (359), both indicate that the speaker asks the addressee to go out. Imagine that the two person are of equal status and there is a quarrel between them. If

the speaker is very angry, he probably says to the other person as in (358). If the speaker is very calm, he is likely to say to the other one as in (359). However, if the relationship between the two persons is child and parent, it would be inappropriate and impolite that a son says to his father as in (358) no matter how angry the child is.

(358) 你出去! (Guo & Shen 2015)

Nǐ chū-qu!
2SG exit-thither
'Go out!'

(359) 你出去吧! (ibid.)

Nǐ chū-qu ba!
2SG exit-thither SUG
'Why don't' you go out (I suggest)?'

Based on their syntactic, semantic and pragmatic properties, we distinguish imperative clauses (IMP) from other sentence types (non-imperatives (NON-IMP) in dialogical data. As illustrated Table 22, imperatives are used very frequently in both TV series data which account for as high as 41% and 46.6% in *MFTY* data and *LZHL* data, respectively.

TV series	IMP		NON-IMP	
<i>MFTY</i> data (N=1046)	41%	(429)	59%	(617)
<i>LZHL</i> data (N=894)	46.6%	(417)	53.4%	(477)

Table 22. The distribution of sentence types in the dialogical data

4.3. Coding strategies of Path in the data

As previously stated, by virtue of the morphosyntactic devices to which the expression of Path is allocated, Standard Chinese has been classified as a satellite-framed language (by means of satellites) (Talmy 2000), an equipollently-framed language (using serial verbs) (Slobin 2004; Chen & Guo 2009), a language using both verb-



framed and satellite-framed lexicalization patterns (Lamarre 2003b; Chu 2004), and a language showing symmetric constructions (Croft et al. 2010). However, due to the complexity of the Standard Chinese system and the language in use in different types of data, the above classifications are far from being satisfactory.

In this and the following section, based on Wälchli's (2001) typology of spatial encoding, i.e., verbal, adverbial, and adnominal, we examine the coding strategies used to express Path and Dynamic Deixis, respectively, in both the descriptive and the dialogical data. We note that in Wälchli's (2001) typology, the author only discusses the case in which Path is encoded predominantly in one single type, and that he doesn't explain the reason why one type is predominant than the other(s) when two or three types are involved in a clause. Therefore, to analyze the Standard Chinese data, following Lamarre (2008a), we consider cases as verbal encoding when Path or Dynamic Deixis is only encoded in verbs, as adverbial encoding when it is encoded in satellites (i.e., directional complements, associated motion markers), and as adnominal encoding when it is encoded in prepositional phrases and localizers (or relational nouns, cf. Chapter 2, §2.2.2 and §2.3.3). In previous research, the topic of different strategies combining in a clause has not been much discussed (i.e., two or three morphosyntactic devices belonging to different word classes involved within one clause); in this work, we consider such cases as a combination of different encodings (i.e., adnominal + adverbial encoding, adnominal + verbal encoding, verbal + adverbial encoding, and adnominal + verbal + adverbial encoding).

Let us now look at the encoding of Path. In order to figure out which coding strategy is used, it is important to examine the semantics of verbs and see whether they lexicalize Path or leave this information to be expressed by other morphosyntactic devices. In the Standard Chinese data under analysis, verbs tend to express only Path information, only Manner information, or only Cause

information.¹²⁵ Besides, some of them also lexicalize both Path and Dynamic Deixis. On the basis of the semantic distinctions that the verbs in the Standard Chinese make, we divide them into three general types: verbs lexicalizing Path (or Path + Dynamic Deixis), verbs lexicalizing Manner, and verbs lexicalizing Cause, as schematized in Figure 17.

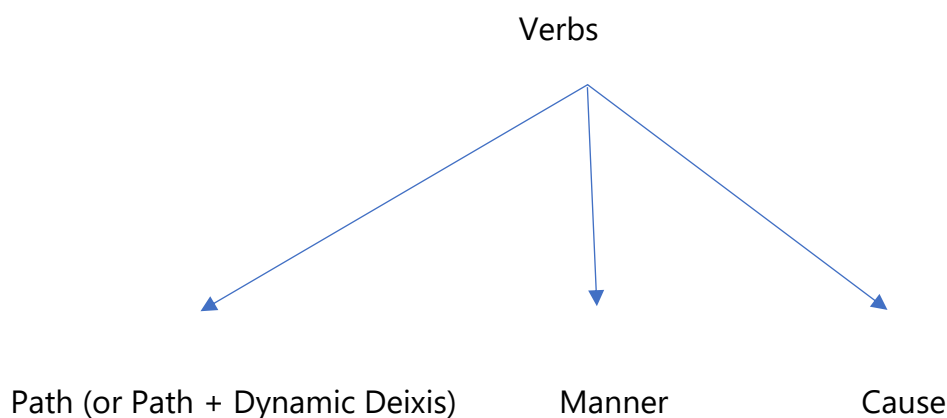


Figure 17. Different semantics lexicalized in verbs in the Standard Chinese data

In the following paragraphs, we discuss the semantic distinctions among Path (Path + Dynamic Deixis) verbs, Manner verbs, and Cause verbs. We first define them based on previous literature. Then we provide the main criteria upon which Path (Path + Dynamic Deixis), Manner, and Cause verbs are identified by taking into consideration language-specific features of Standard Chinese.

Path (or Path + Dynamic Deixis) verbs

Let us first look at how Path (or Path verbs) is defined in previous studies.

For Talmy (1985: 129), Path refers to “the variety of paths followed, or site occupied, by the Figure objet”. It comprises three

¹²⁵ It is important to note that the ‘verbs’ we discuss here do not refer to compound verbs, but rather to ‘main verbs’ as opposed to ‘satellites’.



main components, the Vector, the Conformation, and the Deictic, together with the Contour and the Direction.

According to Levin (1993: 264), Path verbs have the following characteristics.¹²⁶

The meaning of these verbs includes a specification of the direction of motion, even in the absence of an overt directional complement. For some verbs this specification is in deictic terms; for others it is in nondeictic terms. None of these verbs specify the manner of motion. However, the members of this class do not behave uniformly in all respects. They differ as to how they can express the goal, source, or path of motion; depending on the verb, they may be expressed via a prepositional phrase, as a direct object, or both.

Wälchli (2001: 298) considers Path as an 'outer' motion which is concerned with how somebody or something changes its location in space, notably with respect to a given local point of reference (e.g., *enter, quit, descend, and pass*).

Within the TRAJECTOIRE project, Path is considered as a complex notion. According to Grinevald (2011: 55), Path is construed as "a mental calculation by a speaker of a particular spatial relation between several spatial entities". More specifically, it involves the notion of a vector, "consisting of a line in space that is continuous, delimited by two points and oriented between those points. [...] This continuous line is conceived in relation to several grounds, which delimit a vector at both ends with end points (*source X, goal Y*) and allow for points in between (*median Z*)".

Based on the above definitions of Path, we adopt the following features as the main criteria to identify Path verbs in Standard Chinese data.

¹²⁶ What we call 'Path verbs' correspond to what Levin (1993: 263) labels 'Verbs of Inherently Directed Motion'.



- Path verbs entail a change of location;¹²⁷
- Path verbs usually indicate direction;
- Path verbs express outer motion;
- Path verbs often interact with the Ground.

In the definitions above, some linguists consider that deictic verbs can also express Path. We agree with this statement. However, due to the distinct features of Dynamic Deixis (cf. Chapter 1, §1.4), we treat Path verbs that do not convey deictic information (i.e., Path verbs) and Path verbs that convey deictic information (i.e., Path + Dynamic Deixis verbs) separately (see also Zlatev & Yangklang 2004: 163-164 who label these two types of verbs (Non-deictic) Path verbs and Deictic-Path verbs when treating verbs in Thai). In the Standard Chinese data, we found the following Path verbs including, but not limited to, 进 *jìn* 'enter', 出 *chū* 'exit', 回 *huí* 'return', 过 *guò* 'cross', 上 *shàng* 'ascend', and 下 *xià* 'descend', etc. (see Table 23, Table 35, and Table 36 for a full list of Path verbs in the descriptive and the dialogical data). As illustrated in the two examples given below, Path verbs in Standard Chinese can either take a Ground NP as their argument (e.g., (360)), or can be followed by a satellite (e.g., (361)).

(360) 一个小男孩儿进了山洞。 (Traj_058_S2)

<i>Yí</i>	<i>gè</i>	<i>xiǎo</i>	<i>nánhái</i>	<i>jìn-le</i>	<i>shāndòng.</i>
one	CL	young	boy	enter-PFV	cave

'A little boy entered the cave.'

(361) 他出去了。 (LZHL_6_0230)

<i>Tā</i>	<i>chū-qu</i>	<i>le.</i>
3SG	exit-thither	CRS

'He went out.'

Concerning Path + Dynamic Deixis verbs, we consider verbs that convey both Path and Dynamic Deixis information belonging to this category. This concerns 来 *lái* 'come' and 去 *qù* 'go' in the Standard Chinese data. What we call 'Path + Dynamic Deixis verbs'

¹²⁷ We do not consider posture verbs (e.g., 'sit', 'stand') which change their position as Path verbs since the motion of the Figure in such cases does not imply any change of location (cf. Borillo 1998: 38).

correspond to 'Deictic-Path verbs' labeled by Zlatev & Yangklang (2004: 165). The authors claim that, in Thai, the Path expressed by *paj* 'go' and *maa* 'come' "is oriented not only with respect to the Deictic Center (DC) - 'away from' and 'towards' respectively -, but also with respect to the landmark, when this is expressed by a nominal. In this latter case, the Path expressed is 'allative': the end point of the motion event is the reaching of the landmark". Their statement can also apply to the Standard Chinese data. As illustrated in the two examples below, the Figure moves either towards (e.g., (362)) or away from (e.g., (363)) the deictic center (i.e., the location of the speaker).¹²⁸ The Path information expressed by 来 *lái* 'come' in (362) is only oriented with regard to the deictic center whereas the Path information expressed by 去 *qù* 'go' in (363) is not only oriented with regard to the deictic center but also with respect to the Ground (i.e., 医院 *yīyuàn* 'hospital').

(362) 大方来了。 (MFTY_8_2627)

Dàfāng lái le.
Dafang come CRS
'Dafang came.'

(Context: Lao Wang, the neighbor of Han Meng, told her that the colleague of her husband came to their house.)

(363) 赶紧去医院! (LZHL_8_3431)

Gǎnjǐn qù yīyuàn!
hurriedly go hospital
'Go to the hospital hurriedly!'

(Context: The child of Damin and Yunfang has got a fever at home, Damin said to his wife Yunfang that they need to bring their child to the hospital immediately.)

¹²⁸ According to the context, the speaker's location in example (362) is the family dormitory building where Lao Wang and Han Meng share. In (363), the Figure refers to the whole family including Damin, Yunfang, and their child, and the speaker's (i.e., Damin) location refers to their home.



Manner verbs

Despite the numerous studies carried out on Manner, the concept of Manner remains ill-defined (Stosic 2020: 129). Let us look at how Manner (or Manner verbs) is defined in the literature.

In Talmy's (1985: 128) definition, "Manner refers to a subsidiary action or state that a Patient manifests concurrently with its main action or state".

According to Levin (1993: 264), Manner verbs are defined as follows:

These verbs describe motion that typically, though not necessarily, involves displacement, but none of them specifies an inherent direction as part of its meaning. All of these verbs have meanings that include a notion of manner or means of motion. They differ from each other in terms of the specific manner or means.

In Levin's (1993: 264 - 267) classification, Manner verbs are further divided into two subclasses: *Roll Verbs* and *Run Verbs*. The former relates to "manners of motion that are characteristic of inanimate entities (i.e., where there is not necessarily protagonist control on the part of the moving entity)", whereas the latter usually describes "the manners in which animate entities can move, although some of them may be used to describe the movement of inanimate entities". We understand *Roll Verbs* as those that are usually used for what Talmy calls nonagentive motion and *Run Verbs* for self-agentive motion.

Wälchli (2001: 298) considers Manner as an 'inner' motion describing the kind of activity involved in motion (e.g., *run*, *walk*, *jump*, *fly*, and *swim*).

Furthermore, according to Slobin (2004: 223), Manner "can range from rather general manners, such as *walk*, *run*, and *fly*, to quite specific distinctions, such as *limp*, *sprint*, and *swoop*". He



further (2006: 61) elaborates the notion of Manner as including the following subtypes:

“Manner” is a cover term for a number of dimensions, including motor pattern (e.g., *hop, jump, skip*), often combined with rate of motion (e.g., *walk, run, sprint*) or force dynamics (e.g., *step, tread, tramp*) or attitude (e.g., *amble, saunter, stroll*), and sometimes encoding instrument (e.g., *sled, ski, skateboard*), and so forth.

In Kopecka’s (2010: 230) study, Manner refers to “the feature characterizing *how* the Figure moves as opposed to the feature characterizing *where* the Figure moves to or from”.

In a recent study, Stosic (2019: 152) proposes the following definition:

Manner is a complex semantic value, incidental by nature to some substrate element that is processed by various lexical, syntactic, morphological, grammatical and prosodic means and strategies. This processing results in diversifying the substrate by specific qualitative features, and thereby in characterizing/modulating it. The substrate must belong to one of the following ontological types: actions, states or qualities.

Based on the above definitions of Manner, we consider the following features to constitute basic criteria for identifying Manner verbs in the Standard Chinese data.

- Manner verbs characterize how the Figure moves;
- Manner verbs do not necessarily entail a change of location;
- Manner verbs do not indicate direction;
- Manner verbs express inner motion;
- Manner verbs do not have a tight relation with the Ground.

In this dissertataion, the term ‘Manner verbs’ is used in a very general way. In the Standard Chinese data, we include not only 走 *zǒu* ‘walk’, 跑 *pǎo* ‘run’, and 跳 *tiào* ‘jump’, etc. as Manner verbs, but also posture verbs (i.e., 坐 *zuò* ‘sit’, 躺 *tǎng* ‘lie’, etc.), following

Berthele (2004).¹²⁹ For example, 坐 *zuò* 'sit' in (364) expresses how the Figure moves (i.e., by sitting). Table 24, Table 37, and Table 38 give a full list of Manner verbs in the descriptive and the dialogical data.

(364) 韩梦，你坐上来！ (MFTY_2_2341)
Hán Mèng, nǐ zuò-shang-lai!
 Han Meng 2SG sit-up-hither
 'Hanmeng, sit up (towards the deictic center)!'
 (Context: Cheng Zhang, the husband of Han Meng, who is riding a tricycle, asked his wife to come up to the tricycle by sitting.)

Cause verbs

As far as Cause verbs are concerned, Talmy (2000) does not provide a clear definition. Not many definitions are given on Cause verbs since the expression of caused motion events are relatively less investigated in typological research compared to the expression of spontaneous motion events, in both previous literature in Chinese and other languages in general (Kahane & Mel'čuk 2006; Hamon & Leeman 2007).

No category corresponds to what we label 'Cause verbs' in Levin (1993). Instead, the author has a more fine-grained classification of verbs that convey such meaning. In her classification of English verbs, we can find Verbs of Putting (e.g., *place, put*), Verbs of Removing (e.g., *draw, remove*), Verbs of Sending and Carrying (e.g., *deliver, send*), Verbs of Change of Possession (e.g., *give, sell*), and Verbs of Throwing (e.g., *throw, toss*), etc.

As far as Cause verbs in the expression of caused motion events are concerned, Goldberg's (1995) constructional approach may provide a good reference in this regard. The author observes

¹²⁹ Berthele (2004: 108) point out that "Manner verbs [...] are predominantly posture verbs (e.g., *sit, stand, lie, hang*; cf. Newman 2002), i.e. verbs which encode configurational information about the dimensions and the vertical or horizontal orientation of the figure".



that some verbs in isolation do not inherently encode caused motion, for example, *kick* and *hit* in (365) and (366). However, when these verbs are used in the caused-motion construction, a causal interpretation is implied, as shown in (367) and (368).

(365) *Joe kicked the wall.* (Goldberg 1995: 153)

(366) *Joe hit the table.* (ibid.)

(367) *Joe kicked the dog into the bathroom.* (ibid.)
(→ He caused the dog to move into the bathroom)

(368) *Joe hit the ball across the field.* (ibid.)
(→ He caused the ball to move across the field)

In Standard Chinese, we can find similar examples. Verbs used to express caused motion events are not necessarily Cause verbs. Some of the verbs which do not encode caused motion *per se* can also occupy the Co-event verb slot and express a sort of Cause in a direct or indirect way. In (369), the verb 踢 *tī* 'kick' in itself does not convey the meaning of caused motion, while when it combines with the satellite 进 *-jin* 'into' forming a caused-motion construction, such construction does entail a causal interpretation as follows 'someone caused the ball to move into the goal by kicking'.

(369) 把球) 踢进门。 (Hóu, Xú, Zhāng, & Càì 2001: 447; cited in Lamarre 2003b: 5)
(*Bǎ qiú) tī-jìn mén.*
OM ball kick-into goal
'Kick the ball into the goal.'

In this dissertation, the term 'Cause' is used in a very broad sense. We consider verbs that can express the Agent causing the Figure to change location, either because of verbal semantics *per se*, such as 推 *tuī* 'push', 扔 *rēng* 'throw', 搬 *bān* 'displace', etc., as exemplified in (370), or when they combine with Path satellites, like 买 *mǎi* 'buy', 叫 *jiào* 'call', 弄 *nòng* 'make, do, get', etc., as shown in (371), as Cause verbs.¹³⁰

¹³⁰ Tang & Lamarre (2007: 139) observe that some verbs like 买 *mǎi* 'buy' and 叫 *jiào* 'call' which do not express motion *per se* combine frequently with Path satellite, as in 叫来 *jiào-lai* [call-hither] 'to have someone come here by calling'

(370) 一个男生将车子旁边的行李推到了树旁边。 (P&T_052_S6)

Yí gè nánshēng jiāng chēzi=pángbian de xínglǐxiāng
one CL boy OM car=beside GEN suitcase
tuī-dao-le shù-pángbian.
push-to-PFV tree-beside

'A boy pushed the suitcase beside the car to the side of the tree.'

(371) 我把酱油买回来了。 (MFTY_3_4000)

Wǒ bǎ jiàngyóu mǎi-hui-lai le.
1SG OM soy.sauce buy-back-hither CRS

'I bought the soy sauce (back towards the deictic center).'

Apart from Manner verbs and Cause verbs, there are some verbs which seem to lexicalize both Manner and Path and both Cause and Path. Zlatev & Yangklang (2004: 167) observed that there exist a number of verbs which "take an intermediate position between 'pure' Manner verbs (which could be locative, at least in some contexts, e.g., *he walked for hours on the readmill*) and Path verbs proper such as *enter* and *exit*, since they seem to conflate Manner (in the broad sense of the term) and Path. Hence an appropriate label for these verbs would be Manner + Path verbs, or 'MP verbs' for short". They gave the following examples in Thai, like *phloo1* 'pop out', *mut3* 'crawl under', etc. Similarly, we also noticed that in Standard Chinese, there are also a small number of Cause verbs which seem to include a sort of Path meaning to form Cause + Path verbs, such as, 拔 *bá* 'pull out', 放 *fàng* 'put', etc. These verbs can not usually combine with Path satellites showing opposite directions. This is the case for the Source-oriented verb 拔 *bá* 'pull out' (e.g., (372)) and the Goal-oriented verb 放 *fàng* 'put' (e.g., (373)). One can only say 拔出来 *bá-chu-lai* [pull.out-out-hither] 'pull out (towards the deictic center)' and 放进去 *fàng-jin-qu* [put-into-hither] 'put into (away from the deictic center)', but not 拔进来 *bá-jin-lai* [pull.out-into-hither] and 放出去 *fàng-chu-qu* [put-out-hither] since the combination of the verb and the satellite entails a contradictory meaning, as attested from the Standard Chinese data

him/her'. However, the authors didn't discuss the semantics of such verb-satellite constructions.

under analysis and an online corpus including (i.e., 北京语言大学语料库中心 *Běijīng yǔyán dàxué yǔliàokù zhōngxīn* 'Beijing Language and Culture University Corpus Center', abbreviated by BCC, <http://bcc.blcu.edu.cn/>) which allow us to double-check the combination between the verbs and satellites.¹³¹ In this dissertation, we chose to simplify our classification and put verbs which lexicalize both Manner and Path or both Cause and Path to the categories of either Manner or Cause since they take the Co-event slot.

(372) 一个女人将蜡烛从烛台上拔了出来。 (P&T_114_S11)
Yí gè nǚrén jiāng làzhú cóng zhútái=shang bá-le-chu-lai.
 one CL woman OM candle from candlestick=upside pull.out-out-hither
 'A woman took a candle out of the candlestick (towards the deictic center).'

(373) 一个人把苹果放进了木碗里。 (P&T_011_S7)
Yí gè rén bǎ píngguǒ fàng-jìn le mù wǎn=li.
 one CL person OM apple put-into PFV wood bowl=inside
 'A person put the apple into the wooden bowl.'

4.3.1. Coding strategies of Path in the descriptive data

In this section, we present the coding strategies of Path found in the descriptive data, i.e., the *Trajectoire* and the *Put & Take* data. In order to know which coding strategy is used, let us first present the semantics of the verbs that occur in these data (based on the criteria given above) and see what type of information is lexicalized in the verbs.¹³² Note that although some verbs might be polysemous, we only account here for their uses found in the corpora. For example, the verb 爬 *pá* in Standard Chinese can convey the meaning of 'climb' and 'crawl'. According to the context, 爬 *pá* in the data under analysis only means 'climb' (e.g., (374)). Thus we keep the meaning of 'climb' and disregard 'crawl' in the tables.

¹³¹ In Standard Chinese, 放 *fàng* can also mean 'release'. With this meaning, one can say 放出去 *fàng-chū-qu* [release-out-thither] 'release (someone) out of (somewhere)'. Such use is excluded in our analysis. The BCC Chinese corpus, with a total of about 9.5 billion characters, includes different data types, such as newspapers, literature, and dialogue, etc.

¹³² The use of each verb is provided by an example in Appendixes B.



This principle is applied for all the verbs found in the Standard Chinese data discussed in the present dissertation.

(374) 穿着蓝色上衣的女孩儿爬上了台阶。 (Traj_071_S5)

Chuān-zhe lán-sè shàng-yī de nǚ-háir pá-shang-le táijiē.
wear-DUR blue jacket GEN girl climb-up-PFV step
'The girl in the blue jacket climbed up the steps.'

In the descriptive data, verbs lexicalizing Path are only found in the *Trajectoire* data that exclusively comprise clauses expressing spontaneous motion events. As shown in Table 23, the *Trajectoire* data reveal the use of 10 verbs lexicalizing Path.

#	Chinese character	Pinyin	Meaning	N=44	Semantics	Compound verbs [verb + satellite(s)]
1	穿	<i>chuān</i>	pass through	12	Path	<i>chuān-guo-(lai/qu)</i> 'cross' ¹³³ <i>chuān-chu-lai</i> 'cross out of'
2	出	<i>chū</i>	exit	10	Path	<i>chū-lai</i> 'exit'
3	进	<i>jìn</i>	enter	6	Path	<i>jìn-qu</i> 'enter'
4	回	<i>huí</i>	return	4	Path	<i>huí-dao</i> 'return to' <i>huí-qu</i> 'return'
5	进入	<i>jìnrù</i>	enter	4	Path	-
6	上	<i>shàng</i>	ascend	3	Path	<i>shàng-dao</i> 'ascend to'
7	经过	<i>jīngguò</i>	pass by	2	Path	-
8	路过	<i>lùguò</i>	pass by	1	Path	-
9	下	<i>xià</i>	descend	1	Path	-
10	越	<i>yuè</i>	overstep	1	Path	<i>yuè-guo</i> 'cross'

Table 23. Verbs expressing Path in the *Trajectoire* data¹³⁴

¹³³ Due to the lack of space in the column, we won't provide the translation 'towards/away from the deictic center' for each compound verb containing the deictic satellites *-lai* 'hither' and *-qu* 'thither'.

¹³⁴ The four verbs 进入 *jìnrù* 'enter', 经过 *jīngguò* 'pass by', 路过 *lùguò* 'pass by', and 下 *xià* 'descend' take the Ground NP as their argument.



In the *Trajectoire* data, apart from Path verbs which only account for 44 occurrences, Path information is also found to be expressed by either satellites (leaving the Co-event verb slots to express Manner information) or prepositional phrases and localizers. Since all the Figures are animate entities, only self-agentive motion is involved.

Let us look at verbs that convey other information than Path, Manner in the expression of spontaneous motion in the *Trajectoire* data and Cause in the expression of caused motion in the *Put & Take* data. As illustrated in Table 24 and Table 25, respectively, we found 9 verbs expressing the Manner performed by the Figure and 56 verbs expressing the action causing the Figure to move (the Cause).

#	Chinese character	Pinyin	Meaning	N=628	Semantics	Compound verbs [verb + satellite(s)]
1	走	<i>zǒu</i>	walk	466	Manner	<i>zǒu-guo-(lai/qu)</i> 'walk past' <i>zǒu-chu-(lai/qu)</i> 'walk out' <i>zǒu-jin-(qu)</i> 'walk into' <i>zǒu-shang-(lai/qu)</i> 'walk up' <i>zǒu-lai/qu</i> 'walk' <i>zǒu-xia-(lai/qu)</i> 'walk down' <i>zǒu-ru</i> 'walk into' <i>zǒu-hui-(qu)</i> 'walk back'
2	跑	<i>pǎo</i>	run	76	Manner	<i>pǎo-guo-(lai/qu)</i> 'run past' <i>pǎo-shang-(lai)</i> 'run up' <i>pǎo-dao</i> 'run to' <i>pǎo-kai</i> 'run away' <i>pǎo-chu-lai</i> 'run out' <i>pǎo-lai</i> 'run' <i>pǎo-jin</i> 'run into'
3	跳	<i>tiào</i>	jump	54	Manner	<i>tiào-dao</i> 'jump to' <i>tiào-guo-(qu)</i> 'jump over' <i>tiào-shang</i> 'jump up' <i>tiào-xia-(lai)</i> 'jump down' <i>tiào-ru</i> 'jump into' <i>tiào-jin</i> 'jump into'
4	跨	<i>kuà</i>	step	12	Manner	<i>kuà-guo-(qu)</i> 'step over'
5	蹦	<i>bèng</i>	jump	7	Manner	<i>bèng-xia-lai</i> 'jump down' <i>bèng-dao</i> 'jump to' <i>bèng-shang-(qu)</i> 'jump up'
6	钻	<i>zuān</i>	sneak	6	Manner	<i>zuān-chu-lai</i> 'sneak out' <i>zuān-jin</i> 'sneak into' <i>zuān-dao</i> NPloc 'sneak to'

7	奔跑	<i>bēnpǎo</i>	run quickly	5	Manner	<i>bēnpǎo-guo-(lái)</i> 'run quickly over' <i>bēnpǎo-jin</i> 'run into' <i>bēnpǎo-shang-lái</i> 'run up'
8	迈	<i>mài</i>	stride	1	Manner	<i>mài-guo</i> 'stride over'
9	爬	<i>pá</i>	climb	1	Manner	<i>pá-shang</i> 'climb up'

Table 24. Verbs expressing Manner in the *Trajectoire* data

#	Chinese character	Pinyin	Meaning	N=	Semantics	Compound verbs [verb+satellite(s)]
				736		
1	放	<i>fàng</i>	put	202	Cause	<i>fàng-dao</i> 'put to' <i>fàng-jìn</i> 'put into' <i>fàng-hui</i> 'put back' <i>fàng-ru</i> 'put into'
2	拿	<i>ná</i>	hold, take	136	Cause	<i>ná-chu-(lái)</i> 'take out' <i>ná-xia-(lái/qu)</i> 'take off' <i>ná-qì-(lái)</i> 'take off/from' <i>ná-zou</i> 'take away' <i>ná-dao</i> 'take to' <i>ná-guo-qu</i> 'take over' <i>ná-lai</i> 'take'
3	倒	<i>dào</i>	pour	37	Cause	<i>dào-chu-(lái/qu)</i> 'pour out' <i>dào-jìn</i> 'pour into' <i>dào-dao</i> 'pour to'
4	扔	<i>rēng</i>	throw	26	Cause	<i>rēng-dao</i> 'throw to' <i>rēng-jìn</i> 'throw into'
5	插	<i>chā</i>	insert	22	Cause	<i>chā-dao</i> 'insert to' <i>chā-jìn</i> 'insert into'
6	脱	<i>tuō</i>	take off; doff	21	Cause	<i>tuō-xia-(lái)</i> 'take off' <i>tuō-diào</i> 'take off'
7	穿	<i>chuān</i>	put on; wear	20	Cause	<i>chuān-shang</i> 'put on'
8	伸	<i>shēn</i>	extend, stretch	20	Cause	<i>shēn-jìn</i> 'stretch into' <i>shēn-chu</i> 'stretch out' <i>shēn-dao</i> 'stretch to'



9	掏	<i>tāo</i>	fish out	19	Cause	<i>tāo-chu-(lai)</i> 'fish out' <i>qǔ-xia-(lai)</i> 'take off'
10	取	<i>qǔ</i>	take, fetch	16	Cause	<i>qǔ-chu-(lai)</i> 'take out' <i>qǔ-zou</i> 'take away'
11	夹	<i>jiā</i>	press from both sides	15	Cause	<i>jiā-qi-(lai)</i> 'press from both sides up' <i>jiā-dao</i> 'press from both sides to' <i>jiā-hui</i> 'press from both sides back'
12	摘	<i>zhāi</i>	pluck, take off	13	Cause	<i>zhāi-xia-(lai)</i> 'take off'
13	递	<i>dì</i>	give	12	Cause	<i>dì-dao</i> 'give to'
14	拔	<i>bá</i>	pull out	11	Cause	<i>bá-chu-lai</i> 'pull out' <i>bá-xia-lai</i> 'pull down' <i>bá-diao</i> 'pull off'
15	捡	<i>jiǎn</i>	gather, pick up	11	Cause	<i>jiǎn-qi-(lai)</i> 'pick up from' <i>jiǎn-chu-lai</i> 'take out'
16	贴	<i>tīe</i>	paste	11	Cause	<i>tīe-dao</i> 'paste to'
17	叼	<i>diāo</i>	hold in the mouth	10	Cause	<i>diāo-qi-(lai)</i> 'hold in the mouth up' <i>diāo-hui</i> 'hold in the mouth back' <i>diāo-zou</i> 'hold in the mouth away'
18	抱	<i>bào</i>	hold in the arms	9	Cause	<i>bào-qi-(lai)</i> 'carry in the arms up' <i>bào-zou</i> 'carry in the arms away'
19	戴	<i>dài</i>	put on, wear	9	Cause	<i>dài-shang</i> 'put on'
20	推	<i>tuī</i>	push	9	Cause	<i>tuī-dao</i> 'push to' <i>tuī-zou</i> 'push away'
21	塞	<i>sāi</i>	stuff	8	Cause	<i>sāi-jìn</i> 'stuff into' <i>sāi-zhù</i> 'stuff' <i>sāi-hui</i> 'stuff back'

22	踢	<i>tī</i>	kick	8	Cause	<i>tī-dǎo</i> 'kick over' <i>tī-fān</i> 'kick over'
23	拎	<i>līn</i>	carry in one's hand	7	Cause	<i>līn-qì-(lái)</i> 'carry in one's hand up' <i>līn-zou</i> 'carry in one's hand away'
24	抽	<i>chōu</i>	draw	6	Cause	<i>chōu-chū-(lái)</i> 'draw out' <i>chōu-huì-lái</i> 'draw back'
25	提	<i>tí</i>	lift, carry in one's hand	6	Cause	<i>tí-qì-(lái)</i> 'lift up' <i>tí-dào</i> 'lift to' <i>tí-chū-lái</i> 'lift out'
26	抓	<i>zhuā</i>	grab	6	Cause	<i>zhuā-qì-(lái)</i> 'grab up'
27	装	<i>zhuāng</i>	fill	6	Cause	<i>zhuāng-jìn</i> 'fill into' <i>zhuāng-dào</i> 'fill to'
28	搬	<i>bān</i>	move, displace	5	Cause	<i>bān-zou</i> 'move away' <i>bān-chū-lái</i> 'move out' <i>bān-dào</i> 'move to' <i>bān-jìn</i> 'move into'
29	挂	<i>guà</i>	hang (up)	5	Cause	<i>guà-dào</i> 'hang up to'
30	挪	<i>nuó</i>	shift	5	Cause	<i>nuó-dào</i> 'shift to' <i>nuó-zou</i> 'shift away'
31	撕	<i>sī</i>	tear	5	Cause	<i>sī-xià-(lái)</i> 'tear off'
32	丢	<i>diū</i>	throw	4	Cause	<i>diū-jìn</i> 'throw into'
33	别	<i>bié</i>	clip, pin	3	Cause	-
34	堵	<i>dǔ</i>	block	3	Cause	<i>dǔ-shàng</i> 'block up'
35	碰	<i>pèng</i>	knock (against)	3	Cause	<i>pèng-dǎo</i> 'knock over'
36	洒	<i>sǎ</i>	scatter, spill	3	Cause	<i>sǎ-chū-lái</i> 'spill out' <i>sǎ-dào</i> 'spill to'

37	揭	<i>jiē</i>	tear off	2	Cause	<i>jiē-xia-lai</i> 'tear off'
38	撒	<i>sǎ</i>	scatter, spill	2	Cause	-
39	移	<i>yí</i>	move	2	Cause	<i>yí-dao</i> 'move to' <i>yí-kāi</i> 'move away'
40	扎	<i>zhā</i>	get into	2	Cause	<i>zhā-dao</i> 'get to' <i>zhā-jin</i> 'get into'
41	摆	<i>bǎi</i>	place	1	Cause	-
42	搭	<i>dā</i>	hang over	1	Cause	-
43	端	<i>duān</i>	hold sth. level with both hands	1	Cause	<i>duān-qi</i> 'hold sth. level with both hands up'
44	盖	<i>gài</i>	cover	1	Cause	<i>gài-zhù</i> 'cover'
45	接	<i>jiē</i>	receive	1	Cause	<i>jiē-guo</i> 'take over'
46	摞	<i>luò</i>	pile up	1	Cause	-
47	埋	<i>mái</i>	bury	1	Cause	<i>mái-rù</i> 'bury into'
48	弄	<i>nòng</i>	make, do	1	Cause	<i>nòng-dao</i> 'get sth. to'
49	拾	<i>shí</i>	pick up off the ground	1	Cause	<i>shí-qi-lai</i> 'pick up'
50	送	<i>sòng</i>	deliver	1	Cause	<i>sòng-dao</i> 'deliver to'
51	探	<i>tàn</i>	stretch forward	1	Cause	<i>tàn-jin</i> 'stretch into'
52	套	<i>tào</i>	cover with	1	Cause	<i>tào-dao</i> 'cover to'
53	衔	<i>xián</i>	hold in the mouth	1	Cause	<i>xián-qi-lai</i> 'hold in the mouth up'
54	粘	<i>zhān</i>	glue	1	Cause	-
55	拽	<i>zhuài</i>	drag	1	Cause	<i>zhuài-chu-lai</i> 'drag out'
56	撞	<i>zhuàng</i>	strike	1	Cause	<i>zhuàng-dǎo</i> 'knock down'

Table 25. Verbs expressing Cause in the *Put & Take* data

Among the 56 verbs, the use of two verbs 洒 *sǎ* 'scatter, spill' and 撒 *sǎ* 'scatter, spill' needs to be clarified here. According to the dictionaries, 现代汉语词典 *Xiàndài Hànyǔ Cídiǎn* 'Modern Chinese dictionary' (2016, 7th edition) and 牛津·外研社英汉汉英词典 *Niújīn Wàiyánshè Yīng-Hàn Hàn-Yīng Cídiǎn Oxford FLTRP English-Chinese Chinese-English Dictionary* (2017), 洒 *sǎ* 'scatter, spill' and 撒 *sǎ* 'scatter, spill' can, like their English counterparts *spill* and *scatter*, have both a causative use (expressing that an Agent causes the Figure, either a solid or liquid substance, to move, as in (375) and (377)) and a non-causative use (expressing that a Figure (a solid/liquid substance) moves by itself, as in (376) and (378) in the second clause of each sentence).¹³⁵ The number of occurrences of the two verbs shown in Table 25 only includes the causative use; the non-causative use in the expression of nonagentive motion is excluded for analysis.

(375) 他把杯子的水洒在了桌子上。 (P&T_021_S5)

Tā bǎ bēizi de shuǐ sǎ zài le zhuōzi=shang.
3SG OM glass GEN water spill at PFV table=upside
'He spilled the water from the glass on the table.'

(376) 一个人拿起了杯子，然后杯子里的水洒了。 (P&T_021_S1)

Yí gè rén ná-qi-le bēizi, ránhòu bēizi=lǐ de shuǐ
one CL person take-up-PFV glass then glass=inside GEN water
sǎ le.
spill CRS
'A man picked up the glass, and then the water in the glass was spilled.'

(377) 一个女人将一盒积木撒在了地上。 (P&T_112_S11)

Yí gè nǚrén jiāng yì hé jīmù sǎ zài le dì=shang.
one CL woman OM one box block scatter at PFV floor=upside
'A woman scattered a box of blocks on the floor.'

¹³⁵ In the case of 撒 *sǎ* 'scatter, spill', the Modern Chinese dictionary specifies that the Figure is usually granular (e.g., power, seed, salt, and sand).



(378) 一个女人把一个小桶踢翻了，里面撒了很多木块。(P&T_113_S1)

Yí gè nǚrén bǎ yí gè xiǎo tǒng tī-fān le,
one CL woman OM one CL small bucket kick-over CRS
lǐmian sā-le hěnduō mùkuài.
inside scatter-PFV many block

'A woman kicked over a small bucket and many blocks inside were scattered.'

Another verb found in the *Put & Take* data which is also excluded from the analysis is 掉 *diào* 'fall'. This verb is used mainly to describe the scene 009 (drop book accidentally on floor) and the scene 113 (knock over bucket so blocks spill out). Take the clip 009 as an example, it shows a man moving forward with a stack of book; one of the books drops accidentally on the floor. Eleven out of twelve speakers used two clauses to describe this scene, the second clause expressing a nonagentive motion, as exemplified in (379). Only one speaker described the event as a caused motion, using the dummy verb 弄 *nòng* 'get' combined with the Path satellite 到 *-dao* 'to' and the localizer 上 *=shang* 'upside' to convey the meaning 'the Agent causes the book fall onto the floor', as in (380).

(379) 一个人端着一摞书往前走，最上面的一本掉了下来。(P&T_009_S2)

Yí gè rén duān-zhe yí luò shū
one CL person hold.sth.level.with.both.hands-DUR one CL book
wǎng qián zǒu, zuì shàngmian de yì běn diào-le-xia-lai.
towards front walk most upper.part GEN one CL fall-PFV-down-hither
'A man walks forward holding a stack of books, and the uppermost one fell down (towards the deictic center).'

(380) 他把书弄到了地上。(P&T_009_S5)

Tā bǎ shū nòng-dao-le dì=shang.
3SG OM book get-to-PFV floor=upside
'He got the book on the floor.'

In what follows, we present the coding strategies of Path found in the descriptive data and focus on the difference between Path encoding in spontaneous motion and caused motion events.



4.3.1.1. Verbal encoding of Path in the descriptive data

Verbal encoding corresponds to the use of verbs in Talmy's (2000) framework. Although Path verbs in the broad sense form, by definition, an open class in Standard Chinese (Lamarre 2013: 168), the descriptive data (in particular, the *Trajectoire* data showing spontaneous motion) reveal the use of only 10 Path verbs, as mentioned earlier in Table 23. Besides, out of the 10 Path verbs, 5 (Table 27) are used without being combined with other morphosyntactic devices in an individual clause displaying verbal encoding; this accounts for only 1.5% (Table 26). Since Path verbs in Standard Chinese cannot convey the meaning of Cause (cf. Chapter 2, §2.3.1), no verbal encoding is found in the *Put & Take* data showing caused motion events.

Coding strategy	<i>Trajectoire</i> (N=672)	<i>Put & Take</i> (N=736)
verbal encoding	1.5% (10)	-

Table 26. Verbal encoding in the descriptive data

Chinese character	Pinyin	Meaning	N=10	Example
进入	<i>jìnrù</i>	enter	4	(381)
进	<i>jìn</i>	enter	3	(382)
经过	<i>jīngguò</i>	pass by	1	(383)
路过	<i>lùguò</i>	pass by	1	(384)
下	<i>xià</i>	descend	1	(385)

Table 27. Verbs in verbal encoding strategy in the *Trajectoire* data (spontaneous motion)

In Standard Chinese, Path verbs can either take Ground NPs or be followed by satellites in most cases. In the descriptive data, all the Path verbs in verbal encoding are followed by a Ground NP, which functions as their object, as shown in (381)-(385).



(381) 一个男人从山洞中走出来，**进入**另一个山洞。 (Traj_060_S12)

Yí gè nánrén cóng shāndòng=zhong zǒu-chu-lai,
one CL man from cave=in.the.center.of walk-out-hither
jìnrù líng yí gè shāndòng.
enter another one CL cave

'A man walked out of the cave (towards the deictic center) and entered another cave.'

(382) 一个小男孩儿**进**了山洞。 (Traj_058_S2)

Yí gè xiǎo nánháir **jìn-le** shāndòng.
one CL young boy **enter-PFV** cave

'A little boy entered the cave.'

(383) 一个男人从山洞里走出来，**经过**一个篮子，又走进了另一个山洞。 (Traj_060_S1)

Yí gè nánrén cóng shāndòng=li zǒu-chu-lai, **jīngguò** yí gè lánzi,
one CL man from cave=inside walk-out-hither **pass.by** one CL basket
yòu zǒu-jìn-le líng yí gè shāndòng.
again walk-into-PFV another one CL cave

'A man came out of the cave, passed a basket, and walked into another cave.'

(384) 一个男人**路过**一棵树，走进了树丛。 (Traj_049_S6)

Yí gè nánrén **lùguò** yì kē shù, zǒu-jìn-le shùcóng.
one CL man **pass.by** one CL tree walk-into-PFV grove

'A man passed a tree and walked into the grove.'

(385) 一个女人下台阶，走向了水边儿。 (Traj_073_S6)

Yí gè nǚrén **xià** táijiē, zǒu xiàng le shuǐ=bianr.
one CL woman **descend** steps walk towards PFV water=side

'A woman descends the steps and walks towards the water's edge.'

In the examples above, the gloss of the morpheme 过 *guò*/-*guo* requires clarification in order to avoid confusion. 过 *guò*/-*guo* means 'cross' as a verb, and 'across' as a satellite. Some expressions conveying the meaning of 'cross, pass by, pass through' are considered as fully lexicalized compounds and are glossed in one single gloss, such as 经过 *jīngguò* [pass.by] 'pass by' and 路过 *lùguò* [pass.by] 'pass by'; whereas other expressions indicating the same meaning are considered as Verb Directional compounds with a grammaticalized path satellites, and are glossed with a hyphen



which separate the the main verb and the satellite, for instance 穿过 *chuān-guo* [pass.through-across] 'pass' and 越过 *yuè-guo* [overstep-across] 'cross'.

The decision to gloss 过 *guò* / *-guo* as a verb or as a satellite is mainly based on whether the verb is listed as a lexical entry in the dictionaries: verbs formed with productive path satellites are not listed as independent entries in the dictionaries.¹³⁶ Besides, we observed that as for the Verb Directional compound verbs, the aspectual marker 了 *-le* can be inserted between the verbs 穿 *chuān* 'pass through' / 越 *yuè* 'overstep' and the satellites 过来 *-guolai* 'across towards the deictic center' / 过去 *-guoqu* 'across away from the deictic center', as illustrated in examples (386) and (387); however the same marker cannot be inserted in neither 经过 *jīngguò* [pass.by] 'pass by' nor 路过 *lùguò* [pass.by] 'pass by'. Moreover, unlike 穿过 *chuān-guo* [pass.through-across] 'pass' and 越过 *yuè-guo* [overstep-across] 'cross' which can be followed by 来 *-lai* 'hither' or 去 *-qu* 'thither' (e.g., 穿过来 *chuān-guo-lai* [cross-across-hither] 'cross over (towards the deictic center)', 越过去 *yuè-guo-qu* [overstep-across-thither] 'cross over (away from the deictic center)'), neither 经过 *jīngguò* [pass.by] 'pass by' nor 路过 *lùguò* [pass.by] 'pass by' can be followed by the two deictic satellites (e.g., *经过来 *jīngguò-lai* [pass.by-hither] 'pass by (towards the deictic center)', *路过去 *lùguò-qu* [pass.by-thither] 'pass by (away from the deictic center)').

¹³⁶ The two dictionaries that we consulted are 现代汉语词典 *Xiàndài Hànyǔ cídiǎn* 'Modern Chinese dictionary' (2016, 7th edition) and 牛津·外研社英汉汉英词典 *Niújīn wàiyánshè yīnghàn hànyīng cídiǎn* Oxford FLTRP English-Chinese Chinese-English Dictionary (2017).

(386) 她从树里面穿了过来。 (Traj_048_S5)

Tā cóng shù=límian chuān-le-guo-lai.
3SG from tree=inside cross-PFV-across-hither
'She came crossing from the inside of the tree.'

(387) [...]从那少女头上越了过去。 (BCC)¹³⁷

[...] cóng nà shàonǚ tóu=shang yuè-le-guo-qu.
over that young.girl head=upside overstep-PFV-across-thither
'[...] went over the young girl's head.'

4.3.1.2. Adverbial encoding of Path in the descriptive data

Adverbial encoding corresponds to the use of satellites in Talmy's (2000) framework and is considered as the most frequently used coding strategy for Path in Standard Chinese. Let us look at how this strategy is revealed in the descriptive data. As illustrated in Table 28, adverbial encoding account for over one quarter in the *Trajectoire* data showing spontaneous motion and over one fifth in the *Put & Take* data showing caused motion.

Coding strategy	<i>Trajectoire</i> (N=672)	<i>Put & Take</i> (N=736)
adverbial encoding	26.6% (179)	20.8% (153)

Table 28. Adverbial encoding in the descriptive data

Eight Path satellites have been attested in the *Trajectoire* data (see Table 29). Examples (388)-(397) illustrate the use of these satellites together with Manner verbs (in Table 24, see the column compound verbs) expressing spontaneous motion events. Although all the Path satellites in the table below can either be followed by a Ground NP (e.g., (388)-(393)) or a deictic satellite (e.g., (396), (397)) except 入-rù 'into' which can only be followed by a Ground NP, we note that the Path satellites are combined predominantly with a

¹³⁷ BCC refers to 北京语言大学语料库中心 *Běijīng yǔyán dàxué yǔliàokù zhōngxīn* 'Beijing Language and Culture University Corpus Center' (abbreviated by BCC).



Ground NP (154 out of 179 occurrences) than with a deictic satellite (25 out of 179 occurrences).

#	Chinese character	Pinyin	Meaning	N=179	Example
1	过	- <i>guo</i>	across, over, past, through	84	(388), (396)
2	进	- <i>jin</i>	into	48	(389)
3	上	- <i>shang</i>	up	20	(390), (397)
4	出	- <i>chu</i>	out	13	(391)
5	到	- <i>dao</i>	to	4	(392)
6	下	- <i>xia</i>	down, off	4	(393)
7	回	- <i>hui</i>	back	3	(394)
8	入	- <i>ru</i>	into	3	(395)

Table 29. Satellites in adverbial encoding strategy in the *Trajectoire* data (spontaneous motion)

(388) 一个男士跨过了~~了~~一根树桩。 (Traj_072_S5)

Yí gè nánshì kuà-**guo**-le yì gēn shùzhuāng.
one CL man step-**over**-PFV one CL stump
'A man strode over a stump.'

(389) 一个男士走进~~了~~一片竹林。 (Traj_026_S3)

Yí gè nánshì zǒu-**jin** yí piàn zhúlín.
one CL man walk-**into** one CL bamboo.forest
'A man walked into a bamboo forest.'

(390) 小男孩儿跳上了~~了~~石头。 (Traj_062_S7)

Xiǎo nánhái tiào-**shang**-le shítou.
young boy jump-**on**-PFV rock
'The young boy jumped up onto the rock.'

(391) 一个女人走出了~~了~~山洞。 (Traj_025_S6)

Yí gè nǚrén zǒu-**chu**-le shāndòng.
one CL woman walk-**out**-PFV cave
'A woman walked out of the cave.'



(392) 一个女人走到水边。 (Traj_073_S10)

Yí	gè	nǚrén	zǒu- dao	shuǐ=bian.
one	CL	woman	walk- to	water=side

'A woman walked to the edge of the water.'

(393) 男孩儿跳下了石壁。 (Traj_064_S9)

Nánháir	tiào- xia-le	shíbì.
boy	jump- off -PFV	cliff

'The boy jumped off the cliff.'

(394) 女人又走回了山洞。 (Traj_053_S7)

Nǚrén	yòu	zǒu- hui-le	shāndòng.
woman	again	walk- back -PFV	cave

'The woman walked back to the cave again.'

(395) 一个男人走入山洞。 (Traj_068_S12)

Yí	gè	nánrén	zǒu- rù	shāndòng.
one	CL	man	walk- into	cave

'A man walked into the cave.'

(396) 这个小男孩儿走了过来。 (Traj_067_S5)

Zhè	gè	xiǎo	nánháir	zǒu-le- guo-lai .
this	CL	little	boy	walk-PFV- over-hither

'The little boy came over walking.'

(397) 男孩儿蹦上去了。 (Traj_062_S5)

Nánháir	bèng- shang-qu	le.
boy	jump- up-thither	CRS

'The boy jumped up (away from the deictic center).'

Twelve Path satellites have been attested in the *Put & Take* data (see Table 30). Examples (398)-(408) illustrate the use of these satellites together with verbs lexicalizing Cause (in Table 25, see the column compound verbs). Among these satellites, 起 -*qǐ* 'up', 走 -*zǒu* 'away', 倒 -*dǎo* 'over', 掉 -*diào* 'off', 住 -*zhù* 'dwell', and 翻 -*fān* 'over' cannot be followed by a Ground NP, and 走 -*zǒu* 'away', 倒 -*dǎo* 'over', 住 -*zhù* 'dwell', 翻 -*fān* 'over', and 入 -*rù* 'into' can not be followed by a deictic satellite (cf. Chapter 2, §2.3.2).¹³⁸ The

¹³⁸ 起 -*qǐ* 'up' can only be followed by 来 -*lai* 'hither', not 去 -*qu* 'thither'.



impossibility of combining the above Path satellites with either Ground NPs or deictic satellites might explain the reason why in the expression of caused motion, Path satellites tends to be used alone (e.g., (398)- (400), (402)-(404), (406), and (407)), accounting for 98 occurrences. By contrast, the above Path satellites either followed by deictic satellites (42 out of 153 occurrences) or Ground NPs (13 out of 153 occurrences) are less frequent.

#	Chinese character	Pinyin	Meaning	N=153	Example
1	起	- <i>qi</i>	up	44	(398)
2	上	- <i>shang</i>	up	27	(399)
3	下	- <i>xia</i>	down, off	22	(400)
4	出	- <i>chu</i>	out	14	(401)
5	走	- <i>zou</i>	away	11	(402)
6	倒	- <i>dao</i>	over	10	(403)
7	掉	- <i>diao</i>	off	9	(404)
8	进	- <i>jin</i>	into	9	(405)
9	住	- <i>zhu</i>	dwel	3	(406)
10	翻	- <i>fan</i>	over	2	(407)
11	回	- <i>hui</i>	back	1	(408)
12	入	- <i>ru</i>	into	1	(409)

Table 30. Satellites in adverbial encoding strategy in the *Put & Take* data (caused motion)

(398) 他拿起了杯子。 (P&T_101_S9)

Tā ná-qi-le bēizi.
3SG take-up-PFV cup
'He picked up the cup.'

(399) 她戴上了帽子。 (P&T_025_S3)

Tā dài-shang-le màozi.
3SG put.on-up-PFV hat
'She put on her hat.'



(400) 一个女的摘下了她的帽子。 (P&T_125_S1)

Yí gè nǚde zhāi-xia-le tāde màozǐ.
one CL woman take.off-off her hat

'A woman took off her hat.'

(401) 他把黄瓜拿出来了。 (P&T_115_S5)

Tā bǎ huánghuā ná-chu-lai le.
3SG OM cucumber take-out-hither CRS

'He took out the cucumber (towards the deictic center).'

(402) 他把行李箱拿走了。 (P&T_130_S3)

Tā bǎ xínglǐxiāng ná-zǒu le.
3SG OM suitcase take-away CRS

'He took the suitcase away.'

(403) 她把桶踢倒了。 (P&T_113_S5)

Tā bǎ tǒng tī-dǎo le.
3SG OM bucket kick-over CRS

'She kicked the bucket down.'

(404) 他脱掉了外套。 (P&T_133_S9)

Tā tuō-diào-le wàitào.
3SG take.off-off-PFV coat

'He took off his coat.'

(405) 她把手伸进了树洞。 (P&T_023_S10)

Tā bǎ shǒu shēn-jin-le shùdòng.
3SG OM hand stretch-into-PFV tree.hold

'She put her hand into the tree hole.'

(406) 这个人用布把汽车尾气管塞住了。 (P&T_017_S7)

Zhè gè rén yòng bù bǎ qìchē wěiqìguǎn sāi-zhù le.
this CL person with cloth OM car exhaust stuff-dwell CRS

'The man stuffed the car's exhaust with a cloth.'

(407) 这个人把桶踢翻了。 (P&T_113_S8)

Zhè gè rén bǎ tǒng tī-fān le.
this CL person OM bucket kick-over CRS

'The man kicked the bucket over.'

(408) 这个男人又把纸塞回了排气筒。 (P&T_017_S9)

Zhè gè nánrén yòu bǎ zhǐ sāi-hui-le páqìtǒng.
this CL man again OM paper stuff-back-PFV exhaust
'The man stuffed the paper back into the exhaust again.'

(409) 一个人放入水桶一块砖。 (P&T_019_S11)

Yí gè rén fàng-rù shuǐtǒng yí kuài zhuān.
one CL person put-into pot one CL brick
'A person put a brick into the pot.'

The gloss of 入 *rù/-rù* 'into' in Table 29 and Table 30 needs further explanation. There are two main reasons why we didn't consider 走入 *zǒu-rù* [walk-into] and 放入 *fàng-rù* [put-into] as a lexicalized compound verb, such as 进入 *jìnrù* 'enter' (see Table 27 and example (381)). First, both 走入 *zǒu-rù* [walk-into] and 放入 *fàng-rù* [put-into] are not listed as lexical entries in the dictionary. Second, if any Manner or Cause verbs can combine with 入 *-rù* 'into' such as 跳入 *tiào-rù* [jump-into], 跑入 *pǎo-rù* [run-into], 丢入 *diū-rù* [throw-into], and 装入 *zhuāng-rù* [fill-into], then such lexicalized verbs would not be exhaustive. Thus, we consider 入 *-rù* 'into' as a Path satellites when it combines with all the Manner and Cause verbs in the data under analysis, except with the Path verb 进 *jìn* 'enter'.

4.3.1.3. Adnominal encoding of Path in the descriptive data

Adnominal encoding concerns the use of prepositions and localizers in the Standard Chinese data. As shown in Table 31, this coding strategy is used more frequently in the *Put & Take* data showing caused motion (27.3%) than in the *Trajectoire* data showing spontaneous motion (10.1%).

Coding strategy	<i>Trajectoire</i> (N=672)		<i>Put & Take</i> (N=736)	
adnominal encoding	10.1%	(68)	27.3%	(201)

Table 31. Adnominal encoding in the descriptive data

In the *Trajectoire* data, four prepositions have been found in the expression of spontaneous motion events, as listed in Table 32. Among them, one preposition 向 *xiàng* 'towards' was used in postverbal PPs, as shown in (410). Three prepositions 从 *cóng* 'from', 沿 *yán* 'along', and 往 *wǎng* 'towards' were used in preverbal PPs, as exemplified in (411)-(413). The morphosyntactic devices used in adnominal encoding may be limited to prepositions which involve only one Ground NP, as in (410) and (412). Besides, this coding strategy may also contain both prepositions and localizers which comprise two Ground NPs, as in (411) and (413). Note that no description involving Path can be encoded by localizers alone (without prepositions). The case in which a localizer is alone is possible is in existential sentence.

Position with verb	Chinese character	Pinyin	Meaning	N=81	Example
V-PP	向	<i>xiàng</i>	towards	59	(410), (411)
PP-V	从	<i>cóng</i>	from	12	(411), (413)
	沿	<i>yán</i>	along	5	(412)
	往	<i>wǎng</i>	towards	5	(413)

Table 32. Prepositions (+/- localizers) in adnominal encoding strategy in the *Trajectoire* data (= data of spontaneous motion)

(410) 一个女人走向一棵大树。 (Traj_061_S11)

Yí gè nǚrén zǒu **xiàng** yì kē dà shù.
 one CL woman walk **towards** one CL big tree
 'A woman walked towards a big tree.'

(411) 一位女士从远处走向了森林中。 (Traj_052_S2)

Yì wèi nǚshì **cóng** yuǎnchù zǒu **xiàng** le sēnlín=**zhong**.
 one CL lady **from** afar walk **towards** PFV forest=**inside**
 'A lady walked towards the forest from afar.'



(412) 一个小男孩儿沿着山间小路走。 (Traj_065_S1)

Yí gè xiǎo nánhái **yán-zhe** shānjiānxiǎolù zǒu.
one CL small boy **along-DUR** mountain.path walk
'A little boy is walking along the mountain path.'

(413) 一个男孩儿从水边儿往森林里面跑。 (Traj_037_S8)

Yí gè nánhái **cóng** shuǐ=bianr **wǎng** sēnlín=**limian** pǎo.
one CL boy **from** water=side **towards** forest=inside run
'A boy ran from the edge of the water towards the forest.'

In the *Trajectoire* data, apart from the four prepositions above, we also noticed the preposition 在 *zài* 'at' (cf. Chapter 2, §2.2.3 for more details about 在 *zài* 'at'). In examples (414) and (415), 在 *zài* 'at' is used respectively in PPs before and after the verb expressing 'walk on the road'. Neither PPs entail a change of location. Thus cases are excluded from our count.

(414) 男孩儿赤着脚在路上走着。 (Traj_067_S7)

Nánhái **chizhejiǎo** **zài** lù=shang zǒu-zhe.
boy barefoot **at** road=upside walk-DUR
'The boy is walking on the road in his barefoot.'

(415) 一个男孩儿走在崎岖的小路上。 (Traj_067_S8)

Yí gè nánhái zǒu **zài** qíqūde xiǎo lù=shang.
one CL boy walk **at** rugged small road=upside
'A boy is walking on the small rugged road.'

In the *Put & Take* data, five prepositions have been found in the expression of caused motion events, as listed in Table 33. Among them, the preposition 在 *zài* 'at' used in PPs located either after or before the verb, as shown in (416) and (419). As illustrated in the table below, its use in a postverbal PP is more frequent than its use in a preverbal PP (176 occurrences vs. 5 occurrences). Apart from 在 *zài* 'at', the preposition 给 *gěi* 'to' used in PPs also located after the verb, as in (417). Three other prepositions, 从 *cóng* 'from', 往 *wǎng* 'towards', and 向 *xiàng* 'towards' formed PPs, were used before the verb, as exemplified in (420)-(422). We may note that the adnominal encoding in the *Put & Take* data usually involves two morphosyntactic devices in a clause, that is, a preposition and a

localizer, due to the nature of the Ground, as can be seen from examples (416)-(422), except (417) in which 给 *gěi* 'to' as a benefactive marker is often followed by a person as the Ground. In the *Put & Take* stimulus set, the NPs indicating the Ground are usually common nouns, such as 桌子 *zhuōzi* 'table', 锅 *guō* 'pot', etc. Therefore, in order to function as a place word after a locative preposition, they need to be followed by localizers.

Position with verb	Chinese character	Pinyin	Meaning	N=201	Example
V-PP	在	<i>zài</i>	at	176	(416)
	给	<i>gěi</i>	to	11	(417)
	向	<i>xiàng</i>	towards	1	(418)
PP-V	在	<i>zài</i>	at	5	(419)
	从	<i>cóng</i>	from	3	(420)
	往	<i>wǎng</i>	towards	4	(421)
	向	<i>xiàng</i>	towards	1	(422)

Table 33. Prepositions in adnominal encoding strategy in the *Put Take* data (caused motion)

(416) 他把书放在了地上。 (P&T_007_S10)

Tā bǎ shū fàng zài le dì=shang.
 3SG OM book put **on** PFV floor=**upside**
 'He put the book on the floor.'

(417) 一个女士把一杯水递给了一个女孩儿。 (P&T_022_S4)

Yí gè nǚshì bǎ yì bēi shuǐ dì gěi le
 one CL lady OM one CL water give **to** PFV
yí gè nǚhái.
 one CL girl
 'A lady handed a cup of water to a girl.'



(418) 一位女士向锅里面倒水。 (P&T_020_S6)

Yí wèi nǚshì xiàng guō=limian dào shuǐ.
one CL lady towards pot=inside pour water
'A lady pours water into the pot.'

(419) 她在墙上贴了一张照片。 (P&T_028_S10)

Tā zài qiáng=shang tiē-le yì zhāng zhàopian.
3SG at wall=upside paste-PFV one CL picture
'She pasted a picture on the wall.'

(420) 他从树杈上拿了一根绳子。 (P&T_127_S10)

Tā cóng shùchà=shang ná-le yì gēn shéngzi.
3SG from branch=upside take-PFV one CL rope
'He took a rope from the branch.'

(421) 他往锅里丢了一块砖。 (P&T_019_S12)

Tā wǎng guō=li diū-le yì kuài zhuān.
3SG towards pot=inside throw-PFV one CL brick
'He threw a brick into the pot.'

(422) 一位女士向锅里面倒水。 (P&T_020_S6)

Yí wèi nǚshì xiàng guō=limian dào shuǐ.
one CL lady towards pot=inside pour water
'A lady pours water into a pot.'

One intriguing particularity of the adnominal encoding in the *Put & Take* data is the use of modifiers to express Source information, accounting for 17 occurrences. Unlike English or other VO languages that have relative pronouns to signal the relative construction that is usually placed after the noun, in Standard Chinese, such clauses precede the noun (the Figure) and are marked by the genitive marker 的 *de* 'GEN'. Let us examine two cases. In (423), the initial location of the Figure (i.e., 糖 *táng* 'candy') is expressed by the common noun 桌子 *zhuōzi* 'table' followed by the localizer 上 =*shang* 'upside' which precede the genitive marker 的 *de* 'GEN'. In this example, the verb 放 *fàng* 'put' was used to form the relative clause 放在桌子上的 *fàngzài zhuōzi=shang de* 'that was on the table' modifying the Figure 糖 *táng* 'candy', indicating its original location. In (424), the initial location of the Figure (i.e., 杯子 *bēizi* 'glass') is expressed by the common noun 嘴 *zuǐ* 'mouth' followed by the

localizer 里 =*li* 'inside' which precede the genitive marker 的 *de* 'GEN'. In the latter example, the verb 叼 *diāo* 'hold in the mouth' was inserted between the NPloc indicating the Source and the genitive marker 的 *de* 'GEN' to indicate the initial state of the Figure.

(423) 这个女生把原本放在桌子上的糖放在了椅子上。 (P&T_050_S4)

Zhè gè nǚshēng bǎ yuánběn fàng zài zhuōzi=**shang**
 this CL girl OM originally put at table=**upside**
de táng fàng zài le yǐzi=shang.
 GEN candy put **at** PFV chair=**upside**
 'The girl put the candy that was on the table to the chair.'

(424) 一个女的把嘴里叼着的杯子放在桌子上。 (P&T_002_S1)

Yí gè nǚde bǎ zuǐ=li diāo=zhe de bēizi
 one CL woman OM mouth=**inside** hold.in.the.mouth=DUR GEN cup
*fàng zài zhuōzi=**shang**.*
 put **at** table=**upside**
 'A woman put the cup that was held in the mouth to the table.'

4.3.1.4. Combination of different encodings of Path in the descriptive data

In the descriptive data, we have observed four possible combinations of encodings, including a) adnominal + adverbial encoding, b) adnominal + verbal encoding, c) verbal + adverbial encoding, and d) adnominal + verbal + adverbial encoding.¹³⁹ All the four coding strategies are found in the *Trajectoire* data, and only adnominal + adverbial encoding is found in the *Put & Take* data. As illustrated in Table 34, adnominal + adverbial encoding is the most frequent, accounting for over 50% in both data sets. Let us discuss each case of the four combinations of encodings below.

¹³⁹ The adnominal + adverbial encoding can refer to both the adnominal + adverbial encoding and the adverbial + adnominal encoding. The same principle is also applied to other combinations. Only the typical order for each combination is provided in Table 34, Table 48, Table 50, and Table 60.



Coding strategy	<i>Trajectoire</i> (N=672)		<i>Put & Take</i> (N=736)	
adnominal + adverbial encoding	56.8%	(382)	51.9%	(382)
adnominal + verbal + adverbial encoding	2.7%	(18)	-	
verbal + adverbial encoding	1.6%	(11)	-	
adnominal + verbal encoding	0.6%	(4)	-	

Table 34. Combination of different encodings of Path in the descriptive data

In regard to the adnominal + adverbial encoding, there are two orders: adnominal + adverbial encoding and adverbial + adnominal encoding. Let us first look at descriptions in the *Trajectoire* data showing spontaneous motion. In (425), the adnominal encoding by the prepositional phrase (including the preposition 从 *cóng* 'from' and the localizer 后 =*hou* 'back') precedes the adverbial encoding by the satellite 过 -*guo* 'past'. In (426), the adnominal encoding by the localizer 里 =*li* 'inside' follows the adverbial encoding by the satellite 进 -*jin* 'into'.

(425) 一个女人从树后跑过。 (Traj_043_S5)
 Yí gè nǚrén cóng shù=hòu pǎo-guò.
 one CL woman from tree=back run-past
 'A woman ran past the back of the tree.'

(426) 一个男人走进了树丛里。 (Traj_026_S6)
 Yí gè nánrén zǒu-jìn-le shùcóng=li.
 one CL man walk-into-PFV grove=inside
 'A man walked into the grove.'

Then we look at the descriptions in the *Put & Take* data showing caused motion. When adnominal + adverbial encoding is used, such strategy is usually found to describe Source-oriented Path, as in (427), by means of the preposition 从 *cóng* 'from' and the localizer 里面 =*lǐmian* 'inside' as adnominal encoding which precedes the satellite 出 -*chu* 'out' as adverbial encoding. By contrast, when the adverbial + adnominal encoding is used, it is often found in the description of Goal-oriented Path, as in (428), with the help of the

satellite 到 *-dao* 'to' as adverbial encoding which precedes the localizer 里 *-li* 'inside' as adnominal encoding.

(427) 他从箱子里面拿出一个橘子。 (P&T_111_S10)

Tā **cóng** xiāngzi=**lǐmian** ná-**chu-le** yí gè júzi.
3SG **from** box=**inside** take-**out**-PFV one CL orange
'He took an orange out of the box.'

(428) 他把荧光笔放到了树洞里。 (P&T_035_S10)

Tā bǎ yíngguāngbǐ fàng-**dao-le** shùdòng=**li**.
3SG OM highlighter put-**to**-PFV tree.hole=**inside**
'He put the highlighter in the tree hole.'

Concerning the adnominal + verbal + adverbial encoding, all the descriptions in the *Trajectoire* data follow the order adnominal + verbal + adverbial (i.e., PP + Verb + Satellite). The satellite can only convey the meaning of Path or Path + Dynamic Deixis, as exemplified in (429) and (430), respectively.

(429) 一个男人从草地上穿过。 (Traj_039_S12)

Yí gè nánrén **cóng** cǎodi=**shang** chuān-**guo**.
one CL man **from** grass=**upside** pass.**through-across**
'A man past through the grass.'

(430) 男孩儿从大海里出来。 (Traj_031_S9)

Nánháir **cóng** dàhǎi=**li** chū-**lai**.
boy **from** sea=**inside** exit-**hither**
'The boy came out of the sea.'

With respect to the verbal + adverbial encoding, there is only one order found in the *Trajectoire* data: verbal + adverbial encoding. What's more, out of the 11 occurrences, 9 were used to describe either Medium-oriented or Goal-oriented Path, as illustrated in (431) and (432). When the verb expresses Source-oriented Path, the adverbial encoding can only be a deictic satellite, as in (433).

(431) 三个人穿过树丛。 (Traj_041_S3)

Sān gè rén chuān-guo shùcóng.
three CL person pass.through-across grove
'Three men passed through the grove.'

(432) 他又回到了山洞。 (Traj_053_S11)

Tā yòu huí-dao-le shāndòng.
3SG again return-to-PFV cave
'He returned to the cave again.'

(433) 这个孩子出来了。 (Traj_028_S11)

Zhè gè hái-zǐ chū-lai le.
this CL child exit-hither CRS
'The child came out.'

Regarding the adnominal + verbal encoding, both the adnominal + verbal encoding and the verbal + adnominal encoding are found in the *Trajectoire* data. A PP is often used for adnominal encoding when it precedes the verbal encoding, as in (434). By contrast, a localizer is usually used for adnominal encoding when it follows the verbal encoding, as in (435). It is interesting to note that in example (435), besides the verb 进 *jìn* 'enter' which expresses the Path, another verb 奔跑 *bēnpǎo* 'run quickly' combined with the durative marker 着 *-zhe* 'DUR' was used as a gerundive expressing Manner.

(434) 一个小男孩儿沿着山路上山。 (Traj_065_S8)

Yí gè xiǎo nánhái-er yán-zhe shānlù shàng shān.
one CL little boy along-DUR mountain.road ascend mountain
'A little boy walks up the mountain along the mountain road.'

(435) 一个小男孩儿奔跑着进了海里。 (Traj_059_S4)

Yí gè xiǎo nánhái-er bēnpǎo-zhe jìn-le hǎi=li.
one CL little boy run.quickly-DUR enter-PFV sea=inside
'A little boy entered the sea running quickly.'

4.3.2. Coding strategies of Path in the dialogical data

In this section, we present the coding strategies of Path found in the dialogical data (i.e., data which comprise two TV series: *Married for Ten Years* (hereafter *MFTY*) and *Loquacious Zhang Damin's Happy*

Life (hereafter *LZHL*). Before examining different coding strategies, let us first present the semantics of the various verbs found in both data sets.

In Table 35 and Table 36, sixteen verbs expressing Path (or Path + Dynamic Deixis) have been identified in the *MFTY* data, and thirteen verbs in the *LZHL* data. In both data sets, two verbs (i.e., 来 *lái* 'come' and 去 *qù* 'go') lexicalize both Path and Dynamic Deixis and the remaining verbs lexicalize Path only. In terms of frequency, three verbs 来 *lái* 'come', 去 *qù* 'go', and 回 *huí* 'return' prevailed in both data sets. Each of the three verbs accounts for over one hundred occurrences.

#	Chinese character	Pinyin	Meaning	N=757	Semantics	Compound verbs [verb + satellite(s)]
1	去	<i>qù</i>	go	198	Path + Dynamic Deixis	-
2	来	<i>lái</i>	come	189	Path + Dynamic Deixis	-
3	回	<i>huí</i>	return	171	Path	<i>huí-lai</i> 'come back' <i>huí-qu</i> 'go back'
4	出	<i>chū</i>	exit	43	Path	<i>chū-qu</i> 'go out' <i>chū-lai</i> 'come out'
5	过	<i>guò</i>	cross	38	Path	<i>guò-lai</i> 'come over' <i>guò-qu</i> 'go over'
6	上	<i>shàng</i>	move to	20	Path	<i>shàng-NPloc-qu</i> 'move to' <i>shàng-NPloc-lai</i> 'move to'
			ascend	15		
7	进	<i>jìn</i>	enter	30	Path	<i>jìn-lai</i> 'come in' <i>jìn-qu</i> 'go in'
8	到	<i>dào</i>	move to	22	Path	<i>dào-NPloc-lai</i> 'move to' <i>dào-NPloc-qu</i> 'move to'
			arrive	2		
9	走	<i>zǒu</i>	leave; go away	12	Path	-
10	起	<i>qǐ</i>	ascend	7	Path	<i>qǐ-lai</i> 'get up'
11	掉	<i>diào</i>	fall	3	Path	<i>diào-xia-lai</i> 'fall down'
12	退	<i>tuì</i>	move backwards	2	Path	<i>tuì-hui-qu</i> 'move back'
13	下	<i>xià</i>	descend	2	Path	<i>xià-lai</i> 'come down'
14	滚	<i>gǔn</i>	tumble away	1	Path	<i>gǔn-chu-qu</i> 'get out (of here)'
15	跑	<i>pǎo</i>	run away	1	Path	-

16	摔	<i>shuāi</i>	fall	1	Path	<i>shuāi-xia-lai</i> 'fall down'
----	---	--------------	------	---	------	----------------------------------

Table 35. Verbs expressing Path (or Path + Dynamic Deixis) in the *MFTY* data (spontaneous motion)

#	Chinese character	Pinyin	Meaning	N=622	Semantics	Compound verbs [verb + satellite(s)]
1	回	<i>huí</i>	return	130	Path	<i>huí-lai</i> 'come back' <i>huí-qu</i> 'go back'
2	来	<i>lái</i>	come	118	Path + Dynamic Deixis	-
3	去	<i>qù</i>	go	114	Path + Dynamic Deixis	-
4	上	<i>shàng</i>	move to	73	Path	<i>shàng-NPloc-qu</i> 'move to' <i>shàng-NPloc-lai</i> 'move to'
			ascend	4		
5	出	<i>chū</i>	exit	45	Path	<i>chū-qu</i> 'go out' <i>chū-lai</i> 'come out'
6	过	<i>guò</i>	cross	40	Path	<i>guò-lai</i> 'come over' <i>guò-qu</i> 'go over'
7	进	<i>jìn</i>	enter	33	Path	<i>jìn-lai</i> 'come in' <i>jìn-qu</i> 'go in'
8	走	<i>zǒu</i>	leave; go away	30	Path	-
9	下	<i>xià</i>	descend	13	Path	<i>xià-lai</i> 'come down' <i>xià-qu</i> go down'
10	到	<i>dào</i>	arrive	8	Path	-
			move to	3		
11	掉	<i>diào</i>	fall	5	Path	<i>diào-xia-lai</i> 'fall down'
12	起	<i>qǐ</i>	ascend	5	Path	<i>qǐ-lai</i> 'get up'
13	撤	<i>chè</i>	retreat	1	Path	<i>chè-hui-lai</i> 'retreat back'

Table 36. Verbs expressing Path (or Path + Dynamic Deixis) in the LZHL data (spontaneous motion)

Two verbs, 到 *dào* 'arrive' and 上 *shàng* 'ascend', need further explanation since, in certain patterns, they can also mean 'move to'. As stated in Lamarre (2020: 133-134),

In Standard Chinese and in many other varieties spoken in northern and central China, the basic deictic motion verbs 'come' *lái* and 'go' *qù* have bimorphemic variants, consisting of a deictically neuter, semantically bleached path verb that may be glossed as 'move to' and that takes the goal argument when it is overt. A deictic directional is often added after the goal NP. In some of these varieties, deictic motion verbs 'come' *lái* and 'go' *qù* do not bear goal NPs as their argument. This issue is probably closely related to that of the grammaticalization of deictic motion verbs into deictic directionals.

The statement above by Lamarre can be illustrated with the following examples. She considers examples (436) and (438) as "common Sinitic" pattern, prevalent in southern China. In such cases, the deictic motion verbs 去 *qù* 'go' and 来 *lái* 'come' take respectively the NPlocs 北京 *Běijīng* 'Beijing' and 我这儿 *wǒ zhèr* 'my place' indicating the Goal as their argument. To express the same idea as in (436) and (438), many northern dialects and some central dialects (including colloquial Beijing Mandarin) prefer a bimorphemic pattern where the NPlocs are placed between the bleached path verb 到 *dào* 'move to' and the deictic satellites 去 *-qu* 'thither' and 来 *-lai* 'hither', as shown in (437) and (439) respectively.

(436) 我去北京。 (Lamarre 2020: 134)

<i>Wǒ</i>	<i>qù</i>	<i>Běijīng.</i>
1SG	go	Beijing
'I go to Beijing.'		



(437) 我到北京去。 (ibid.)

Wǒ dào Běijīng=qū.
1SG move.to Beijing=DIR_{itive}
'I go to Beijing.'

(438) 来我这儿! (ibid.)

Lái wǒ zhèr!
come 1SG here
'Come to my place!'

(439) 到我这儿来! (ibid.)

Dào wǒ zhèr=lái!
move.to 1SG here=DIR_{ven}
'Come to my place!'

In addition, Lamarre (2020: 134) also points out that: "Some northern dialects (for instance the Jilu Mandarin dialects spoken in Hebei and in western Shangdong) use *shàng* instead of *dào* as a bleached path verb meaning 'move to'".

The two verbs, 到 *dào* 'arrive' and 上 *shàng* 'ascend', used as Path verbs and semantically bleached meaning 'move to' were attested in both the *MFTY* data (see examples (440)-(443)) and the *LZHL* data (see (444)-(447)). Furthermore, we observed that the semantically bleached path verb 上 *shàng* 'move to' was used more frequently in the *LZHL* data (with 73 occurrences) than in the *MFTY* data (20 occurrences). This is probably due to the fact that in the TV series *LZHL*, Beijing Mandarin is the main language used by the actors, whereas in *MFTY*, it is Standard Chinese that is used as the main language.

(440) 你到哪儿去了? (MFTY_2_0757)

Nǐ dào-nǎr-qu le?
2SG move.to-where-thither CRS
'Where have you been? / Where did you go?'
(Context: Where have you been? I've been looking for you for a long time)

(441) 明天夏导演就**到**了。 (MFTY_3_0726)

Míngtiān *Xià* *dǎoyǎn* *jiù* **dào** *le.*
tomorrow Xia director then **arrive** CRS
'Director Xia will arrive tomorrow.'

(442) 你上哪儿去了? (MFTY_3_2705)

Nǐ **shàng-nǎr-qu** *le?*
2SG **move.to-where-thither** CRS
'Where have you been?'
(Context: Where have you been? I can't find you this afternoon.)

(443) 你快上去吧! (MFTY_8_2626)

Nǐ *kuài* **shàng-qu** *ba!*
2SG quickly **ascend-thither** SUG
'Go up quickly!'

(444) 大雪，上这边儿来! (LZHL_6_1752)

Dàxuě, **shàng-zhèbiānr-lai!**
Daxue **move.to-here-hither**
'Daxue, come here!'

(445) 大军，你上去试试。 (LZHL_4_3221)

Dàjūn, *nǐ* **shàng-qu** *shì-shì.*
Dajun 2SG **ascend-thither** try-RDP
'Dajun, go up and have a try.'

(446) 你怎么没到店里去啊? (LZHL_10_3003)

Nǐ *zěnmé* *méi* **dào-diàn=li-qu** *a?*
2SG why NEG.REAL **move.to-store=inside-thither** PRT
'Why didn't you go to the store?'

(447) 你到了那上边儿，哪儿也别动。 (LZHL_2_1543)

Nǐ **dào-le** *nèi* *shàngbiānr,* *nǎr* *yě* *bié* *dòng.*
2SG **arrive-PFV** there upside where also PROH move
'When you arrived upside, don't move anywhere.'

Let us now look at verbs that convey other information than Path in the dialogical data, in particular, Manner (Table 37 and Table 38) in the expression of spontaneous motion and Cause (Table 39 and Table 40) in the expression of caused motion. As illustrated in Table 37 and Table 39 involving the *MFTY* data, 5 verbs expressing Manner and 33 verbs expressing Cause have been



identified. Table 38 and Table 40 concerning the *LZHL* data reveal the use of 8 Manner verbs and 30 Cause verbs.

#	Chinese character	Pinyin	Meaning	N=35	Semantics	Compound verbs [verb + satellite(s)]
1	搬	<i>bān</i>	move	17	Manner	<i>bān-guo-lai/qu</i> 'move to' <i>bān-dao-NPloc-lai/qu</i> 'move to' <i>bān-chu-qu</i> 'move out' <i>bān-jin-lai</i> 'move into' <i>bān-hui-lai</i> 'move back' <i>bān-lai/qu</i> 'move'
2	跑	<i>pǎo</i>	run	12	Manner	<i>pǎo-lai/qu</i> 'run here/there' <i>pǎo-hui-lai</i> 'run back' <i>pǎo-chu-lai</i> 'run out' <i>pǎo-dao-NPloc-qu</i> 'run to' <i>pǎo-guo-lai</i> 'run over'
3	赶	<i>gǎn</i>	hurry	2	Manner	<i>gǎn-hui-lai</i> 'hurry back'
4	走	<i>zǒu</i>	walk	2	Manner	<i>zǒu-chu-lai</i> 'walk out' <i>zǒu-hui-qu</i> 'walk back'
5	坐	<i>zuò</i>	sit	2	Manner	<i>zuò-shang-lai</i> 'sit up'

Table 37. Verbs expressing Manner in the *MFTY* data (spontaneous motion)

#	Chinese character	Pinyin	Meaning	N=14	Semantics	Compound verb [verb + satellite(s)]
1	搬	<i>bān</i>	move	3	Manner	<i>bān-chu-lai/qu</i> 'move out' <i>bān-dao-NPloc-qu</i> 'move to' <i>bān-jin-lai</i> 'move into' <i>bān-lai/qu</i> 'move' <i>bān-zǒu</i> 'move away'
2	跑	<i>pǎo</i>	run	3	Manner	<i>pǎo-dao-NPloc-lai</i> 'run to' <i>pǎo-guo-lai</i> 'run over' <i>pǎo-lai</i> 'run'
3	爬	<i>pá</i>	climb	2	Manner	-
4	走	<i>zǒu</i>	walk	2	Manner	<i>zǒu-dao</i> 'walk to'
5	蹭	<i>cèng</i>	drag along	1	Manner	<i>cèng-xia-qu</i> 'drag down along'
6	住	<i>zhù</i>	live	1	Manner	<i>zhù-jin-qu</i> 'live into'
7	转	<i>zhuàn</i>	wander about	1	Manner	<i>zhuǎn-dao-NPloc-lai</i> 'wander about to'
8	钻	<i>zuān</i>	sneak	1	Manner	<i>zuān-NPloc-qu</i> 'sneak to'

Table 38. Verbs expressing Manner in the LZHL data (spontaneous motion)

#	Chinese character	Pinyin	Meaning	N=107	Semantics	Compound verbs [verb + satellite(s)]
1	拿	<i>ná</i>	take	23	Cause	<i>ná-lai</i> 'take' <i>ná-chu-lai</i> 'take out' <i>ná-dao-NPloc-(lai)</i> 'take to' <i>ná-hui-lai</i> 'take back' <i>ná-jin-qu</i> 'take into' <i>ná-guo-lai</i> 'take over' <i>ná-xia-lai</i> 'take down' <i>ná-zou</i> 'take away'
2	送	<i>sòng</i>	deliver; see sb. off	18	Cause	<i>sòng-lai/qu</i> 'deliver' <i>sòng-dao-NPloc-lai/qu</i> 'deliver to' <i>sòng-hui-lai/qu</i> 'deliver back' <i>sòng-chu-qu</i> 'deliver out' <i>sòng-guo-qu</i> 'deliver over' <i>sòng-hui-qu</i> 'see sb. off'
3	带	<i>dài</i>	carry	7	Cause	<i>dài-lai</i> 'bring' <i>dài-dao-NPloc-qu</i> 'carry to' <i>dài-guo-qu</i> 'carry over' <i>dài-hui-lai</i> 'carry back' <i>dài-zǒu</i> 'carry away'
4	寄	<i>jì</i>	send (sth.)	7	Cause	<i>jì-lai/qu</i> 'send hither/thither'
5	接	<i>jiē</i>	meet; pick up (someone)	7	Cause	<i>jiē-guo-lai/qu</i> 'meet over' <i>jiē-hui-lai</i> 'meet back'
6	买	<i>mǎi</i>	buy	4	Cause	<i>mǎi-hui-lai</i> 'buy back'
7	弄	<i>nòng</i>	make, do	4	Cause	<i>nòng-NPloc-qu</i> 'get to somewhere' <i>nòng-hui-lai</i> 'get back'

						<i>nòng-xia-lai</i> 'get down'
8	叫	<i>jiào</i>	call	4	Cause	<i>jiào-hui-lai</i> 'call back' <i>jiào-lai</i> 'call'
9	办	<i>bàn</i>	do	2	Cause	<i>bàn-lai</i> 'do'
10	抱	<i>bào</i>	hold in the arms	2	Cause	<i>bào-dao-NPloc</i> 'hold in the arms to' <i>bào-guo-qu</i> 'hold in the arms over'
11	打 (电话)	<i>dǎ (diànhuà)</i>	make (a phone call)	2	Cause	<i>dǎ-lai-diànhuà</i> 'call'
12	调	<i>diào</i>	transfer	2	Cause	<i>diào-guo-lai</i> 'transfer over'
13	分	<i>fēn</i>	distribute; assign; allot	2	Cause	<i>fēn-dao-NPloc-qu</i> 'assign to' <i>fēn-jìn-qu</i> 'assign into'
14	拉	<i>lā</i>	transport by vehicle; drag	2	Cause	<i>lā-chu-qu</i> 'transport by vehicle out' <i>lā-lai</i> 'drag hither'
15	撵	<i>niǎn</i>	oust	2	Cause	<i>niǎn-chu-lai/qu</i> 'oust out'
16	派	<i>pài</i>	send; dispatch; assign; appoint	2	Cause	<i>pài-guo-qu</i> 'send over' <i>pài-lai</i> 'send'
17	搬	<i>bān</i>	displace	1	Cause	<i>bān-guo-qu</i> 'displace to'
18	穿	<i>chuān</i>	put on	1	Cause	<i>chuān-shang</i> 'put on'
19	蹬	<i>dēng</i>	pedal	1	Cause	<i>dēng-hui-qu</i> 'pedal back'
20	发	<i>fā</i>	send off	1	Cause	<i>fā-dao-NPloc-lai</i> 'send off to'
21	放	<i>fàng</i>	put	1	Cause	<i>fàng-hui-qu</i> 'put back'
22	呼	<i>hū</i>	call	1	Cause	<i>hū-lai</i> 'call hither'
23	揪	<i>jiū</i>	hold tight and pull	1	Cause	<i>jiū-qì-lai</i> 'hold tight and pull up'
24	卖	<i>mài</i>	sell	1	Cause	<i>mài-NPloc(nǎr)-qu</i> 'sell somewhere'
25	挪	<i>nuó</i>	move, shift	1	Cause	<i>nuó-jìn-lai</i> 'move into'
26	擒	<i>qín</i>	capture	1	Cause	<i>qín-zǒu</i> 'capture away'
27	取	<i>qǔ</i>	fetch	1	Cause	<i>qǔ-hui-lai</i> 'fetch back'

					<i>qǔ-xia-lai</i> 'fetch down'	
28	娶	<i>qǔ</i> ¹⁴⁰	marry (a woman)	1	Cause	<i>qǔ-hui-lai</i> 'marry back'
29	扔	<i>rēng</i>	throw	1	Cause	<i>rēng-chu-qu</i> 'throw out'
30	塞	<i>sāi</i>	stuff	1	Cause	<i>sāi-jin-lai</i> 'stuff into'
31	挖	<i>wā</i>	discover	1	Cause	<i>wā</i> 'discover'
32	写信	<i>xiěxìn</i>	write (a letter)	1	Cause	<i>xiěxìn-lai</i> 'write (a letter)'
33	挣	<i>zhèng</i>	earn	1	Cause	<i>zhèng-dao-NPloc-lai</i> 'earn to'

Table 39. Verbs expressing Cause in the *MFTY* data (caused motion)

¹⁴⁰ The verb 娶 *qǔ* 'marry (a woman)' can only be followed by Medium-oriented and Goal-oriented satellites, such as 娶过来 *qǔ-guo-lai* [marry.(a.woman)-over-hither] 'take someone as his wife', 娶进门 *qǔ-jin mén* [marry.(a.woman)-into door] 'marry someone home', and 娶回家 *qǔ-hui jiā* [marry.(a.woman)-back-home] 'marry someone home'.

#	Chinese character	Pinyin	Meaning	N=83	Semantics	Compound verb
1	拿	<i>ná</i>	take	18	Cause	<i>ná-chu-lai/qu</i> 'take out' <i>ná-qu</i> 'take away' <i>ná-hui-qu</i> 'take back' <i>ná-guo-lai</i> 'take over' <i>ná-lai</i> take' <i>ná-zǒu</i> 'take away'
2	送	<i>sòng</i>	deliver	9	Cause	<i>sòng-lai/qu</i> 'deliver' <i>sòng-guo-lai/qu</i> 'deliver over' <i>sòng-chu-qu</i> 'deliver out'
3	搬	<i>bān</i>	displace	8	Cause	<i>bān-chu-lai/qu</i> 'displace out' <i>bān-(dao)-NPloc-qu</i> 'displace to' <i>bān-jin-lai</i> 'displace into'
4	接	<i>jiē</i>	receive	7	Cause	<i>jiē-guo-qu</i> 'receive over' <i>jiē-qu</i> 'receive' <i>jiē-chu-qu</i> 'receive out'
5	抱	<i>bào</i>	hold in the arms	4	Cause	<i>bào-chu-lai</i> 'hold in the arms out' <i>bào-hui-lai</i> 'hold in the arms back' <i>bào-qi-lai</i> 'hold in the arms up'
6	调	<i>diào</i>	transfer	4	Cause	<i>diào-dao-NPloc-qu</i>
7	买	<i>mǎi</i>	buy	3	Cause	<i>mǎi-hui-lai</i> 'buy back'
8	弄	<i>nòng</i>	dummy verb: do, get	3	Cause	<i>nòng-dao-NPloc-qu</i> 'get to' <i>nòng-hui-lai</i> 'get back'
9	背	<i>bēi</i>	carry on the back	2	Cause	<i>bēi-qi-lai</i> 'carry on the back up' <i>bēi-xia-qu</i> 'carry on the back down'
10	带	<i>dài</i>	take; bring; carry	2	Cause	-

11	吊	<i>diào</i>	hang	2	Cause	<i>diào-qi-lai</i> 'hang up'
12	扛	<i>káng</i>	carry on the shoulder	2	Cause	<i>káng-guo-lai</i> 'carry on the shoulder over' <i>káng-hui-lai</i> 'carry on the shoulder back'
13	拉	<i>lā</i>	convey by vehicles	2	Cause	<i>lā-hui-lai</i> 'convey by vehicles back'
14	撤	<i>chè</i>	remove	1	Cause	<i>chè-xia-qu</i> 'remove off'
15	抽	<i>chōu</i>	draw	1	Cause	<i>chōu-chu-lai</i> 'draw out'
16	叼	<i>diāo</i>	hold in the mouth	1	Cause	<i>diāo-qu</i> 'hold in the mouth'
17	端	<i>duān</i>	hold sth. level with both hands	1	Cause	<i>duān-qu</i> 'hold sth. level with both hands'
18	轰	<i>hōng</i>	drive off	1	Cause	<i>hōng-chu-qu</i> 'drive off'
19	还	<i>huán</i>	give back	1	Cause	<i>huán-hui-lai</i> 'give back'
20	寄	<i>jì</i>	send	1	Cause	<i>jì-lai</i> 'send'
21	借	<i>jiè</i>	borrow	1	Cause	<i>jiè-guo-lai</i> 'borrow over'
22	举	<i>jǔ</i>	raise	1	Cause	<i>jǔ-qi-lai</i> 'raise up'
23	领	<i>lǐng</i>	lead	1	Cause	<i>lǐng-hui-lai</i> 'lead back'
24	摞	<i>luò</i>	pile up	1	Cause	<i>luò-qi-lai</i> 'pile up'
25	盼	<i>pàn</i>	look forward to	1	Cause	<i>pàn-hui-lai</i> 'look forward to come back'
26	取	<i>qǔ</i>	take	1	Cause	<i>qǔ-chu-lai</i> 'take out'
27	扔	<i>rēng</i>	throw	1	Cause	<i>rēng-dao</i> 'throw to'
28	抬	<i>tái</i>	lift	1	Cause	<i>tái-qi-lai</i> 'lift up'
29	挑	<i>tiāo</i>	pick	1	Cause	<i>tiāo-chu-lai</i> 'pick out'
30	转	<i>zhuǎn</i>	transfer	1	Cause	<i>zhuǎn-NPloc-qu</i> 'transfer to'

Table 40. Verbs expressing Cause in the LZHL data (caused motion)



4.3.2.1. Verbal encoding of Path in the dialogical data

In the dialogical data, verbal encoding is very frequent and accounts for more than one third in both data sets, as illustrated in Table 41.

Coding strategy	<i>MFTY</i> (N=997)		<i>LZHL</i> (N=802)	
verbal encoding	40.2%	(401)	38.0%	(305)

Table 41. Verbal encoding of Path in the dialogical data

As shown earlier in Table 35 and Table 36, the *MFTY* data and the *LZHL* data reveal respectively the use of 16 and 13 Path (or Path + Dynamic Deixis) verbs. Out of them, 8 verbs in the *MFTY* data (see Table 42) and 10 verbs in the *LZHL* data (see Table 43) are used in individual clauses without being combined with other morphosyntactic devices. In both data sets, 来 *lái* 'come', 去 *qù* 'go', 走 *zǒu* 'leave; go away', 到 *dào* 'arrive' ('move to' only in the *MFTY* data), 回 *huí* 'return', 进 *jìn* 'enter', and 上 *shàng* 'move to' ('ascend' only in the *MFTY* data) are used. Let us first look at the use of the above seven verbs, and then 跑 *pǎo* 'run away' in the *MFTY* data, and 出 *chū* 'exit', 过 *guò* 'cross', and 下 *xià* 'descend' in the *LZHL* data.

# Chinese character	Pinyin	Meaning	N=401	Example
1 来	<i>lái</i>	come	186	
2 去	<i>qù</i>	go	175	
3 走	<i>zǒu</i>	leave; go away	12	(448)
4 回	<i>huí</i>	return	9	(450)
5 到	<i>dào</i>	move to	4	(454), (455)
		arrive	2	
6 进	<i>jìn</i>	enter	6	(461)
7 上	<i>shàng</i>	move to	4	(457)
		ascend	2	
8 跑	<i>pǎo</i>	run away	1	(464)

Table 42. Verbs in verbal encoding strategy in the *MZTY* data (spontaneous motion)



#	Chinese character	Pinyin	Meaning	N=317	Example
1	来	<i>lái</i>	come	115	
2	去	<i>qù</i>	go	112	
3	走	<i>zǒu</i>	leave; go away	30	(449)
4	上	<i>shàng</i>	move to	24	(458), (459)
5	回	<i>huí</i>	return	16	(451)
6	到	<i>dào</i>	arrive	7	(453)
7	进	<i>jìn</i>	enter	6	(462)
8	出	<i>chū</i>	exit	3	(465)
9	过	<i>guò</i>	cross	2	(466)
10	下	<i>xià</i>	descend	2	(467)

Table 43. Verbs in verbal encoding strategy in the LZHL data (spontaneous motion)

In this section, we only focus on the verbs lexicalizing Path exclusively (without Dynamic Deixis) and discuss 来 *lái* 'come' and 去 *qù* 'go' further below in §4.4.2 which is devoted to examine the coding strategies of Dynamic Deixis. Let us now look at the use of 走 *zǒu* 'leave; go away', 到 *dào* 'arrive', 回 *huí* 'return', 进 *jìn* 'enter', and 上 *shàng* 'move to'.

The Path verb 走 *zǒu* 'leave' can neither take Ground NPs nor be followed by satellites. As exemplified in (448) and (449), this verb is used alone in both data sets.

(448) 别走! (MFTY_5_1151)

Bié zǒu!
PROH leave
'Don't leave!'

(449) 我们先走了。 (LZHL_5_0228)

Wǒmen xiān zǒu le.
1PL first leave CRS
'We leave first.'

The Path verb 回 *huí* 'return' can either take Ground NPs or be followed by satellites. As point out by Lamarre (2003b: 6), some Path verbs, such as 回 *huí* 'return' and 出 *chū* 'exit' are used very frequently when they are followed by a deictic satellite (e.g., 回来 *huí-lái* [return-hither] 'come back', 出去 *chū-qu* [exit-thither] 'go out') forming compound verbs. We consider such cases as verbal + adverbial encoding and discuss their use in §4.3.2.3. As far as verbal encoding is concerned, 回 *huí* 'return' usually takes two Ground NPs 屋 *wū* 'room' and 家 *jiā* 'home' as Goal argument in both data sets, as in (450) and (451).

(450) 回屋了! (MFTY_6_0358)

Huí	<i>wū</i>	<i>le!</i>
return	room	CRS
'Go back home!'		

(451) 快回家吧! (LZHL_10_4023)

<i>Kuài</i>	huí	<i>jiā</i>	<i>ba!</i>
quickly	return	home	SUG
'Go back home quickly!'			

As we discussed earlier in §4.3.2, the two verbs 到 *dào* 'arrive' and 上 *shàng* 'ascend' can also mean 'move to' in certain patterns, as reviewed in Lamarre (2020) (see examples (437) and (439) in Lamarre's article, and examples (440), (442), (444), and (446) in the data we collected). In the *MFTY* data, the use of 到 *dào* 'arrive' and 上 *shàng* 'ascend' as well as their reading of 'move to' were found. By contrast, in the *LZHL* data, 到 *dào* was only used as 'arrive' and 上 *shàng* only means 'move to'.

Let us first examine the use of 到 *dào* meaning 'arrive' and 'move to'. In its meaning of 'arrive', 到 *dào* was found in both the *MFTY* and the *LZHL* data. As illustrated in examples (452) and (453), this verb can either use alone without combining with other morphosyntactic devices or be followed by a Ground NP.

(452) 明天夏导演就到了。 (MFTY_3_0726)

Míngtiān Xià dǎoyǎn jiù dào le.
tomorrow Xia director at.once arrive CRS
'Director Xia will arrive tomorrow.'

(453) 你到了那上边儿，哪儿也别动。 (LZHL_2_1543)

Nǐ dào-le nèi shàngbiānr, nǎr yě bié dòng.
2SG arrive-PFV there upside where also PROH move
'When you arrived upside, don't move anywhere.'

The use of 到 *dào* with its meaning 'move to' was only attested in the *MFTY* data. Note that the 8 occurrences of 到 *dào* 'move to' found in the *MFTY* data in combination with either 去 *qù* 'go' or 来 *lái* 'come', are all followed by a purpose VP, as in (454) and (455). In Lamarre's (2020), the author explains that in such pattern, illustrated in (456), the bleached motion predicate 到 *dào* 'move to' (or 上 *shàng* 'move to') takes the locative goal NP as its argument, whereas 去 *qù* 'go' and 来 *lái* 'come' are followed by the purpose VP, and seem to recover their 'verbiness'.

(454) 你到那儿去王吧! (MFTY_10_3744)

Nǐ dào nàr qù gàn ba!
2SG move.to there go do SUG
'Go there to work!'

(455) 那你怎么会想要到我们公司来应聘? (MFTY_6_3921)

Nà nǐ zěnmē huì xiǎng yào dào wǒmen gōngsī
then 2SG why can want want move.to 1PL company
lái yìngpìn?
come apply.for.a.post
'Then why do you want to come to our company to apply for a post?'

(456) 到北京去读书 (Lamarre 2020: 135)

Dào Běijīng qù dúshū
move.to Beijing go study
'go to Beijing to study'

Now we look at the use of 上 *shàng* meaning 'ascend' and 'move to'. The use of 上 *shàng* in its meaning 'move to' was identified in both the *MFTY* data and the *LZHL* data. In both data sets, in most of the cases (4 out of 4 in *MFTY* data and 18 out of 24

in LZHL data), the verb 上 *shàng* ‘move to’ was used only followed by the Ground NP without being followed by the satellite 来 *-lai* ‘hither’ or 去 *-qu* ‘thither’, as in (457) and (458). Sometimes (6 out of 24 in LZHL data), the NPloc can also be followed by the purpose VP, as shown in (459).

From the data we collected, the use of 上 *shàng* meaning ‘move to’ seems to have less constraint compared with 到 *dào* which need to be combined with either satellites 来 *-lai* ‘hither’ and 去 *-qu* ‘thither’ or verbs 来 *lái* ‘come’ and 去 *qù* ‘go’ to have the reading of ‘move to’.

(457) 您上哪儿啊? (MFTY_2_1528)

<i>Nín</i>	shàng	<i>nǎr</i>	<i>a?</i>
2SG.HON	move.to	where	PRT

‘Where are you going?’

(458) 我马上上医院。 (LZHL_10_4058)

<i>Wǒ</i>	<i>mǎshàng</i>	shàng	<i>yīyuàn.</i>
1sg	immediately	move.to	hospital

‘I am going to the hospital immediately.’

(459) 上刘大爷那儿看看! (LZHL_4_1510)

Shàng	<i>liú</i>	<i>dàye</i>	<i>nàr</i>	<u><i>kàn-kan!</i></u>
move.to	Liu	uncle	there	<u>look-RDP</u>

‘Go to take a look at Uncle Liu’s home!’

The use of 上 *shàng* with its meaning ‘ascend’ was only attested in MFTY data, as in (460). The 2 occurrences in which 上 *shàng* ‘ascend’ was used were all followed by the NPloc 楼 *lóu* ‘stairs’ thus entailing a reading of vertical motion of the verb 上 *shàng*.

(460) 咱们上楼! (MFTY_5_1916)

<i>Zánmen</i>	shàng	<i>lóu!</i>
1pl.incl	ascend	stairs

‘Let’s go upstairs!’

Concerning the verb 进 *jìn* ‘enter’, it was used either alone or followed by a Ground NP indicating the Goal (usually 屋 *wū* ‘room’ in the data), as illustrated in (461) and (462), respectively.

(461) 请**进**! (MFTY_1_4103)

Qǐng **jìn!**
please **enter**
'Come in please!'

(462) 赶紧**进**屋! (LZHL_10_1824)

Gǎnjǐn **jìn** wū!
immediately **enter** room
'Enter the house immediately!'

Now let us examine the verb 跑 *pǎo* 'run away' which was found exclusively in the *MFTY* data. This verb can either be used as a Manner verb meaning 'run' which occupies the Co-event slot, or as a Path verb meaning 'run away', as illustrated in (463) and (464), respectively. When used as a Path verb, neither a Ground NP nor a deictic satellite can follow it.

(463) 你又**跑**回来干吗? (MFTY_1_1134)

Nǐ yòu **pǎo-hui-lai** gàn má?
2SG again **run-back-hither** do what
'Why are you running back again (towards the deictic center)?'

(464) 跟那个夜总会的聂老板**跑**了。 (MFTY_8_0806)

Gēn nèi gè yèzǒnghuì de Niè lǎobǎn **pǎo** le.
with that CL nightclub GEN Nie boss **run.away** CRS
'(She) ran away with the boss Nie of the nightclub.'

The three verbs 出 *chū* 'exit', 过 *guò* 'cross', and 下 *xià* 'descend' found only in the *LZHL* data were all followed by a Ground NP, as in (465)-(467).

(465) 刚**出**厕所, [...] (LZHL_1_1155)

Gāng **chū** cèsuǒ, [...]
just **exit** toilet
'(The moment when she) just got out of the toilet, [...]'

(466) 捂着这脑袋**过**马路吧, [...] (LZHL_1_1203)

Wǔ-zhe zhè nǎodai **guò** mǎlù ba, [...]
cover-DUR this head **cross** road PRT
'(She) crossed the road coving her head, [...]'



- (467) 云芳，穿鞋下地！ (LZHL_1_3854)
Yúnfāng, chuān xié xià dì!
 Yunfang put.on shoe **descend** floor
 ‘Yunfang, put on your shoes and get down to the floor!’
 (Context: Yunfang is in her bed and Damin asked her to put on her shoes and get out of bed.)

4.3.2.2. Adverbial encoding of Path in the dialogical data

Although the adverbial encoding (i.e., the use of satellites) is considered as the most frequently used coding strategy by Talmy (2000), it is less frequent in the dialogical data than the verbal encoding (over one third). As illustrated in Table 44, the adverbial encoding accounts for around 23% in both data sets.

Coding strategy	MFTY (N=997)	LZHL (N=802)
adverbial encoding	24.0%(239)	23.7%(190)

Table 44. Adverbial encoding of Path in the dialogical data

In the *MFTY* data and the *LZHL* data, the following eight satellites were use in both data sets: 回 *-huí* ‘back’, 过 *-guò* ‘across, over, past, through’, 到 *-dao* ‘to’, 出 *-chu* ‘out’, 进 *-jin* ‘into’, 下 *-xia* ‘down’, 走 *-zǒu* ‘away’, and 起 *-qi* ‘up’. The satellite 上 *-shang* ‘up’ was only found in the *MFTY* data, as shown in Table 45 and Table 46. These satellites usually combine with verbs expressing either Manner (see Table 37 and Table 38) or Cause (see Table 39 and Table 40), and are followed by either Ground NPs or deictic satellites.

#	Chinese character	Pinyin	Meaning	N=82	Example
1	回	<i>-hui</i>	back	25	(468)
2	过	<i>-guo</i>	across, over, past, through	16	(471)
3	到	<i>-dao</i>	to	15	(482)
4	出	<i>-chu</i>	out	9	(472)
5	进	<i>-jin</i>	into	7	(477)
6	上	<i>-shang</i>	up	3	(480), (481)



7	下	- <i>xia</i>	down, off	3	(478)
8	走	- <i>zǒu</i>	away	3	(484)
9	起	- <i>qi</i>	up	1	(474)

Table 45. Satellites in adverbial encoding strategy in the *MFTY* data

#	Chinese character	Pinyin	Meaning	N=66	Example
1	出	- <i>chu</i>	out	18	(473)
2	回	- <i>hui</i>	back	13	(469)
3	到	- <i>dao</i>	to	11	(483)
4	过	- <i>guo</i>	across, over, past, through	9	(470)
5	起	- <i>qi</i>	up	7	(475)
6	进	- <i>jin</i>	into	3	(476)
7	走	- <i>zǒu</i>	away	3	(485)
8	下	- <i>xia</i>	down, off	2	(479)

Table 46. Satellites in adverbial encoding strategy in the *LZHL* data

Note that only Path satellites are listed in the tables above, either followed by Ground NPs or deictic satellites. When deictic satellites are used without Path satellites (e.g., 拿去 *ná-qu* [take-thither] 'take (it) away'), such cases will be discussed in §4.4.2 devoted to the adverbial encoding of Dynamic Deixis.

As far as the adverbial encoding is concerned, we noticed that Path satellites are followed predominantly by Ground NPs in the descriptive data (only the *Trajectoire* data showing spontaneous motion), accounting for 86%. By contrast, Path satellites are followed frequently by deictic satellites in the dialogical data (both data sets), accounting for 74.4% and 75%, as illustrated in Table 47. Our results confirms a similar phenomenon that the one observed by Lamarre (2013: 182) who compares the use of Path satellites in different constructions between data extracted from a TV series (dialogues) and from a novel. The author found that Path satellites followed by deictic satellites are used much more frequently in data



of the TV series (92%) than of the novel (46%) and thus addresses the importance of examining two types of data showing discursive differences.

Data		Co-event verb + Path satellite + Ground NP + deictic satellite	Co-event verb + Path satellite + Ground NP	Co-event verb + Path satellite + deictic satellite	Co-event verb + Path satellite
Descriptive data	<i>Trajectoire</i> (N=179)	-	86.0% (154)	14.0% (25)	-
	<i>Put & Take</i> (N=153)	-	8.5% (13)	27.5% (42)	64.0% (98)
Dialogical data	<i>MFTY</i> (N=82)	19.5% (16)	-	74.4% (61)	6.1% (5)
	<i>LZHL</i> (N=66)	16.7% (11)	3.0% (2)	75.8% (50)	4.5% (3)

Table 47. Comparison of the use of Path satellites in the descriptive and the dialogical data



Let us examine the use of Path satellites in Table 45 and Table 46. First, we look at 回 *-hui* 'back', 过 *-guò* 'across, over, past, through', 出 *-chu* 'out', and 起 *-qi* 'up'. These satellites were all followed by deictic satellites (来 *-lai* 'hither' or 去 *-qu* 'thither'), except 起 *-qi* 'up' which can only be followed by 来 *-lai* 'hither', as illustrated in (468)-(475) in both data sets.

(468) 你又跑回来干吗? (MFTY_1_1134)

Nǐ yòu pǎo-hui-lai gàn má?
2SG again run-**back**-hither do what
'Why are you running back again (towards the deictic center)?'

(469) 麻烦你帮你嫂子把这凳子拿回去! (LZHL_5_1918)

Máfan nǐ bāng nǐ sǎozi bǎ zhè dèngzi ná-hui-qu!
trouble 2SG help 2SG sister-in-law OM this stool take-**back**-thither
'Please help your sister-in-law take this stool back (away from the deictic center)!'

(470) 一大群马跑过来。 (LZHL_4_2913)

Yí dà qún mǎ pǎo-guo-lai.
one large group horse run-**over**-hither
'A large group of horses ran over (towards the deictic center).'

(471) 你给妈把电视搬过去吧! (MFTY_6_4047)

Nǐ gěi mā bǎ diànshì bān-guo-qu ba!
2SG BEN mother OM television displace-**over**-thither SUG
'Move the TV to Mom (away from the deictic center)!'

(472) 我偷着跑出来了。 (MFTY_3_3058)

Wǒ tōuzhe pǎo-chu-lai le.
1SG secretly run-**out**-hither CRS
'I sneaked out.'
(Lit. I ran out secretly (towards the deictic center).)

(473) 大民，先把梯子搬出去! (LZHL_1_1721)

Dàmin, xiān bǎ tīzi bān-chu-qu!
Damin first OM ladder displace-**out**-thither
'Damin, move out the ladder first (away from the deictic center)!'



(474) 睡了也得给她揪起来。 (MFTY_2_2213)

Shuì le yě děi gěi tā jiū-qǐ-lai.
sleep PFV also must BEN 3SG hold.tight.and.pull-up-hither
'(We) have to pull her up even if she fell asleep.'

(475) 大伙儿把杯举起来。 (LZHL_4_3622)

Dàhuǒr bǎ bēi jǔ-qǐ-lai.
all.of.us OM glass raise-up-hither
'Everyone raise your glasses.'

The two Path satellites 进 *-jin* 'into' and 下 *-xia* 'down' were found to be followed by either deictic satellites (e.g., (476), (478)) or Ground NPs and deictic satellites (e.g., (477), (479)), in both data sets.

(476) 我帮你把它搬进来。 (LZHL_9_3718)

Wǒ bāng nǐ bǎ tā bān-jìn-lai.
1SG help 2SG OM 3SG displace-into-hither
'I will help you move it in (towards the deictic center).'

(477) 赶紧把这拿进储藏室去! (MFTY_8_0931)

Gǎnjǐn bǎ zhè ná-jìn chǔcángshì -qu!
immediately OM this take-into storeroom -thither
'Take this into the storeroom immediately (away from the deictic center)!'

(478) 快把那取下来! (MFTY_5_4244)

Kuài bǎ nèi qǔ-xià-lai!
quickly OM that take-down-hither
'Take that down quickly (towards the deictic center)!'

(Context: Take the refrigerator down from the luggage van)

(479) 我蹭下楼去。 (LZHL_3_0911)

Wǒ cèng-xià lóu -qu.
1SG drag.along-down stairs -thither
'I drag along downstairs (away from the deictic center).'

(Context: Damin said to his little sister who is a nurse that if needed, he would carry his wife who is pregnant on his back and go downstairs by dragging.)

The Path satellite 上 *-shang* 'up' was only found in the *MFTY* data and was used either followed by deictic satellites (in (480)), or alone (in (481)).



(480) 韩梦，你坐上来！ (MFTY_2_2341)

Hán Mèng, nǐ zuò-shang-lai!

Han Meng 2SG sit-up-hither

'Hanmeng, sit up (towards the deictic center)!'

(Context: Cheng Zhang, the husband of Han Meng, who is riding a tricycle, asked his wife to come onto the tricycle by sitting.)

(481) 穿上！ (MFTY_1_0923)

Chuān-shang!

put.on-up

'Put (it) on!'

Regarding the Path satellites 到 *-dao* 'to', it is followed by both Ground NPs and deictic satellites, as in (482) and (483). As for 走 *-zǒu* 'away', this Path satellite can only be used alone without being followed by neither Ground NPs nor deictic satellites, as in (484) and (485).

(482) 您明天不能搬到这儿来！ (MFTY_1_3637)

Nín míngtiān bù néng bān-dao-zhèr-lai!

2SG.HON tomorrow NEG can move-to-here-hither

'You can't move here tomorrow (towards the deictic center)!'

(483) 他们要把我调到喷漆工段去。 (LZHL_9_0029)

Tāmen yào bǎ wǒ diào-dao-pēnqī-gōngduàn-qu.

3PL be.about.to OM 1SG transfer-to-spray.paint-section-thither

'They are going to transfer me to the painting section.'

(484) 把衣服拿走！ (MFTY_6_4405)

Bǎ yīfu ná-zǒu!

OM clothes take-away

'Take your clothes away!'

(485) 云芳，信拿走！ (LZHL_9_1129)

Yúnfāng, xìn ná-zǒu!

Yunfang letter take-away

'Yunfang, take the letter away!'



4.3.2.3. Combination of different encodings of Path in the dialogical data

The dialogical data revealed the use of four possible combinations of different encodings, namely, a) verbal + adverbial encoding, b) adnominal + adverbial encoding, c) adnominal + verbal + adverbial encoding, and d) adnominal + verbal encoding. All of the four combinations were found in both the *MFTY* data and the *LZHL* data. Among these combined coding strategies, verbal + adverbial encoding is the dominant one, accounting for 34.6% and 37.5% in each data set, as illustrated in Table 48. Apart from this encoding, the other three combined coding strategies were relatively rare. One thing in common is that they all involve the adnominal encoding. Below we look at each of the four combined coding strategies.

Coding strategy	<i>MFTY</i> (N=997)	Coding strategy	<i>LZHL</i> (N=802)
verbal + adverbial encoding	34.6% (345)	verbal + adverbial encoding	36.4% (292)
adnominal + adverbial encoding	0.8% (8)	adnominal + verbal + adverbial encoding	1.2% (10)
adnominal + verbal + adverbial encoding	0.7% (7)	adnominal + verbal encoding	0.4% (3)
adnominal + verbal encoding	0.4% (2)	adnominal + adverbial encoding	0.2% (2)

Table 48. Combination of different encodings of Path in the dialogical data

Let us first look at the verbal + adverbial encoding. We found only one order in this strategy: verbal + adverbial. There are mainly four different cases. In the first case, Path verbs are only followed by deictic satellites (i.e., 来 *-lai* 'hither', 去 *-qu* 'thither'), as illustrated in (486) and (487). In the second case, Path verbs co-occur only with associated motion markers, as in (488) and (489). In the third case, Path verbs followed by deictic satellites co-occur with associated motion markers, as in (490) and (491). In the fourth case, Path verbs

are followed by both Path satellites and deictic satellites, as exemplified in (492) and (493).

In terms of the occurrences, the first case (290 out of 345 in the *MFTY* data, 241 out of 292 in the *LZHL* data) is used more frequently than the second (46 out of 345 in the *MFTY* data, 40 out of 292), the third (7 out of 345 in the *MFTY* data, 6 out of 292 in the *LZHL* data), and the fourth (3 out of 345 in the *MFTY* data, 5 out of 292 in the *LZHL* data) cases.

(486) 善大爷，我回来了。 (MFTY_4_4424)

Shàn-dàye *wǒ* *huí-lai* *le.*
Shan-uncle 1SG return-hither CRS
'Uncle Shan, I came back.'

(487) 姐，别出去！ (LZHL_5_3314)

Jiě, *bié* *chū-qu!*
sister PROH exit-thither
'Sister, don't go out!'

(488) 明天上医院看看去！ (LZHL_3_3535)

Míngtiān *shàng* *yīyuàn* *kàn-kan=qu*
tomorrow move.to hospital see-RDP=GO&DO
'Tomorrow go to the hospital and see!'

(489) 去睡去吧！ (MFTY_5_2025)

Qù *shuì=qu* *ba!*
go sleep=GO&DO SUJ
'Go to sleep!'

(490) 进来坐来！ (MFTY_4_1627)

Jin-lai *zuò-lai!*
enter-hither sit-COME&DO
'Come in and have a sit!'



(491) 妈，您赶紧过去看看去吧！ (LZHL_10_2137)

Mā, nín gǎnjǐn guò-qu kàn-kan=qu ba!
Mum 2SG.HON immediately **pass-thither** see-RDP=**GO&DO** SUG
'Mum, go over immediately and take a look at!'

(492) 快退回去！ (MFTY_4_3314)

Kuài tuì-hui-qu!
quickly **move.backwards-back-thither**
'Go back quickly!'

(493) 这个掉下来了。 (LZHL_2_3537)

Zhè gè diào-xia-lai le.
this CL **fall-down-hither** CRS
'This (the decoration from the ceiling) fell down (towards the deictic center).'

Concerning the adnominal + verbal + adverbial encoding, two possible orders have been identified. The first order is the adnominal + verbal + adverbial encoding in which the adnominal encoding was only occupied by PPs, as shown in (494). As to the second order, the verbal + adnominal + adverbial encoding, the adnominal encoding in this strategy was only occupied by localizers, as in (495).

(494) 赵姨已经从老家回来一阵子了。 (MFTY_9_0502)

Zhào yí yǐngjīng cóng lǎojiā huí-lai yízhènzǐ le.
Zhao aunt already **from** hometown **return-hither** for.a.while CRS
'Aunt Zhao has already been back from her hometown for a while (towards the deictic center).'

(495) 干完活儿了，咱上大街上好好儿看看去！ (LZHL_10_1615)

Gàn-wán huór le, zán shàng dàjiē=dàjiē=shang
do-finish work CRS 1PL.INCL **move.to** street=**upside**
hǎohǎor kàn-kan-qu!
carefully look.at-RDP-**thither**

'After finishing the work, let's take a good look on the street (away from the deictic center)!'

With regard to the adnominal + adverbial encoding, two orders were attested in both data sets. In the first order the adnominal + adverbial encoding, only PPs were involved, as in (496). By contrast,

in the second order the adverbial + adnominal encoding, only localizers were used, as in (497).

(496) 你从哪儿拿出来的? (MFTY_4_1824)

<i>Nǐ</i>	cóng	<i>nǎr</i>	<i>ná-chu-lai</i>	<i>de?</i>
2SG	from	where	take-out-hither	PRT

'Where did you take (the chess piece) out (towards the deictic center)?'

(497) 你给它扔到茅坑里! (LZHL_7_0349)

<i>Nǐ</i>	<i>gěi</i>	<i>tā</i>	<i>rēng-dao</i>	<i>máokēng=li!</i>
2SG	BEN	3SG	throw-to	cesspit=inside

'Throw it into the cesspit!'

Regarding the adnominal + verbal encoding, we only found one order: adnominal + verbal. Note that in this coding strategy, either PPs or PPs with localizers can co-occur with Path verbs which are only deictic verbs 来 *lái* 'come' and 去 *qù* 'go', as in (498) and (499).

(498) 我能往哪儿去呀? (MFTY_5_1054)

<i>Wǒ</i>	<i>néng</i>	wǎng	<i>nǎr</i>	qù	<i>ya?</i>
1SG	can	towards	where	go	PRT

'Where can I go?'

(499) 你往屋里来! (LZHL_10_1255)

<i>Nǐ</i>	wǎng	<i>wū=li</i>	lái!
2SG	towards	room=inside	come

'Come into the room!'

4.4. Coding strategies of Dynamic Deixis in the data

After having examined the coding strategies in the expression of Path in §4.3, we will now investigate the coding strategies used in the expression of Dynamic Deixis. We may note that some examples of the encoding of Dynamic Deixis presented in this section might have already been given in §4.3, especially for the cases in which 来 *lái/-lai/=qu* 'come/-hither/=COME&DO' and 去 *qù/-qu/=qu* 'go/-

thither/=GO&DO' are used. Let us first look at the use of Dynamic Deixis in the descriptive data and then in the dialogical data.

4.4.1. Coding strategies of Dynamic Deixis in the descriptive data

As introduced previously in Chapter 2 (§2.4), Dynamic Deixis can be encoded by deictic verbs (i.e., 来 *lái* 'com', 去 *qù* 'go'), deictic satellites (i.e., 来 *-lai* 'hither', 去 *-qu* 'thither'), and associated motion markers (i.e., 来 *-lai* 'COME&DO', 去 *-qu* 'GO&DO') in Standard Chinese. Note that both deictic verbs and associated motion markers are absent in the descriptive data for Dynamic Deixis encoding.

4.4.1.1. Adverbial encoding of Dynamic Deixis in the descriptive data

In the descriptive data, the adverbial encoding was used to express Dynamic Deixis by means of the deictic satellites 来 *-lai* 'hither' and 去 *-qu* 'thither'. As illustrated in Table 49, the encoding of Dynamic Deixis in the *Trajectoire* data showing spontaneous motion (35.1%) is more frequent in the *Put & Take* data showing caused motion (22.0%).

Coding strategy	<i>Trajectoire</i> (N=672)	<i>Put & Take</i> (N=736)
adverbial encoding	35.0% (235)	22.0% (162)

Table 49. Adverbial encoding of Dynamic Deixis in the descriptive data

In the *Trajectoire* data, when Dynamic Deixis is expressed, it usually co-occurs with other morphosyntactic devices expressing Path. As illustrated in (500), the deictic satellite 来 *-lai* 'hither' co-occurs with the prepositional phrase and the localizer 从石头上 *cóng shítou=shang* 'from the upside of the stone' and the satellite 下 *-xia* 'down' expressing Path. Similarly, in (501), 去 *-qu* 'thither' co-occurs with the prepositional phrase and the localizer 从山洞中 *cóng shāndòng=zhong* 'from the inside of the cave' and the satellite 出 *-chu* 'out'. Among the 235 occurrences of the adverbial encoding, 177 of them co-occur with both prepositional phrases (with or without

localizers depending on the nature of the Ground) and satellites expressing Path.

(500) 男孩儿从石头上蹦下来。 (Traj_034_S10)

Nánháir cóng shítou=shang bèng-xia-lai.
 boy from stone=upside jump-down-hither
 'The boy jumped down from the stone (towards the deictic center).'

(501) 一个女孩儿从山洞中走出去。 (Traj_029_S2)

Yí gè nǚháir cóng shāndòng=zhong zǒu-chu-qu.
 one CL girl from cave=in.the.center.of walk-out-thither
 'A girl walked out of the cave (away from the deictic center).'

The deictic satellites 来 *-lai* 'hither' and 去 *-qu* 'thither' can also co-occur with just prepositional phrases (without Path satellites, e.g., (502) without localizers, (503) with localizers) or with just Path satellites (without PPs, e.g., (504), (505)). Such cases only account for a small number of the adverbial encoding, only 58 out of 235 occurrences.

(502) 一个女生从远处走来。 (Traj_051_S2)

Yí gè nǚshēng cóng yuǎnchù zǒu-lai.
 one CL girl from afar walk-hither
 'A girl came from afar.'

(503) 一群人向湖边走去。 (Traj_066_S12)

Yì qún rén xiàng hú=biān zǒu-qu.
 one group people towards lake=side walk-thither
 'A group of people walked towards the lake (away from the deictic center).'

(504) 一位女士走了过来。 (Traj_051_S11)

Yí wèi nǚshì zǒu-le-guo-lai.
 one CL lady walk-PFV-over-hither
 'A woman came over walking.'

(505) 男孩儿蹦上去了。 (Traj_062_S5)

Nánháir bèng-shang-qu le.
 boy jump-up-thither CRS
 'The boy jumped up (away from the deictic center).'

The use of deictic satellites 来 *-lai* 'hither' and 去 *-qu* 'thither' in the *Trajectoire* data has confirmed an observation made by Liú (1998: 36) based on a written corpus. The author points out that when the deictic satellites are preceded by intransitive verbs such as 走 *zǒu* 'walk', 跑 *pǎo* 'run', they usually require PPs introduced by 朝 *cháo* 'towards', 向 *xiàng* 'towards', and 往 *wǎng* 'towards', etc., preceded by these verbs.

The adverbial encoding of Dynamic Deixis in the *Put & Take* data shows the same tendency as in the *Trajectoire* data. When Dynamic Deixis is encoded by 来 *-lai* 'hither' or 去 *-qu* 'thither', it is usually accompanied by at least two morphosyntactic devices from different word classes expressing Path. Such cases account for the majority of adverbial encoding (124 out of 162 occurrences). As illustrated in (506), the localizer 里 *=li* 'inside' and the satellite 出 *-chu* 'out' encoding Path co-occur with the deictic satellite 来 *-lai* 'hither'. In example (507), the prepositional phrase and the localizer 从那个人的脑袋上 *cóng nèi gè rén de nǎodai=shang* 'from the head of that man' together with the satellite 下 *-xia* 'off' expressing Path co-occur with the satellite 去 *-qu* 'thither'.

(506) 他把箱子里的橘子拿出出来了。 (P&T_111_S5)

Tā bǎ xiāngzi=li de júzi ná-chu-lai le.
3SG OM box=inside GEN orange take-out-hither CRS
'He took out the orange from the box (towards the deictic center).'

(507) 他把一朵花从那个人的脑袋上拿下去了。 (P&T_118_S4)

Tā bǎ yì duǒ huā cóng nèi gè rén de
3SG OM one CL flower from that CL person GEN
nǎodai=shang ná-xia-qu le.
head=upside take-off-hither CRS
'He took a floor off that man's head (away from the deictic center).'

When Dynamic Deixis is expressed by 来 *-lai* 'hither', we also found the following case in which only Path satellites co-occur with deictic satellites, as shown in (508).



- (508) 他把香蕉夹起来了。 (P&T_103_S5)
 Tā bǎ xiāngjiāo jiā-qi-lai le.
 3SG OM banana press.from.both.sides-up-hither CRS
 'He picked up the banana (towards the deictic center).'

4.4.1.2. Combination of different encodings of Dynamic Deixis in the descriptive data

In the descriptive data, one combined coding strategy, the adnominal + adverbial encoding, was found in the expression of Dynamic Deixis. This strategy is attested in the *Trajectoire* data only (i.e., in spontaneous motion) and accounts for 0.9%.

Coding strategy	<i>Trajectoire</i> (N=672)	<i>Put & Take</i> (N=736)
adnominal + adverbial encoding	0.9% (6)	-

Table 50. Combination of different encodings of Dynamic Deixis in the descriptive data

In the adnominal + adverbial encoding, Ground NPs which follow a preposition must be the first person pronouns, either 我 *wǒ* 'I' or 我们 *wǒmen* 'us'. All the six descriptions in the *Trajectoire* data used the prepositional phrase 向我们 *xiàng wǒmen* 'towards us' and the deictic satellite 来 *-lai* 'hither' to encode Dynamic Deixis, as in (509). Besides, we also find cases in which other morphosyntactic devices (e.g., PPs and Path satellites) expressing Path encoded together with Dynamic Deixis, as in (510).¹⁴¹

¹⁴¹ Note that we do not include deictic demonstrative (e.g., 这儿 *zhèr* 'here') which is not used with other deictic elements. Only expressions with first person pronouns equivalent to the meanings 'to my place/our place', 'towards me/us' are in the scope of our investigation.

(509) 一个男人向我们走来。 (Traj_035_S12)

Yí gè nánrén xiàng wǒmen zǒu-lai.
one CL man towards 1PL walk-hither
'A man walks towards us (towards the deictic center).'

(510) 这个女孩儿从树旁边向我们走过来。 (Traj_032_S5)

Zhè gè nǚháir cóng shù=pángbiān xiàng wǒmen zǒu-guò-lai.
this CL girl from tree=beside towards us walk-over-hither
'The girl walks towards us from the tree (towards the deictic center).'

4.4.2. Coding strategies of Dynamic Deixis in the dialogical data

In the dialogical data, deictic verbs (i.e., 来 *lái* 'come', 去 *qù* 'go'), deictic satellites (i.e., 来 *-lai* 'hither', 去 *-qu* 'thither'), and associated motion markers (i.e., 来 *-lai* 'COME&DO', 去 *-qu* 'GO&DO') were found to encode Dynamic Deixis.

4.4.2.1. Verbal encoding of Dynamic Deixis in the dialogical data

As we discussed earlier in §4.4.1, no verbal encoding was found in the descriptive data to encode Dynamic Deixis. By contrast, the dialogical data reveal the frequent use of verbal encoding. This coding strategy accounts for over one third in the *MFTY* data and over one quarter in the *LZHL* data.

Coding strategy	<i>MFTY</i> (N=997)	<i>LZHL</i> (N=802)
verbal encoding	36.3% (362)	28.6% (229)

Table 51. Verbal encoding of Dynamic Deixis in the dialogical data

Both deictic verbs 来 *lái* 'come' and 去 *qù* 'go' can be used in the absence of the Figure, as illustrated in (511) and (512). When the Figure is expressed overtly, it can be either animate (e.g., (513)-(514)) or inanimate (e.g., (515)). Only the deictic verb 来 *lái* 'come' is attested with an inanimate Figure in the data set under study.



Table 52 shows the presence and absence of the Figure in verbal encoding. In both data sets, expression with the Figure being explicitly expressed is a bit more frequent than without a Figure.

(511) 马上就**来**。 (MFTY_4_3659)

<i>Mǎshàng</i>	<i>jiù</i>	<i>lái.</i>
immediately	at.once	come
'(I) will come immediately.'		

(512) 快去**吧**！ (LZHL_5_3334)

<i>Kuài</i>	<i>qù</i>	<i>ba!</i>
quickly	go	SUJ
'Go quickly!'		

(513) 大方**来**了。 (MFTY_8_2627)

<i>Dàfāng</i>	<i>lái</i>	<i>le.</i>
Dafang	come	CRS
'Dafang came.'		

(Context: Lao Wang, the neighbor of Han Meng, told her that the colleague of her husband came to their house.)

(514) 云芳，你**先**去！ (LZHL_8_3525)

<i>Yúnfāng,</i>	<i>nǐ</i>	<i>xiān</i>	<i>qù!</i>
Yunfang	2SG	first	go
'Yunfang, you go first!'			

(515) 导演，饭**来**了。 (MFTY_4_3317)

<i>Dǎoyǎn,</i>	<i>fàn</i>	<i>lái</i>	<i>le.</i>
director	meal	come	CRS
'Director, the food is here.'			

(Context: The lunch ordered for the whole team is delivered.)



	MFTY data (N=362)		LZHL data (N=229)	
Figure (+) ¹⁴²	52.8%	(191)	62.0%	(142)
Figure (-)	47.2%	(171)	38.0%	(87)

Table 52. Verbal encoding of Dynamic Deixis with/without a Figure

In the above examples, (511)-(515), the Ground information was not expressed overtly and can be inferred from the context. In the case in which 来 *lái* 'come' is used, the Ground usually refers to a place where the speaker is located at the moment of speaking. When 去 *qù* 'go' is used, the Ground is often a place that is known mutually by the speaker and the hearer.

In the examples below, both deictic verbs take directly the Ground NP as their argument, as 这儿 *zhèr* 'here' being followed by 来 *lái* 'come' and 医院 *yīyuàn* 'hospital' being followed by 去 *qù* 'go' in (516) and (517), respectively. Besides, we also found the case in which 来 *lái* 'come' is preceded by a Ground NP and is followed by a Figure, as in (518), as existential sentence (cf. Chapter 2, §2.4.1). We note that regardless of the position of the Ground NP, it does not co-occur very frequently with deictic verbs, as shown in Table 53. Thus deictic verbs tend to be used without any Ground NP.

(516)	你	老	来	这儿	啊?	(MFTY_2_1621)
	<i>Nǐ</i>	<i>lǎo</i>	<i>lái</i>	<i>zhèr</i>	<i>a?</i>	
	2SG	always	come	here	PRT	
	'Do you always come here?'					

¹⁴² The use of inanimate Figures accounts for 20 out of 191 occurrences in the MFTY data and 36 out of 136 occurrences in the LZHL data.

(517) 赶紧去医院!

(LZHL_8_3431)

Gǎnjǐn qù yīyuàn!
hurriedly go hospital

'Go to the hospital hurriedly!'

(Context: The child of Damin and Yunfang has got a fever at home, Damin said to his wife Yunfang that they need to bring their child to the hospital immediately.)

(518) 成长哥，总务处来人了。

(MFTY_1_1718)

Chéng Zhǎng gē, zǒngwùchù lái rén le.
Cheng Zhang brother office.of.general.services come person CRS

'Brother Cheng Zhang, someone from the Office of general affairs came.'

	MFTY data (N=362)	LZHL data (N=229)
Ground NP (+) ¹⁴³	18.0% (65)	15.3% (35)
Ground NP (-)	82.0% (297)	84.7% (194)

Table 53. Verbal encoding of Dynamic Deixis with/without a Ground NP

In addition to the above cases, the deictic verbs 来 *lái* 'come' and 去 *qù* 'go' were also found to be followed by purpose VPs, as exemplified in (519) and (520). Moreover, we have also identified the use of 去 *qù* 'go' being followed by a Ground NP and a purpose VP simultaneously, as shown in (521). As illustrated in Table 54, in both data sets, cases in which deictic verbs followed by purpose VPs are less frequent.

¹⁴³ The Ground NP precedes the deictic verb 来 *lái* 'come' forming existential sentence accounts for 3 occurrences in the MFTY data and 1 occurrence in the LZHL data.

(519) 你要是不听，明天局保卫处的人来处理。 (MFTY_2_1343)

Nǐ yàoshi bù tīng, míngtiān júbǎowèichù de rén
2SG if NEG listen tomorrow security.office GEN person
lái chǔlǐ.
come deal.with

'If you don't listen, the person from the security office will come to deal with it tomorrow.'

(520) 礼拜天我去看您。 (LZHL_8_1945)

Lǐbàitiān wǒ qù kàn nín.
sunday 1SG go see 2SG.HON

'I will go to see you on Sunday.'

(521) 你去车间问问吧！ (MFTY_6_3159)

Nǐ qù chējiān wèn-wèn ba!
2SG go workshop ask-RDP SUG

'Go to the workshop and ask!'

	MFTY data (N=362)	LZHL data (N=229)
purpose VP (+) ¹⁴⁴	22.9% (83)	11.4% (26)
purpose VP (-)	77.1% (279)	88.6% (203)

Table 54. Verbal encoding of Dynamic Deixis with/without a purpose VP

4.4.2.2. Adverbial encoding of Dynamic Deixis in the dialogical data

The adverbial encoding was used predominantly in the dialogical data, accounting for almost 60% in both data sets. Two morphosyntactic devices are involved to express Dynamic Deixis: deictic satellites and associated motion markers.

¹⁴⁴ The purpose VP co-occurring with a Ground NP accounts for 10 occurrences in the MFTY data and 1 occurrence in the LZHL data.



Coding strategy	MFTY (N=997)	LZHL (N=802)
adverbial encoding	58.6% (584)	59.4% (476)

Table 55. Adverbial encoding of Dynamic Deixis in the dialogical data

Let us first look at the use of deictic satellites. Two deictic satellites, 来 *-lai* 'hither' and 去 *-qu* 'thither' were preceded by verbs conveying different meanings (i.e., Path, Manner, and Cause). When a verb expressing Path is used, the deictic satellite (来 *-lai* 'hither' or 去 *-qu* 'thither') usually directly follows the verb, as illustrated in (522) and (523). Such case accounts for over 97% in both data sets, as shown in Table 56. Our result has confirmed the statement made by Lamarre (2008a: 76) who claims that patterns like (522) and (523) with Path verbs followed by deictic satellites are overwhelmingly prevalent in dialogues (more than 90%). Besides, we also found the case in which a Path satellite is inserted between the Path verb and the deictic satellite, as in (524) and (525). However, this case is quite rare in both data sets.

(522) 云芳，你进**来**吧！ (LZHL_2_2438)

Yúnfāng, nǐ jìn-**lai** ba!
Yunfang 2SG enter-**hither** SUJ
'Yunfang, come in!'

(523) 现在就回**去**！ (MFTY_1_4432)

Xiànzài jiù huí-**qu**!
now at.once return-**thither**
'Go back now!'

(524) 这个掉**下**来了。 (LZHL_2_3537)

Zhè gè diào-**xià-lai** le.
this CL fall-**down-hither** CRS
'This (the decoration from the ceiling) fell down (towards the deictic center).'

(525) 快退**回**去！ (MFTY_4_3314)

Kuài tuì-**huí-qu**!
quickly move.backwards-**back-thither**
'Go back quickly!'



	MFTY (N=302)		LZHL (N=251)	
Path satellite (+)	2.3%	(7)	2.4%	(6)
Path satellite (-)	97.7%	(295)	97.6%	(245)

Table 56. Deictic satellites preceded by Path verbs with/without Path satellites

When a verb expresses Manner or Cause, its combination with a Path satellite is different in contrast to a verb expressing Path. As can be seen from examples (526) and (527), verbs expressing Manner are usually followed by both Path satellites and deictic satellites. The case in which Manner verbs are followed only by deictic satellites (without Path satellites being explicitly expressed) are less frequent and are sometimes found to be inserted by Ground NPs in between, as in (528) and (529). This case can be explained by the omission of the Goal marker 到 *-dao* 'to' which is acceptable in northern Mandarin, especially in Beijing colloquial, as pointed out in Lamarre (2009: 150). Therefore, by adding 到 *-dao* 'to' in examples (528) and (529), one can say as follows in (530) and (531). The above tendency of the use or non-use of Path satellite between Manner verbs and deictic satellites is illustrated in Table 57.

(526) 一大群马跑过来。 (LZHL_4_2913)

Yí dà qún mǎ pǎo-guo-lai.
one large group horse run-over-hither

'A large group of horses ran over (towards the deictic center).'

(527) 这回是我，我搬出去。 (MFTY_1_0756)

Zhè huí shì wǒ, wǒ bān-chu-qu.
this time be 1SG 1SG move-out-thither

'This time is me, I (will) move out (away from the deictic center).'

(528) 你怎么跑这儿来了? (MFTY_7_4536)

Nǐ zěnmē pǎo zhèr -lai le?
2SG why run here -hither CRS

'Why did you come here running?'



(529) 怕你想不开钻车轱辘底下去。 (LZHL_2_0157)

Pà nǐ xiǎngbukāi zuān chē gūlu
be.afraid.of 2SG take.things.too.hard sneak car wheel
dǐxia **-qu**
beneath **-thither**

'(Your mom) is afraid that you take things too hard and sneak beneath the wheel of the car.'

(530) 你怎么跑到这儿来了?

Nǐ zěnmē pǎo-dào zhèr -lai le?
2SG why run-to here **-hither** CRS

'Why did you come here running?'

(531) 怕你想不开钻到车轱辘底下去。

Pà nǐ xiǎngbukāi zuān-dào chē gūlu
be.afraid.of 2SG take.things.too.hard sneak-to car wheel
dǐxia **-qu**
beneath **-thither**

'(Your mom) is afraid that you take things too hard and sneak beneath the wheel of the car.'

	MFTY (N=34)		LZHL (N=9)	
Path satellite (+)	61.8%	(21)	66.7%	(6)
Path satellite (-)	38.2%	(13)	33.3%	(3)

Table 57. Deictic satellites preceded by Manner verbs with/without Path satellites

When a verb expressing Cause precedes a deictic satellite, the case in which a Path satellite is inserted between the Cause verb and deictic satellite (e.g., (532), (533)) is more frequent than without the use of a Path satellite (e.g., (534), (535)), as illustrated in Table 58.

(532) 别忘了把围棋拿来啊! (MFTY_4_1430)

Bié wàng le bǎ wéiqí ná-xià-lai a!
PROH forget PFV OM go[game] take-down **-hither** PRT

'Don't forget to take down the game of go (towards the deictic center)!'



(533) 大民，先把梯子搬出去！ (LZHL_1_1721)

Dàmin, xiān bǎ tīzi bān-chū-qu!
Damin first OM ladder displace-out-thither
'Damin, move the ladder out first (away from the deictic center)!'

(534) 钱给你带来了。 (LZHL_10_2715)

Qián gěi nǐ ná-lai le.
money BEN 2SG take-hither CRS
'(I've) brought you the money (towards the deictic center).'

(535) 拿去！ (MFTY_8_1900)

Ná-qu!
take-thither
'Take (it) away!'
(Context: Gu San said to Shasha: "take the money away".)

	MFTY (N=95)	LZHL (N=74)
Path satellite (+)	61.1% (58)	74.3% (55)
Path satellite (-)	38.9% (37)	25.7% (19)

Table 58. Deictic satellites preceded by Cause verbs with/without Path satellites

We will now look at the use of associated motion markers which convey Dynamic Deixis. This type of the adverbial encoding is only attested in the dialogical data (accounting for more than 24%) but not in the descriptive data (oral corpus) analyzed in our dissertation. However, in Lamarre's (2020: 139) descriptive data (written corpus), such strategy has been found in a novel accounting for 21.5%. The non-use and use of associated motion markers in descriptive data showed that even within the same data type, coding strategy might vary depending on the genre of the data (oral vs. written). As introduced in Chapter 2 (§2.4.2.2), the associated motion markers usually associate with a non-motion verb. This can be illustrated in (536) and (537).



(536) 我，出差来了。(MFTY_2_0304)

Wǒ, chūchāi=lái le.
 1SG go.on.business=**COME&DO** CRS
 'Me, I am on a business trip (towards the deictic center).'

(537) 干活儿去!(LZHL_9_0051)

Gànhuór=**qu!**
 work=**GO&DO**
 'Go to work!'

In addition to the use of deictic satellites or associated motion markers to encode Dynamic Deixis, we also found the use of both morphosyntactic devices, as in (538) and (539). Such combined coding strategy is very rare which account for only 1.3% and 1.4% in the *MFTY* and the *LZHL* data. In Lamarre's analysis of the descriptive data (from novel), such strategy is also used less frequently (2%). In Chapter 5 (§5.4.2), we will discuss in depth the redundant encoding of Dynamic Deixis. Table 59 below illustrates the use of different morphosyntactic devices in adverbial encoding of Dynamic Deixis in the dialogical data.

(538) 进来坐来!(MFTY_4_1627)

Jin-lai zuò-lai!
 enter-hither sit-**COME&DO**
 'Come in and have a sit!'

(539) 待会儿咱们过去吃饭去!(MFTY_10_2051)

Dāihuìr zánmen guò-qu chīfàn-qu!
 later 1PL.INCL pass-thither eat-**GO&DO**
 'Let's go over there and have dinner later!'

Morphosyntactic device	<i>MFTY</i> (N=584)		<i>LZHL</i> (N=476)	
deictic satellite	73.9%	(431)	70.2%	(334)
associated motion marker	24.7%	(145)	28.4%	(135)
deictic satellite + associated motion marker	1.3%	(8)	1.4%	(7)

Table 59. Morphosyntactic devices used in adverbial encoding in the dialogical data

4.4.2.3. Combination of different encodings of Dynamic Deixis in the dialogical data

In the dialogical data, we found one combined encoding in the expression of Dynamic Deixis, that is, the verbal + adverbial encoding. This strategy is quite rare in both data sets and accounts for only 2.5% in the *MFTY* data and 0.4% in the *LZHL* data (see Table 60).

Coding strategy	<i>MFTY</i> (N=997)	<i>LZHL</i> (N=802)
verbal + adverbial encoding	2.5% (25)	0.4% (3)

Table 60. Combination of different encodings of Dynamic Deixis in the dialogical data

When the above strategy is used, the deictic verb (来 *lái* 'come' or 去 *qù* 'go') usually co-occurs with the associated motion marker, as in (540) and (541). Besides, we also found 2 occurrences exclusively in the *MFTY* data showing the case in which the deictic verb co-occurs with the deictic satellite (e.g., (542), (543)).

(540) 来取货来了。 (MFTY_6_3145)

Lái *qǔ* *huò=lai* *le.*
come take delivery=**COME&DO** CRS
 '(I) came to take goods.'

(541) 妈，您先去吃去吧！ (MFTY_6_0803)

Mā, *nín* *xiān* *qù* *chī=qu* *ba!*
 mum 2SG.HON first **go** eat=**GO&DO** **SUG**
 'Mum, go to eat first!'

(542) 你去把那韩经理的自行车搬来！ (MFTY_7_0929)

Nǐ *qù* *bǎ* *Hán* *jīnglǐ* *de* *zìxíngchē* *bān-lai.*
 2SG **go** OM Han director GEN bicycle displace-**hither**
 'Go (over there) and move Director Han's bicycle here (towards the deictic center)!'



(543) 你去把果果抱到王奶奶家去! (MFTY_7_4423)

Nǐ qù bǎ Guǒguo bào-dao Wáng nǎinai jiā -qu!
2SG go OM Guoguo hold.in.the.arms-to Wang grandma house -thither
'Go and carry Guoguo to grandma Wang's house!'

4.5. Summary and discussion

The analysis of the Standard Chinese data presented in this chapter has shown different coding strategies available for the expression of Path and Dynamic Deixis. Furthermore, the data of two types, descriptive and dialogical, has revealed some important results showing similarities and differences with respect to the use of these strategies.

In particular, based on the typology proposed by Wälchli (2001), namely, verbal, adverbial, and adnominal encoding, we found 7 coding strategies in the encoding of Path and 3 in the encoding of Dynamic Deixis.

Regarding the encoding of Path, we found that:

- In the descriptive data (see Table 61), both the *Trajectoire* data (spontaneous motion) and the *Put & Take* data (caused motion) displayed the adnominal + adverbial encoding, the adverbial encoding, and the adnominal encoding. Besides, the *Trajectoire* data also revealed the adnominal + verbal + adverbial encoding, the verbal + adverbial encoding, the verbal encoding, and the adnominal + verbal encoding. Among these coding strategies, the dominant strategy used to express Path relies on the combination of the adnominal and adverbial encoding. What's more, the adverbial encoding and the adnominal encoding are also frequent in both data sets. The data showing spontaneous motion (*Trajectoire* data) revealed a preference for the adverbial encoding against adnominal encoding, while the data displaying caused motion (*Put & Take* data) revealed a preference for the use of the adnominal than the adverbial encoding.



- In the dialogical data (see Table 62), both the *MFTY* and the *LZHL* data revealed the use of the verbal encoding, the verbal + adverbial encoding, the adverbial encoding, the adnominal + verbal + adverbial encoding, the adnominal + adverbial encoding, the adnominal + verbal encoding. Among the above coding strategies, the verbal encoding was used predominantly. In addition to this strategy, the verbal + adverbial encoding and adverbial encoding are also used frequently in both data sets.

Coding strategy	<i>Trajectoire</i> (N=672)		Coding strategy	<i>Put & Take</i> (N=736)	
adnominal + adverbial encoding	56.8%	(382)	adnominal + adverbial encoding	51.9%	(382)
adverbial encoding	26.6%	(179)	adnominal encoding	27.3%	(201)
adnominal encoding	10.1%	(68)	adverbial encoding	20.8%	(153)
adnominal + verbal + adverbial encoding	2.7%	(18)	-		
verbal + adverbial encoding	1.6%	(11)	-		
verbal encoding	1.5%	(10)	-		
adnominal + verbal encoding	0.6%	(4)	-		

Table 61. Coding strategies of Path in the descriptive data



Coding strategy	<i>MFTY</i> (N=997)	Coding strategy	<i>LZHL</i> (N=802)
verbal encoding	40.2% (401)	verbal encoding	38.0% (305)
verbal + adverbial encoding	34.6% (345)	verbal + adverbial encoding	36.4% (292)
adverbial encoding	24.0% (239)	adverbial encoding	23.7% (190)
adnominal + adverbial encoding	0.8% (8)	adnominal + verbal + adverbial encoding	1.2% (10)
adnominal + verbal + adverbial encoding	0.7% (7)	adnominal + adverbial encoding	0.4% (3)
adnominal + verbal encoding	0.4% (2)	adnominal + verbal encoding	0.2% (2)

Table 62. Coding strategies of Path in the dialogical data

Concerning the encoding of Dynamic Deixis. We observed that:

- In the descriptive data (see Table 63), two coding strategies have been attested: the adverbial encoding and the adnominal + adverbial encoding. The adverbial encoding, as the most frequent used strategy, was found in both the *Trajectoire* and the *Put & Take* data. The adnominal + adverbial encoding was also found in the *Trajectoire* data.
- In the dialogical data (see Table 64), three coding strategies have been found in both the *MFTY* and the *LZHL* data: the adverbial encoding, the verbal encoding, the verbal + adverbial encoding. Among them, adverbial encoding is the most widely used. Besides, the verbal encoding is also frequently used.



Coding strategy	<i>Trajectoire</i> (N=672)		<i>Put & Take</i> (N=736)	
adverbial encoding	35.0%	(235)	22.0%	(162)
adnominal + adverbial encoding	0.9%	(6)	-	

Table 63. Coding strategies of Dynamic Deixis in the descriptive data

Coding strategy	<i>MFTY</i> (N=997)		<i>LZHL</i> (N=802)	
adverbial encoding	58.6%	(584)	59.4%	(476)
verbal encoding	36.3%	(362)	28.6%	(229)
verbal + adverbial encoding	2.5%	(25)	0.4%	(3)

Table 64. Coding strategies of Dynamic Deixis in the dialogical data

The question that arises is how do our findings regarding the coding strategies relate to previous studies. Firstly, in the Standard Chinese data under analysis, the encoding of Path revealed the frequent use of the adverbial encoding (i.e., satellites) in both the descriptive (over 26%) and the dialogical data (over 23%). This result supports partially Talmy's typology (2000) in which in Standard Chinese satellites are used frequently to encode Path. However, by comparing Path encoding in the descriptive and the dialogical data, we found that they show different tendency. The descriptive data revealed the tendency to use the combined encoding as a dominant strategy (over 50%), i.e., the adnominal + adverbial encoding, whereas the dialogical data show the tendency to favor the use of the verbal encoding (over 38%) and the verbal + adverbial encoding (over 34%). In previous studies, Lamarre (2013: 185) also compares the coding strategies between the dialogical (from TV series) and the descriptive data (from novel). In her analysis, Path encoded by verbs accounts for 93% in the dialogical data and 53% in the descriptive data (written corpus). The frequent use of verbs to encode Path in our dialogical data has confirmed one of the observations made by Lamarre. Nevertheless, in our descriptive data (oral corpus), Path encoding by means of verbs only accounts for 6.4%, which is quite rare.



Secondly, concerning the encoding of Dynamic Deixis, both the descriptive and the dialogical data revealed the dominant use of the adverbial encoding. Such observataion corresponds partly to Talmy and other linguists' classifications in which Dynamic Deixis is considered a component of Path since they show the same frequent use of satellites. However, the dialogical data also rely frequently on verbs to encode Dynamic Deixis.

From the above findings, we notice that the data type plays a very important role in the selection of coding strategies. The descriptive data revealed more frequently the use of the adnominal + adverbial encoding for Path and the adverbial encoding for Dynamic Deixis. By contrast, the dialogical data revealed dominantly the use of the verbal encoding for Path, and the adverbial encoding for Dynamic Deixis. Besides, the event type also plays a crucial role within the descriptive data. To encode Path, the spontaneous motion data (*Trajectoire* data) rely more on the adverbial encoding whereas the caused motion data (*Put & Take*) rely more on the adnominal encoding. To encode Dynamic Deixis, the spontaneous motion data (*Trajectoire* data) resort to the combined coding strategy, i.e., the adnominal + adverbial encoding while such strategy is absent in the caused motion data (*Put & Take* data). Hence, the data show that the coding strategy used for the expression of Path and Dynamic Deixis in Standard Chinese depends not only on the language structure but also on other important factors, such as the type of data (descriptive vs. dialogical) and the type of motion event (spontaneous vs. caused).

Chapter 5

PATTERNS OF PATH AND DYNAMIC DEIXIS DISTRIBUTION

5.1. Introduction

In Chapter 4, we have presented the coding strategies found in the expression of Path and Dynamic Deixis. These strategies revealed the use of different morphosyntactic devices. In this chapter, we will address the topic of the patterns of distributed semantics in order to examine how each of the morphosyntactic devices contributes to the construction of different information of Path and Dynamic Deixis. Our main aim is to uncover the similarities and differences in patterns of distribution of different portion(s) of Path (i.e., Source vs. Medium vs. Goal, Source + Medium vs. Source + Goal vs. Medium + Goal vs. Source + Medium + Goal) and different direction(s) of Dynamic Deixis (i.e., centripetal vs. centrifugal, centripetal + centrifugal).

To address the issue, we analyze the Standard Chinese data by applying the *distributed spatial semantics* approach proposed by Sinha & Kuteva (1995). This approach is very important since the spatial relational semantic information is not exclusively carried in languages over one single form-class but can be distributed over different form-classes, as argued by the authors.

We structure the present chapter as follows: section 5.2 provides a brief introduction to Sinha & Kuteva's (1995) approach. Sections 5.3 and 5.4 explain how we applied this approach to the

analysis of Standard Chinese in both the descriptive and the dialogical data regarding patterns of Path and Dynamic Deixis distribution respectively. Section 5.5 draws a comparison between the two semantic components in order to capture their similarities and differences.

5.2. Distributed spatial semantics approach

In their paper *Distributed Spatial Semantics*, Sinha & Kuteva (1995) discuss the encoding of spatial relational semantic information, especially the Path of motion, in different languages. By reviewing the *local semantics* approach (Miller & Johnson-Laird 1976; Landau & Jackendoff 1993; Svorou 1994) in which a given linguistic conceptualization is mapped to a single selection from a single form class, the authors show that this approach is far from satisfying in analyzing spatial relational meaning. Therefore, they propose the distributed semantics approach in which a given semantic type is mapped to different form classes. More precisely, the authors argue that the spatial relational meaning is not mapped exclusively onto the locative particle (e.g., closed syntactic classes such as spatial prepositions), as suggested in the local semantics approach, but can be distributed over several elements of the clause.

By examining the encoding of Path in various languages, especially Bulgarian, Danish, Dutch, English, Ewe, Japanese and Tzeltal, Sinha & Kuteva (1995: 173) observe that:

- (a) all languages exhibit a distributed spatial semantics;
- (b) the “weighting” of different form classes for the expression of spatial relational meaning varies across languages;
- (c) languages also vary in terms of the extent to which the underlying distributed semantics of space is *manifest* or *overt* in the linguistic expression.

Concerning the third point (c), the authors (1995: 181) elaborate their view as follows: “one dimension of language typology is the extent to which the distributed semantics of spatial relations receives explicit expression”. They further distinguish *covertly distributed spatial semantics* from *overtly distributed spatial semantics*. In the former case, spatial semantics is not explicitly conveyed. By contrast, in the latter case, spatial semantics is conveyed explicitly.

English is a good example of a language with a covertly distributed spatial semantics. In (544), the preposition ‘across’ is optional and can be omitted in certain conditions in which it can be recovered from the linguistic context. Therefore, the profiling of Path in this example is not conflated in the verb of motion, but covertly distributed across the verb (i.e., *swam*) and the Ground NP (*the river*), as illustrated in (545).

(544) *The girl swam ACROSS† the river.* (Sinha & Kuteva 1995: 181)

(545) *The girl swam the river.*

It should be noted that not all the prepositions in English are optional. In example (546), the omission of the preposition IN(TO) is not permitted and the sentence in (547) is thus ungrammatical. Sinha & Kuteva (1995) point out that the verb *insert* differs from other verbs like *swim* in that the former one requires in all contexts a Direct Object and cannot be used intransitively. And such verb requires two arguments (expressed, if nominalized, respectively by a Direct Object NP and a Locative NP). As further explained by the authors (1995: 183): “it is a general fact about English that it does not allow the combination of Direct Object and Locative NP unless the latter is a part of a PP”.

(546) *insert the plug IN(TO) the socket* (Sinha & Kuteva 1995: 182)

(547) **insert the plug the socket* (ibid.)

According to Sinha & Kuteva (1995), Japanese in general has a more overtly distributed spatial semantics than English. The example (548) shows that spatial relational meaning is regularly expressed by simultaneous selections from the verb *ireru* 'insert', the noun *naka* 'inside', and the postposition *ni*. Besides, the authors point out that the locative Path information may be "redundantly" expressed by both the verb and the noun which do not profile the change of location in the same way. The verb *ireru* 'insert' behaves more like the English verb *insert* which indicates the initiation of the action whereas the noun *naka* 'inside' denotes the Goal of the movement. Nouns like *naka* 'inside' in Japanese are called 'paronymic nouns' by Sinha & Kuteva (1995) which correspond to the localizers (i.e., relational nouns) in Standard Chinese. Furthermore, both the noun and the postposition in the Japanese example may optionally be omitted.

- (548) Japanese (adapted from Sinha & Kuteva 1995: 186)
*Sensei wa hon o hako (no naka)† ni # ireru*¹⁴⁵
 Professor TOPIC book OBJ box (GEN-inside) LOC insert.PRES
 'The professor puts the book in the box.'

By virtue of their linguistic characteristics, languages like English seem to express the spatial meaning more covertly than languages such as Japanese. However, it is important to point out that within the same language, spatial information might be expressed in both ways, as is the case for English in examples (545) and (546).

Sinha & Kuteva (1995: 187) identify two main patterns of distribution that are labelled **redundancy** and **differentiation**. According to the authors, the example (548) from Japanese shows a redundant pattern in which "the same 'narrow' spatial relational schematization may be expressed by simultaneously overt selections from different form classes". The example (550) from Bulgarian illustrates a differentiated pattern in which "a different

¹⁴⁵ The marker † refers to optional and # optional in colloquial speech.

kind of overtly expressed pattern of distributed spatial pattern” is used. Moreover, under the redundant pattern, the authors also identify a sub-pattern labelled *parallelism* in which there is usually “the repetition of the same (basic) morpheme”, an expression structure which is strongly dispreferred in English (e.g., **The man crossed ACROSS the road*).

Bulgarian is a good example to illustrate both the parallel pattern and the differentiated pattern. According to Sinha & Kuteva (1995: 187), “the combination of verbal prefix and preposition is a regular and frequently employed means for the expression of spatial relational meaning in Bulgarian”.

As shown in (549), the same morpheme (i.e., *do* ADJACENT+CONTACT) appears twice in this example. The first *do* is used as a verbal prefix, and the second *do* as a preposition. Both of them express the same spatial relational meaning ‘adjacent’ plus ‘contact’.

In (550), the spatial relational meaning is distributed over the verbal prefix *pre* ‘through’ and the preposition *nad* ‘above/over’. Each of them contributes a different spatial relational meaning in terms of which the referential situation is conceptualized. As explained by the authors, the prefix expresses the directed path and the preposition expresses the spatial relation between the Figure and the Ground at the vertical axis.

(549) Bulgarian	(adapted from Sinha & Kuteva 1995: 188)		
<i>Tja</i>	<i>dopǎlzja</i>	<i>do</i>	<i>vratata.</i>
She	ADJACENT+CONTACT.crept	ADJACENT+CONTACT	door.the
‘She crept up to the door.’			

(550) Bulgarian	(adapted from Sinha & Kuteva 1995: 187)		
<i>Samoletăt</i>	<i>preletja</i>	<i>nad</i>	<i>grada.</i>
plane.the	through.flew	above/over	town.the
‘The plane flew over the town.’			

To better illustrate the distinctive features of the patterns proposed by Sinha & Kuteva (1995), the relation among these patterns can be schematized in Figure 18.

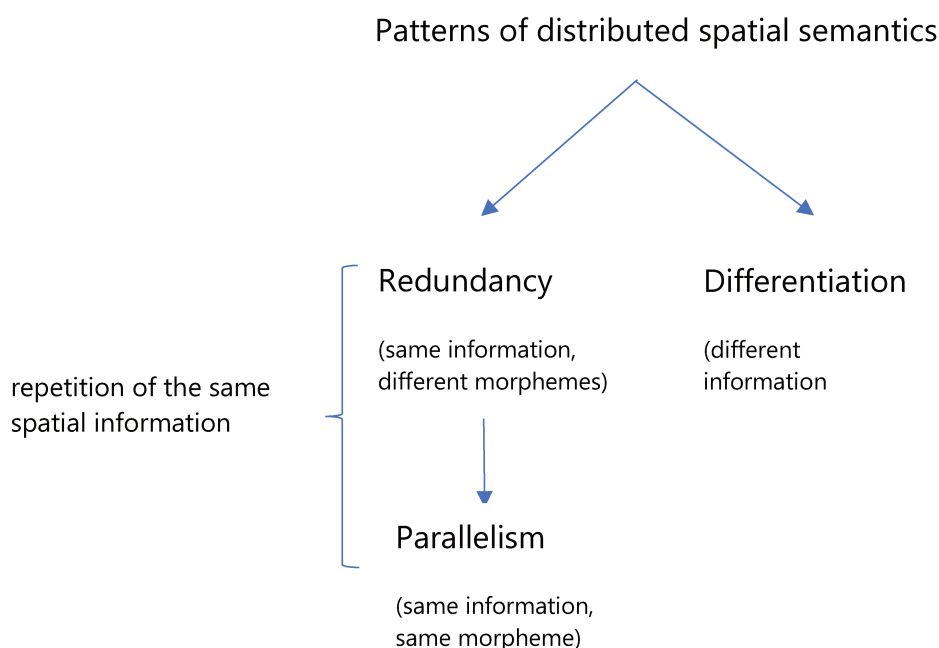


Figure 18. Distributed spatial semantics¹⁴⁶

5.3. Patterns of distribution in the expression of Path

In order to investigate the patterns of distribution in the expression of Path in Standard Chinese, we distinguish simple Path (i.e., Source-oriented Path, Medium-oriented Path, and Goal-oriented Path) from complex Path (i.e., Source + Medium-oriented Path, Medium + Goal-oriented Path, Source + Goal-oriented Path, and Source + Medium + Goal-oriented Path) in terms of the spatial semantics being expressed by different patterns. We use the abbreviated forms Source, Medium, and Goal to refer to Source-oriented Path, Medium-oriented Path, and Goal-oriented Path. It is important to underline that the terms, Source, Medium, and Goal, used in this dissertation not only refer to the noun phrases (usually in adnominal encoding by means of prepositional phrases and localizers)

¹⁴⁶ See also De Pasquale's (2017: 181) and Parajuli's (2021: 427) adaptations for the analyses of Ancient Greek and Nepali, respectively.

expressing the initial, the intermediate, and the final Grounds, but also includes verbal and adverbial expressions that indicate Source-oriented, Medium-oriented, and Goal-oriented Paths. The same principle is also applied to complex Path.

Below we provide some examples showing the cases in which verbal and adverbial expressions are considered as conveying the meaning of Source, Medium, and Goal and the cases in which they are excluded from our analysis. The same principle is also applied to Chapter 6 when we examine the Source-Goal (a)symmetry. Regarding the verbal encoding, verbs like 下 *xià* 'descend' followed by the Ground NP 地 *dì* 'floor' in (551) express the Goal. Note that the same verb 下 *xià* 'descend', among other Path verbs, can also be followed by Source and Medium Ground NPs, such as 下床 *xià chuáng* [descend bed] 'get out of bed' and 下台阶 *xià táijiē* [descend step] 'get down steps'. When these verbs are used without being followed by any Ground NP, as in (552), such cases are excluded in our count since only the direction is indicated. However, there are other Path verbs which can be followed exclusively by a Ground NP indicating one specific portion of Path, such as 回 *huí* 'return' in 回屋 *huí wū* [return room] 'return to the room' expressing the Goal. Cases in which 回 *huí* 'return' is used without being followed by any Ground NP, as in (553), is still considered in our count since it expressed Goal-oriented Path.

(551) 云芳，穿鞋下地！ (LZHL_1_3854)

<i>Yúnfāng,</i>	<i>chuān</i>	<i>xié</i>	<i>xià</i>	<u><i>dì!</i></u>
Yunfang	put.on	shoe	descend	<u>floor</u>

'Yunfang, put on your shoes and get down to the floor!'

(Context: Yunfang is in her bed and Damin asked her to put on her shoes and get out of bed.)

(552) 快下来吧！ (LZHL_7_2128)

<i>Kuài</i>	<i>xià-lai</i>	<i>ba!</i>
quickly	descend-hither	SUG

'Come down quickly!'

(553) 你回来! (LZHL_1_1509)

Nǐ huí-lai!
2SG return-hither
'Come back!'

Concerning the adverbial encoding, we consider the satellite 下 *-xia* 'down, off' used in (555) and (554) as conveying the meaning of Source and Medium, respectively, since it is followed by the Ground NPs 石壁 *shíbì* 'cliff' and 楼 *lóu* 'stairs'. Cases like (556) are excluded from our count since the satellite 下 *-xia* 'off' in this example is not followed by any Ground NP and thus only implies the direction of motion. Note that not all the satellites without being followed by any Ground NP are excluded, cases like (557) in which 回 *-hui* 'back' expresses the Goal are considered in our analysis.

(554) 男孩儿跳下了石壁。 (Traj_064_S9)

Nánhái er tiào-xia-le shíbì.
boy jump-off-PFV cliff
'The boy jumped off the cliff.'

(555) 我蹭下楼去。 (LZHL_3_0911)

Wǒ cèng-xia lóu -qu.¹⁴⁷
1SG drag.along-down stairs -thither
'I drag along downstairs (away from the deictic center).'

(556) 快给我弄下来! (MFTY_5_0544)

Kuài gěi wǒ nòng-xia-lai!
quickly BEN 1SG get-off-hither
'Get (it) off for me now!'

(557) 你妈把琴给你买回来了。 (LZHL_10_3221)

Nǐ mā bǎ qín gěi nǐ mǎi-hui-lai le.
2SG mum OM piano for 2SG buy-back-hither CRS
'Your mum bought the piano for you (towards the deictic center).'

Before presenting different patterns of Path distribution, let us look at how Sinha & Kuteva's (1995) approach is applied to Standard Chinese. As presented in Chapter 2 (§2.3), various morphosyntactic

¹⁴⁷ According to the context, 楼 *lóu* here refers to 楼梯 *lóutī* 'stairs'.



devices, including verbs, satellites, prepositions, and localizers, share the task of Path encoding. Examples (558) and (559) show respectively the redundant pattern and the differentiated pattern. In (558), the same type of spatial information (i.e., one portion of Path, here Source) is repeated within the clause by means of the preposition 从 *cóng* 'from', the localizer 上 =*shang* 'upside', and the satellite 下 -*xia* 'down'. Note that prepositions in Standard Chinese only encode Path meanings such as 'from', 'to', etc., whereas localizers (or relational nouns) profile the configuration of the Figure with respect to the Ground. This can be seen from the literal translation of (558). Localizers in Standard Chinese, sometimes optional and sometimes compulsory, correspond to paronymic nouns like in Japanese or postpositions like in Ewe. In (559), different pieces of spatial information (i.e., more than one portion of Path, here Source and Goal) is expressed within the clause by the preposition 从 *cóng* 'from' and the verb 回 *huí* 'return'.

(558) 男孩儿从石头上蹦下来。 (Traj_034_S10)

Nánháir cóng shítou=shang bèng-xia-lai.
 boy from stone=upside jump-down-hither

'The boy jumped down from the stone (towards the deictic center).'

(Lit. 'The boy jumped down from the upside of the stone (towards the deictic center).')

(559) 赵姨已经从老家回来一阵子了。 (MFTY_9_0502)

Zhào yí yǐngjīng cóng lǎojiā huí-lai yízhènzǐ le.

Zhao aunt already from hometown return-hither for.a.while CRS

'Aunt Zhao has already been back from her hometown for a while (towards the deictic center).'

5.3.1. Redundant distribution pattern of Path

In the redundant pattern, the same semantic information may be redundantly expressed by different morphemes in the clause. Since Path is a complex notion, in order to investigate the redundant distribution pattern, each portion of Path, i.e., Source, Medium, and Goal, has been analyzed on its own. In the Standard Chinese data under study, we observed that Source, Medium, and Goal all display

redundancy. Let us examine the expression of each spatial semantics in turn. In order to analyze the redundant distribution pattern of Source (i.e., the initial part of Path), Medium (i.e., the intermediate part of Path), and Goal (i.e., the final part of Path), we first extracted all the clauses expressing each spatial information respectively from the data.

5.3.1.1. Redundant distribution pattern of Source

In the *Trajectoire* data (i.e. spontaneous motion), the Source information can simultaneously appear in two or three morphosyntactic slots within a single clause. The data show that redundancy of Source tends to be more frequent in three different morphemes (107 out of 119 occurrences) than in two different morphemes (12 out of 119 occurrences).¹⁴⁸

In example (560), the Source is simultaneously expressed by the preposition 从 *cóng* 'from', the localizer 中 =*zhong* 'in the center of', and the satellite 出 -*chu* 'out'. More precisely, each of the three morphemes participates in Source encoding by focusing on different aspects. The preposition 从 *cóng* 'from' being followed by the Ground NP 山洞 *shāndòng* 'cave' denotes the point of departure whence motion takes place. The localizer 中 =*zhong* 'in the center of' profiles the initial configuration of the Figure (i.e., 女孩儿 *nǚhái* 'girl') with respect to the Ground (i.e., 山洞 *shāndòng* 'cave'). The satellite 出 -*chu* 'out' emphasizes the direction of the Path (i.e., from inside to outside) which involves a boundary-crossing event. Similarly, in example (561), the Source can also be simultaneously expressed by the preposition 从 *cóng* 'from', the localizer 里 =*li* 'inside', and the verb 出 *chū* 'exit'.

¹⁴⁸ Note that the examples showing different patterns in the data are presented by order of frequency (from more to less frequent).

(560) 一个女孩儿从山洞中走出去。 (Traj_029_S2)

Yí gè nǚhái **cóng** shāndòng=**zhong** zǒu-**chu**-qu.
 one CL girl **from** cave=**in.the.center.of** walk-**out**-thither
 'A girl walked out of the cave (away from the deictic center).'
 (Lit. A girl walked out from the inside of the cave (away from the deictic center).)

(561) 男孩儿从大海里出来。 (Traj_032_S9)

Nánhái **cóng** dàhǎi=**li** **chū**-lai.
 boy **from** sea=**inside** **exit**-hither
 'The boy came out of the sea.'
 (Lit. The boy came out from the inside of the sea.)

In (562), the preposition 从 *cóng* 'from' and the satellite 出 -*chu* 'out' both contribute to Source encoding. The only difference between examples (560) and (562) is the omission of the localizer which follows the Ground NP in (562). The localizer in Standard Chinese can sometimes be omitted when the Ground NP is a place word with an inherently locative value, such as 山洞 *shāndòng* 'cave'. Such omission does not entail any loss of meaning since the preposition and the satellite capture the essential meaning of Source.

(562) 一个女人从山洞走了出去。 (Traj_025_S7)

Yí gè nǚrén **cóng** shāndòng zǒu-le-**chu**-qu.
 one CL woman **from** cave walk-PFV-**out**-thither
 'A woman walked out of the cave (away from the deictic center).'

Another case in which the Source information is redundantly conveyed by two different morphemes is illustrated in (563). In this example, Source is distributed in the localizer 里 =*li* 'inside' and the verb 出 *chū* 'exit'. If we compare examples (561) and (563), both of them comprise the localizer and the verb. The only difference is the lack of the Source preposition in (563). However, a Source preposition before a Ground NP is not impossible in presentative sentences that denote an apparition, as shown in (564). As far as the redundant distribution pattern of Source is concerned, the omission of preposition is acceptable only in the case of locative Verb-Subject constructions (e.g., (563), (564)), i.e., if the clause is a presentative

sentence showing the following order, (Prep) + NPloc + V + Figure (Arslangul 2019, forthcoming in Chinese narrative). Based on this rule, the omission of preposition in Topic-Comment clauses like (561) would be ungrammatical. Apart from localizers and verbs, we also found the presentative sentences convey the Source information by means of localizers and satellites, as illustrated in (565). Similarly, prepositions are optional and can be used before the Ground NP in (566) following the same rule.

(563) 山洞里出来了一个小孩儿。 (Traj_030_S11)

Shāndòng=li chū-lai-le yí gè xiǎoháir.
cave=inside exit-hither-PFV one CL child

'A child came out of the cave.'

(Lit. (From) the inside of the cave, came out a child.)

(564) 从树林里出来了一个男士。 (Traj_055_S5)

Cóng shùlín=li chū-lai-le yí gè nánshì.
from forest=inside exit-hither-PFV one CL man

'A man came out of the forest.'

(Lit. From the inside of the forest, came out a man.)

(565) 山洞里走出了另外一个小孩儿。 (Traj_030_S7)

Shāndòng=li zǒu-chu-le líng yí gè xiǎoháir.
cave=inside walk-out-PFV another one CL child

'Another child exited the cave.'

(566) 从庄稼地里走出来了一个穿着红衣服的女孩儿。 (Traj_038_S5)

Cóng zhuāngjiadi=li zǒu-chu-lai-le yí gè
from cropland=inside walk-out-hither-PFV one CL

chuān-zhe hóng yīfu de nǚháir.

wear=DUR red clothes GEN girl

'A girl wearing red clothes walked out of the cropland.'

Other cases in which the Source information is redundantly expressed over two different morphemes is by means of the preposition and the localizer (e.g., (567)) and the preposition and the verb (e.g., (568)).

(567) 女孩儿从丛林中走来。 (Traj_051_S9)

Nǚháir cóng cónglín=zhong zǒu-lai.
 girl from jungle=in.the.center.of walk-hither
 'The girl comes from the jungle walking.'

(568) 她从密林出来。 (Traj_048_S11)

Tā cóng mìlín chū-lai.
 3SG from thick.forest exit-hither
 'She came out of the thick forest.'

In the *Put & Take* data (i.e., caused motion), the Source information can simultaneously appear in two or three morphosyntactic slots within a single clause. The majority of the redundant distribution pattern of Source is realized in three different morphemes (171 out of 209 occurrences). The use of two different morphemes (38 out of 209 occurrences) is not high in terms of frequency.

Example (569) illustrates the case in which Source information is distributed in three morphemes. In this example, Source is simultaneously expressed by the preposition 从 *cóng* 'from', the localizer 上 =*shang* 'upside', and the satellite 起 -*qi* 'up'. More specifically, the preposition 从 *cóng* 'from' being followed by the Ground NP 桌子 *zhuōzi* 'table' denotes the point of departure whence motion takes place. The localizer 上 =*shang* 'upside' indicates the initial location of the Figure (i.e., 书 *shū* 'book') with respect to the Ground (i.e., 桌子 *zhuōzi* 'table'). The satellite 起 -*qi* 'up' which convey the directional meaning of Path 'from downside to upside' is Source-oriented (cf. Lamarre 2008: 72).

(569) 一个女人从桌子上抱起了一摞书。 (P&T_104_S11)

Yí gè nǚrén cóng zhuōzi=shang bào-qi-le
 one CL woman from table=upside hold.in.the.arms-up-PFV
yí luò shū.
 one CL book

'A woman took a stack of books from the table.'

(Lit. A woman took a stack of books from the upside of the table.)



The case in which the Source is distributed over two morphemes is typically by means of localizers and satellites. When the two morphosyntactic devices are involved, the initial location of the Figure generally occurs in a modifier phrase (Ground NP + localizer + genitive marker *de*), functioning like phrasal modifiers, as in (570).

(570) 他把箱子里的橘子拿出来了。 (P&T_111_S5)

Tā bǎ xiāngzi=li de júzi ná-chu-lai le.
 3SG OM box=inside GEN orange take-out-hither CRS
 'He took out the orange from the box (towards the deictic center).'

Let us now look at how the redundant pattern of the Source is displayed in the dialogical data. Compared to the data collected with the stimulus sets, we found very few occurrences of the redundant pattern in the encoding of Source information in the TV series data (only 6 occurrences out of 83 in *MFTY* data and 4 occurrences out of 110 in *LZHL* data). When Source information is expressed by two morphemes, it can be distributed over the preposition and the satellite (e.g., (571)), the preposition and the verb (e.g., (572)), the preposition and the localizer (e.g., (573)), and the verb and the satellite (e.g., (574)).

(571) 你从哪儿拿出来的? (MFTY_4_1824)

Nǐ cóng nǎr ná-chu-lai de?
 2SG from where take-out-hither PRT
 'Where did you take (the chess piece) out (towards the deictic center)?'

(572) 我们就是从澡堂子出来, [...] (LZHL_1_2247)

Wǒmen jiùshì cóng zǎotángzi chū-lai, [...]
 1SG just from public.bathhouse exit-hither
 'We just came out of the public bathhouse, [...]

(573) 从家里拿来的。 (MFTY_8_1019)

Cóng jiā=li ná-lai de.
 from home=inside take-hither PRT
 '(I) bring (it) from home.'



(574) 你给我滚出去! (MFTY_10_4127)

Nǐ gěi wǒ gǔn-chu-qu!
 2SG for 1SG **get.away-out-thither**
 'Get out of my face!'

The use of three and four different morphemes to encode the Source is rare. When three morphemes are involved, we found the preposition, the localizer, and the satellite (e.g., (575)), the preposition, the verb, and the satellite (e.g., (576)). As for the use of four morphemes within a clause, only one occurrence has been found which resorts to the preposition, the localizer, the verb, and the satellite (e.g., (577)).

(575) 您把这梯子从脚底下给我撤下去。 (LZHL_1_1620)

Nín bǎ wǒ zhè tīzi cóng jiǎodǐ=xia
 2SG.HON OM 1SG this ladder **from** sole.of.the.foot=**downside**
gěi wǒ chè-xia-qu.
 BEN 1SG **remove-off-thither**
 'Take this ladder from under my feet (away from the deictic center).'

(576) 从哪儿摔下来了? (MFTY_10_2758)

Cóng nǎr shuāi-xia-lai le?
from where **fall-down-hither** CRS
 'Where did (you) fall (towards the deictic center)?'

(577) 我从缆车上掉下来了。 (LZHL_2_1709)

Wǒ cóng lǎnchē=shang diào-xia-lai le.
 1SG **from** cable.car=**upside** **fall-down-hither** CRS
 'I fell down from the cable car (towards the deictic center).'

In general, the Source information can be encoded redundantly ranging from two up to four different morphosyntactic devices, as attested in the Standard Chinese data. Below we summarize the findings by showing the various morphemes which occupy the two, three, and four morphosyntactic slots. Table 65 and Table 66 show the redundant distribution of Source in the descriptive and the dialogical data, respectively. Generally speaking, the redundant pattern in the expression of Source tend to appear more frequently in the descriptive data (119 occurrences in the *Trajectoire* data and 209 occurrences in the *Put & Take* data) than in

the dialogical data (6 occurrences in the *MFTY* data and 4 occurrences in the *LZHL* data). Besides, the number of morphosyntactic slots in which the Source information can simultaneously appear also varies depending on the data type. In the descriptive data, we found that Source appeared predominantly in three morphosyntactic slots whereas in the dialogical data, Source appeared a slightly more frequently in two morphosyntactic slots.

N° of slots	PREP	LOC	V	SAT	Trajectoire (N = 119)	<i>Put Take</i> (N = 209)	& example
3	x	x		x	101	171	(560), (566), (569)
	x	x	x		6	-	(561)
2	x			x	7	-	(562)
		x		x	2	38	(565), (570), (570)
		x	x		1	-	(563)
	x	x			1	-	(567)
	x			x	1	-	(568)

Table 65. Redundant pattern of Source in the descriptive data

N° of slots	PREP	LOC	V	SAT	<i>MFTY</i> (N = 6)	<i>LZHL</i> (N = 4)	example
2	x			x	1	1	(571)
	x			x	1	1	(572)
	x	x			1	-	(573)
				x	x	1	-
3	x	x		x	1	1	(575)
	x			x	x	1	-
4	x	x	x	x	-	1	(577)

Table 66. Redundant pattern of Source in the dialogical data

5.3.1.2. Redundant distribution pattern of Medium

Let us look at how the Medium is distributed redundantly in the *Trajectoire* data (i.e., spontaneous motion). The Medium information can simultaneously appear in two, three, or four morphosyntactic slots within a single clause.

In (578), the Medium is encoded in three different morphemes, namely the preposition 从 *cóng* 'from', the localizer 旁 =*pang* 'side', and the satellite 过 -*guo* 'past'. The preposition 从 *cóng* 'from' specifies the place through which the Figure (i.e., a lady) moves and the localizer 旁 =*pang* 'side' is related to the configuration of the Figure with respect to the Ground (i.e., 树 *shù* 'tree'). As to the satellite 过 -*guo* 'past', it indicates the fact of passing by some place. Similarly, such information can also be distributed over the preposition, the localizer and the verb, as illustrated in (579).

(578) 一位女士从一棵树旁跑过。 (Traj_043_S2)

Yí wèi nǚshì cóng yì kē shù=*pang* pǎo-*guo*.
 one CL lady from one CL tree=*side* run-*past*

'A lady ran past a tree.'

(Lit. A woman ran past the side of a tree.)

(579) 一个小男孩儿从河边的小桥上经过。 (Traj_050_S2)

Yí gè xiǎo nánháiér cóng hé=bian de
 one CL little boy from river=*side* GEN
 xiǎo qiáo=*shang* jīngguò.
 small brige=*upside* pass.by

'A little boy passed through the small brige of the riverside.'

Moreover, the Medium can also be distributed redundantly over two different morphemes. This is the case in (580)-(582). As we can see in (580), the Medium information is distributed between the preposition 沿 *yán* 'along' and the satellite 上 -*shang* 'up'. The preposition 沿 *yán* 'along' reveals that the Figure (i.e., 女人 *nǚrén* 'woman') is in a direction which follows the length of (or part of the length of) the Ground (i.e., 山间小路 *shānjiānxiǎolù* 'mountain path') while the satellite 上 -*shang* 'up' implies that the Figure is oriented to the upward direction. The same information can also be distributed between the preposition 沿 *yán* 'along' and the verb 上 *shàng* 'ascend', as shown in (581).

(580) 一个女人沿着山间小路走上山。 (Traj_070_S1)

Yí gè nǚrén **yán-zhe** shānjiānxiǎolù zǒu-**shang** shān.
 one CL woman **along-DUR** mountain.path walk-up mountain
 'A woman walks up the mountain along the mountain path.'

(581) 一个小男孩儿沿着山路上山。 (Traj_065_S8)

Yí gè xiǎo nánháir **yán-zhe** shānlù **shàng** shān.
 one CL little boy **along-DUR** mountain.road **ascend** mountain
 'A little boy walks up the mountain along the mountain road.'

Another case in which the Medium is distributed redundantly over two different morphemes can be seen from (582). In this example, both the verb 穿 *chuān* 'pass through' and the satellite 过 *-guo* 'across' express the motion of the Figure (i.e., 三个人 *sān gè rén* 'three men') from one side to the other side of the Ground (i.e., 树丛 *shùcóng* 'grove').

(582) 三个人穿过树丛。 (Traj_041_S3)

Sān gè rén **chuān-guo** shùcóng.
 three CL person **pass.through-across** grove
 'Three men passed through the grove.'

The redundant pattern of the Medium over four different morphemes is very rare in the *Trajectoire* data. Example (583) illustrates the Medium information being encoded via the preposition 从 *cóng* 'from', the localizer 上 = *shang* 'upside', the verb 穿 *chuān* 'pass through', and the satellite 过 *-guo* 'across'. Let us compare example (583) with (582) which convey the similar meaning. In both examples, the same verb and satellite are used. Additionally, the intermediate location and the configuration of the Figure (i.e., 男人 *nánrén* 'man') with regard to the Ground (i.e., 草地 *cǎodì* 'grass') are emphasized in (583).

(583) 一个男人从草地上穿过。 (Traj_039_S12)

Yí gè nánrén **cóng** cǎodì=**shang** **chuān-guo**.
 one CL man **from** grass=**upside** **pass.through-across**
 'A man passed through the grass.'

In general, the Medium information can be encoded redundantly ranging from two up to four different morphosyntactic

devices, and this is only attested in stimuli data, the *Trajectoire* data. Below we summarize the various morphemes which occupy the two, three, and four morphosyntactic slots. Table 67 shows that the redundant pattern of Medium tends to be expressed more frequently in three different morphemes (86 occurrences) than two different morphemes (22 occurrences) and four different morphemes (5 occurrences).

N° of slots	PREP	LOC	V	SAT	Trajectoire (N = 113)	example
3	x	x		x	85	(578)
	x	x	x		1	(579)
2	x			x	14	(580)
			x	x	6	(582)
	x		x		2	(581)
4	x	x			5	(583)

Table 67. Redundant pattern of Medium in the *Trajectoire* data (spontaneous motion)

5.3.1.3. Redundant distribution pattern of Goal

In the *Trajectoire* data (i.e., spontaneous motion), the Goal information can simultaneously appear in two or three morphosyntactic slots within a single clause. In (584), the Goal information is expressed by the satellite and the localizer. The satellite 进 *-jin* 'into' indicates the direction of the Path (i.e., from outside to inside) which involves a boundary-crossing event. The localizer 中 *=zhong* 'in the center of' specifies the configuration of the Figure (i.e., 女人 *nǚrén* 'woman') with respect to the Ground (i.e., 山洞 *shāndòng* 'cave'). Note that the localizer can sometimes be omitted without changing the meaning of the sentence when the Ground NP is a place word with an inherently locative value, such as 山洞 *shāndòng* 'cave' in (585). However, such omission is not always allowed. In example (586), the Goal information is also expressed by the satellite and the localizer. The omission of the localizer 边儿 *=biānr* 'side' in (587) would be ungrammatical since the Ground NP

河 *hé* 'river' is a common noun which requires a localizer to form a place word which indicates a specific location. Besides the satellite and the localizer, the verb and the localizer can convey similar fine-grained meanings of Goal too, and shown in (588).

(584) 一个女人走进山洞中。 (Traj_053_S12)

Yí gè nǚrén zǒu-jìn shāndòng=zhong.
 one CL woman walk-into cave=in.the.center.of
 'A woman walked into the cave.'
 (Lit. A woman walked into the inside of the cave.)

(585) 一个女人走进山洞。 (Traj_053_S1)

Yí gè nǚrén zǒu-jìn shāndòng.
 one CL woman walk-into cave
 'A woman walked into the cave.'

(586) 她走到了河边儿。 (Traj_073_S11)

Tā zǒu-dào le hé=biānr.
 3SG walk-to PFV river=side
 'She walked to the river.'
 (Lit. She walked to the edge of the river.)

(587) *她走到了河。

**Tā zǒu-dào le hé.*
 3SG walk-to PFV river
 'She walked to the river.'

(588) 一个小男孩儿奔跑着进了海里。 (Traj_059_S4)

Yí gè xiǎo nánhái'r bēnpǎo-zhe jìn-le hǎi=li.
 one CL young boy run.quickly-DUR enter-PFV sea=inside
 'A little boy entered the sea running quickly.'

When the Goal is expressed redundantly by the preposition and the localizer, such prepositional phrase can either follow the verb or precede the verb, as exemplified in (589) and (590) respectively.¹⁴⁹ In both examples, the preposition conveys the direction of the Path and the localizer implies the configuration the Figure with respect to the Ground.

¹⁴⁹ Note that such prepositional phrase can either follow or precede the verb only in our data since there are restrictions on the verb.

(589) 男孩儿跑向海里。 (Traj_059_S10)

Nánháir pǎo xiàng hǎi=li.
 boy run towards sea=inside

'The boy runs to the sea.'
 (Lit. The boy runs to the inside of the sea.)

(590) 女人向丛林里走去。 (Traj_057_S9)

Nǚrén xiàng cónglín=li zǒu-qu.
 woman towards jungle=inside walk-thither

'The woman walks towards the jungle.'
 (Lit. The woman walks towards the inside of the jungle.)

The Goal information can also be shared by the verb and the satellite, as in (591). In this example, the direction of the Path is encoded by the verb 回 *huí* 'return' and the arrival of the Figure at the destination is expressed by the satellite 到 *-dao* 'to'. The case in which Goal is expressed simultaneously by three different morphemes is illustrated in (592). In this example, the verb and the satellite express the same information as did in (591); besides, the localizer emphasizes the configuration of the Figure with regard to the Ground.

(591) 他又回到了山洞。 (Traj_053_S11)

Tā yòu huí-dao le shāndòng.
 3SG again return-to PFV cave

'He returned to the cave again.'

(592) 他回到了山洞里。 (Traj_024_S5)

Tā huí-dao le shāndòng=li.
 3SG return-to PFV cave=inside

'He returned into the cave.'
 (Lit. He returned to the inside of the cave.)

In the *Put & Take* data (i.e., caused motion), the Goal information can simultaneously appear in two or three morphosyntactic slots within a single clause. Nearly all instances of the redundant distribution pattern of Goal are expressed using two different morphemes (316 out of 319 occurrences). Only three occurrences using three morphemes were found in the data.

Examples (593) and (594) represent two frequently used redundant patterns of Goal. In (593), the Goal information is indicated by the preposition and the localizer. The preposition 在 *zài* 'at' denotes the final localization of the Figure and the localizer 上 =*shang* 'upside' expresses the geometrical configuration of the Ground (i.e., the upside). In (594), two different morphemes, namely the satellite and the localizer, are in charge of the encoding of Goal. The satellite 进 -*jin* 'into' conveys the directional meaning of the Path (i.e., from outside to inside) which implies a boundary-crossing event and the localizer 里 =*li* 'inside' expresses the geometrical configuration of the ground (i.e., the inside).

(593) 一个人把书放在了地上。 (P&T_007_S11)

Yí gè rén bǎ shū fàng zài le dì=*shang*
 one CL person OM book put at PFV floor=**upside**
 'A person put the book on the floor.'
 (Lit. A person put the book at the upside of the floor.)

(594) 一个人把苹果放进了木碗里。 (P&T_011_S7)

Yí gè rén bǎ píngguǒ fàng-jìn le mù wǎn=*li*.
 one CL person OM apple put-into PFV wood bowl=**inside**
 'A person put the apple into the wooden bowl.'
 (Lit. A person put the apple into the inside of the wooden bowl.)

The distribution of Goal over three different morphemes is only attested once in the data. As exemplified in (595), the Goal is encoded by the preposition, the localizer, and the satellite. In this example, the Goal information is expressed in a more fine-grained and explicit way. The preposition 在 *zài* 'at' specifies the destination of the Figure, the localizer 上 =*shang* 'upside' implies the spatial configuration of the Figure (i.e., 花 *huā* 'flower') with respect to the Ground (i.e., 头 *tóu* 'head'), and the satellite 上 =*shang* 'up' emphasizes the directional meaning of Path.



(595) 一个女的在另一个女的的头上插上了一枝花。 (P&T_018_S1)

Yí gè nǚde zài lìng yí gè nǚde de
 one CL woman at another one CL woman GEN
 tóu=**shang** chā=**shang** le yì zhī huā.
 head=**upside** insert=**up** PFV one CL flower
 'A woman put a flower on another woman's head.'

Now let us look at how the redundant pattern of Goal is manifested in the TV series data. Compared with the stimuli data, there are only a few of the redundant pattern encoding Goal found in the TV series data (only 2 occurrences out of 318 in the *MFTY* data and 10 occurrences out of 284 in the *LZHL* data). Among the total of 12 occurrences of the redundant distribution of Goal, we found only the cases in which the Goal is expressed simultaneously by two different morphemes. In (596), it is the verb and the satellite which repeat the information of Goal. Both the verb 退 *tùi* 'move backwards' and the satellite 回 *-hui* 'back' indicate the directional meaning of the Path. In (597), the Goal is expressed by means of the verb and the localizer, as 到 *dào* 'move.to' and 里 *=li* 'inside'. In addition, the Goal can also be encoded by the preposition and the localizer. As in (598), the preposition 往 *wǎng* 'towards' conveys the direction of the Path and the localizer 里 *=li* 'inside' specifies the spatial configuration of the Figure with respect to the Ground.

(596) 快退回去! (MFTY_4_3314)

Kuài **tui-hui-qu!**
 quickly **move.backwards-back-thither**
 'Go back quickly!'

(597) 你怎么没到店里去啊? (LZHL_10_3003)

Nǐ zěnméi méi dào-diàn=li-qu a?
 2SG why NEG.REAL **move.to-store=inside-thither** PRT
 'Why didn't you go to the store?'

(598) 你往屋里来! (LZHL_10_1255)

Nǐ **wǎng** *wū=li* *lái!*
 2SG **towards** room=inside come
 'Come into the room!'

In general, Goal information can be encoded redundantly by two or three different morphosyntactic devices, as attested in the Standard Chinese data. Below we summarize the various morphemes which occupy two and three morphosyntactic slots. The pattern with two different morphemes conveying the Goal information tends to be favored in both data sets, as illustrated in Table 65 and Table 66.

N° of slots	PREP	LOC	V	SAT	Trajectoire (N = 64)	Put & Take (N = 319)	example
2		x		x	30	153	(584), (586), (594)
	x	x			28	165	(589), (590), (593)
			x	x	2	-	(591)
		x	x		1	-	(588)
3		x	x	x	3	-	(592)
	x	x		x	-	1	(595)

Table 68. Redundant pattern of Goal in the descriptive data

N° of slots	PREP	LOC	V	SAT	MFTY (N = 2)	LZHL (N = 10)	example
2		x	x			7	(597)
			x	x	2	1	(596)
	x	x				2	(598)

Table 69. Redundant pattern of Goal in the dialogical data

5.3.2. Differentiated distribution pattern of Path

In the differentiated pattern, each morpheme contributes “a *different* part of the spatial relational meaning in terms of which the referential situation is conceptualized” (Sinha & Kuteva 1995: 187). To examine the use of the differentiated pattern in the data, only the expression of complex Path has been analyzed including either

two or three portions of Path (i.e., Source + Goal, Source + Medium, Medium + Goal, and Source + Medium + Goal).

In the *Trajectoire* data, the spatial semantics related to complex Path can be distributed differentially in two up to four morphosyntactic slots. Depending on which portions of Path are expressed, the use of two, three, or four morphemes varies. The data show that for the Source + Goal Path, the distribution of spatial information by four morphemes is the most frequent pattern, accounting for 46.2%, as illustrated in (599). Regarding the Source + Medium Path, the use of three morphemes, as in (600), is the preferred pattern, accounting for 57.2%. Concerning the Medium + Goal Path, two morphemes are the prevailing pattern, accounting for 73.7%, as shown in (602). As far as the Source + Medium + Goal Path is concerned, only the pattern consisting of four morphemes, as in (603), is attested. Note that the examples we provide below are not all the possible patterns found in the expression of complex Path, but only the most representative ones. Table 70 summarizes the above tendency found in the *Trajectoire* data.

Portions of Path	Two morphemes		Three morphemes		Four morphemes	
Source + Goal (<i>N</i> = 91)	14.2%	(13)	39.6%	(36)	46.2%	(42)
Source + Medium (<i>N</i> = 28)	35.7%	(10)	57.2%	(16)	7.1%	(2)
Medium + Goal (<i>N</i> = 19)	73.7%	(14)	26.3%	(5)	-	
Source + Medium + Goal (<i>N</i> = 2)	-		-		100%	(2)

Table 70. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the *Trajectoire* data



(599) 男孩儿从一个石头上跳到另一个石头上。 (Traj_075_S9)

Nánháir **cóng** yí gè shítou=**shang** tiào-**dao** líng yí
 boy **from** one CL rock=**upside** jump-**to** other one
 gè shítou=**shang**.
 CL rock=**upside**

'The boy jumped from one rock to the other.'

(600) 一个女人从大树旁边走过来。 (Traj_032_S1)

Yí gè nǚrén **cóng** dà shù=**pángbiān** zǒu-**guo-lai**.
 one CL woman **from** big tree=**side** walk-**over-hither**

'A woman walked over from the tree (towards the deictic center).'

(Lit. A woman walked over from the side of the tree (towards the deictic center).)

(601) 一个女人从大树旁边走过。 (Traj_040_S1)

Yí gè nǚrén **cóng** dà shù=**pángbiān** zǒu-**guo**.
 one CL woman **from** big tree=**side** walk-**past**

'A woman walked past the tree.'

(602) 一个女人向大树走了过去。 (Traj_061_S6)

Yí gè nǚrén **xiàng** dà shù zǒu-**le-guo-qu**.
 one CL woman **towards** big tree walk-PFV-**over-thither**

'A woman walked over towards the big tree (away from the deictic center).'

(603) 这个女孩儿从树旁边向我们走过来。 (Traj_032_S5)

Zhè gè nǚháir **cóng** shù=**pángbiān** **xiàng** wǒmen zǒu-**guo-lai**.
 this CL girl **from** tree=**side** **towards** 1PL walk-**over-hither**

'The girl walked over towards us from the tree (towards the deictic center).'

(Lit. The girl walked over towards us from the side of the tree (towards the deictic center).)

By examining the expression depicting Source + Medium Path, we observed an interesting phenomenon. Let us look at the examples (600) and (601) which describe the following two events (i.e., Figure 19, Figure 20). In example (600), the Source and Medium information are distributed differentially within the same clause. The Source information is expressed by the preposition 从 *cóng* 'from' and the localizer 旁边 *pángbiān* 'side' indicating the starting point of the Figure (i.e., 女人 *nǚrén* 'woman') and its relation with respect to the Ground (i.e., 大树 *dà shù* 'big tree'). The Medium information

is conveyed by the satellite 过 *-guo* 'over' which implies that the Figure is on her way to some place. In example (601), the three same morphemes (i.e., the preposition 从 *cóng* 'from', the localizer 旁边 *pángbiān* 'side', and the satellite 过 *-guo* 'over') are used. However, in (601), the preposition 从 *cóng* 'from' and the localizer 旁边 *pángbiān* 'side' entail an interpretation which is different from (600). The two morphemes in (601) encode redundantly the Medium information. The only difference between (600) and (601) lies in the use of the deictic morpheme 来 *-lai* 'hither'. The comparison of these two examples suggests that Dynamic Deixis such as 来 *-lai* 'hither' might not only express the perspective with respect to the deictic center, but that it may also, to some extent, play a role in determining the interpretation of the portions of Path conveyed by different morphosyntactic devices.



Figure 19. Source-Medium-oriented Path



Figure 20. Medium-oriented Path

Let us now examine the differentiated distribution pattern of Path in the *Put & Take* data. In this data set, only Source + Goal Path is attested as complex Path by using three or four different morphemes. As we can see from Table 71, the distribution of Path over three morphemes is the most frequent pattern, accounting for 64.3%, as illustrated in example (604).



Portions of Path	Two morphemes	Three morphemes	Four morphemes
Source + Goal (N=42)	-	66.7% (28/42)	33.3% (14/42)

Table 71. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the *Put & Take* data

(604) 一个人将书上的苹果放在了鞋子上。 (P&T_051_S6)

Yí gè rén jiāng shū=**shang** de píngguǒ fàng zài
 one CL person OM book=**upside** GEN apple put at
 le xiézi=**shang**
 PFV shoe=**upside**

'A person put an apple that was on the book on the shoe.'

The differentiated pattern is also attested in the dialogical data. However, the use of this pattern was attested only in the *MFTY* data to convey the Source + Goal Path. As illustrated in Table 72, the distribution over two morphemes is the only way found in the data, as exemplified in (605).

Portions of Path	Two morphemes	Three morphemes	Four morphemes
Source + Goal (N=6)	100% (6)	-	-

Table 72. The number of clauses expressing complex Path and the occurrences of differentiated pattern in the *MFTY* data

(605) 赵姨已经从老家回来一阵子了。 (MFTY_9_0502)

Zhào yí yǐngjīng **cóng** lǎojiā **huí-lai** yízhènzǐ le.
 Zhao aunt already **from** hometown **return-hither** for.a.while CRS
 'Aunt Zhao has already been back from her hometown for a while (towards the deictic center).'

5.4. Patterns of distribution in the expression of Dynamic Deixis

In Standard Chinese, there is a two-way distinction in the expression of Dynamic Deixis, the centripetal and the centrifugal. In order to examine the patterns of distribution exhibited by Dynamic Deixis in the data under study, each of the two directions (i.e., centripetal direction, centrifugal direction) has been analyzed on its own in the light of the parallel pattern and the redundant pattern. In previous literature, similar phenomenon has also been observed concerning the associated motion. In a crosslinguistic study, Lamarre et al. (2022) show that in Sereer (an Atlantic language), Northern Mandarin, and Japanese, associated motion markers are concurring with morphemes marking deictic orientation. In addition, Lamarre (2020) also makes an in-depth analysis of the associated motion markers in Northern Mandarin and discusses the same phenomenon of parallel pattern of deictic motion morphemes in what she labels motion-cum-purpose patterns. In the following sections, let us look at how the parallel pattern and redundant pattern are manifested in the Standard Chinese data. As presented in Chapter 2 (§2.4), different morphosyntactic devices, including deictic verbs, deictic satellites, associated motion markers, and prepositional phrases share the task of Dynamic Deixis encoding.

5.4.1. Parallel distribution pattern of Dynamic Deixis

In the parallel pattern, “the same schematization is actually expressed by the same morpheme in different positions in the syntagm” (Sinha & Kuteva 1995: 188). In our study, this pattern was only found in the dialogical data and was attested in both the centripetal and the centrifugal expressions, especially when associated motion is involved. No such pattern was indeed attested in the descriptive data.



5.4.1.1. Parallel distribution pattern of centripetal direction

Let us first examine the parallel distribution pattern of centripetal direction. As illustrated in (606) and (607), the deictic verb 来 *lái* 'come' encodes the centripetal direction in both TV series data sets. The same centripetal information is repeated by means of the same morpheme 来 =*lai* 'COME&DO', used as an associated motion marker. Note that such pattern is usually used to express the purpose of the motion in a serial verb construction, as can be seen from the use of the deictic verb 来 *lái* 'come', together with other verbs (i.e., 接 *jiē* 'pick', 还 *huán* 'give back') within the same clauses in the two examples below.

(606) 杜总，我老公来接我来了。 (MFTY_7_0958)

Dù zǒng, wǒ lǎogōng lái jiē wǒ=lai le.
 Du director 1SG husband come pick 1SG=COME&DO CRS
 'Director Du, my husband come to pick me up.'

(607) 来还大头那贷款来了。 (LZHL_10_2644)

Lái huán Dàtóu nèi dàikuǎn-lai le.
 come give.back Datou that loan-COME&DO CRS
 '(I) came to give back the loan of Datou.'

Another case of the parallel distribution of centripetal direction was attested only in the *MFTY* data in which the same information is repeated in the satellite 来 *-lai* 'hither' and the associated motion marker 来 =*lai* 'COME&DO', as in (608).

(608) 进来坐来! (MFTY_4_1627)

Jin-lai zuò-lai!
 enter-hither sit-COME&DO
 'Come in and have a sit!'

5.4.1.2. Parallel distribution pattern of centrifugal direction

We now look at how the parallel distribution pattern is displayed in the expression of centrifugal direction. Similarly to the parallel pattern found in centripetal direction, the parallel pattern in the encoding of centrifugal direction involves the contribution of the verbs and the associated motion markers. Examples (609) and (610)

display the parallel distribution of centrifugal direction in both TV series data. The same information is repeated by both the deictic verb 去 *qù* 'go' and the associated motion marker 去 =*qu* 'GO&DO'. In addition to the repetition of the same morpheme as verbs and associated motion markers, the centrifugal direction was also found to be expressed by the same morpheme used as deictic satellites and associated motion markers, as illustrated in (611) and (612), attested in both TV series data. Examples (609)-(611) show the use of the deictic verb 去 *qù* 'go' / the compound verb comprising the deictic satellite 去 -*qu* 'thither' co-occurring with other verbs in a serial verb construction. We also found cases in which the repetition of centripetal direction is used without combining with other verbs but is combined with Ground NPs. As shown in (613), the Ground NP 医院 *yīyuàn* 'hospital' is preceded by the deictic verb 去 *qù* 'go' and followed by the associated motion marker 去 =*qu* 'GO&DO'.

(609) 去睡去吧! (MFTY_5_2025)

Qù	<i>shuì=qu</i>	<i>ba!</i>
go	sleep=GO&DO	SUJ
'Go to sleep!'		

(610) 我要去结婚去了。 (LZHL_10_0511)

<i>Wǒ</i>	<i>yào</i>	qù	<i>jiéhūn-qu</i>	<i>le.</i>
1SG	be.about.to	go	get.married-GO&DO	CRS
'I'm going to get married.'				

(611) 待会儿咱们过去吃饭去! (MFTY_10_2051)

<i>Dāihuìr</i>	<i>zánmen</i>	<i>guò-qu</i>	<i>chīfàn-qu!</i>
later	1PL.INCL	pass-thither	eat-GO&DO
'Let's go over there and have dinner later!'			

(612) 拿回去抽去吧! (LZHL_8_2947)

<i>Ná-huì-qu</i>	<i>chōu-qu</i>	<i>ba!</i>
take-back-thither	smoke-GO&DO	sug
'Take it back (away from the deictic center) and smoke!'		

(613) 要不去医院去? (MFTY_4_1611)

<i>Yàobu</i>	qù	<i>yīyuàn</i>	= <i>qu</i>
otherwise	go	hospital	=GO&DO
'How about going to the hospital?'			

In addition to the above cases which have already been discussed in Lamarre (2020) regarding the parallel pattern of centripetal and centrifugal expressions, we also observed that the centrifugal direction can be expressed by the same morpheme without involving associated motion. This is the case in which the same centripetal morpheme 去 is repeated as deictic verbs 去 *qù* 'go' and deictic satellites 去 *-qu* 'thither', illustrated in (614). Interestingly, this example involves both spontaneous and caused motion.

- (614) 你去把果果抱到王奶奶家去! (MFTY_7_4423)
Nǐ qù bǎ Guǒguo bào-dao Wáng nǎinai jiā -qu!
 2SG go OM Guoguo hold.in.the.arms-to Wang grandma house **-thither**
 'Go and carry Guoguo to grandma Wang's house!'

5.4.2. Redundant distribution pattern of Dynamic Deixis

As far as the redundant pattern of Dynamic Deixis is concerned, it was only found in the descriptive data, i.e., *Trajectoire* data (spontaneous motion), and only in the expression of centripetal direction. This direction usually implies the fact of motion towards the deictic center. Since the deictic center is in most cases the location of the speaker, we consider expressions conveying the meaning of 'towards me/us' as a way of encoding Dynamic Deixis. As suggested by Matsumoto et al. (2017: 97), Deixis seems to be simply a Vector (e.g. TO, FROM) plus a specific Ground (the first person) in its semantics.

As illustrated in Table 73, out of 179 occurrences encoding centripetal direction, only 9 express centripetal information in a redundant way. All the nine occurrences behave the same way in the data in which the centripetal direction is expressed by the prepositional phrase formed by the preposition 向 *xiàng* 'towards' and the first person plural form 我们 *wǒmen* '1PL', together with the satellite 来 *-lai* 'hither', as shown in (615).

- (615) 一个男人向我们走来。 (Traj_035_S12)
 Yí gè nánrén xiàng wǒmen zǒu-lai.
 one CL man towards 1PL walk-hither
 ‘A man walks towards us (towards the deictic center).’

Data type	Data sets	Redundant pattern	
Stimuli	<i>Trajectoire</i> (N=179)	5.0%	(9)

Table 73. The number of clauses using centripetal morpheme and the occurrences of redundant pattern

5.4.3. Differentiated distribution pattern of Dynamic Deixis

Regarding the differentiated distribution of Dynamic Deixis, this pattern was only found in the dialogical data, i.e., the *MFTY* data. This is the case where the centripetal direction and the centrifugal direction are distributed over two different morphemes within the same clause. In example (616), Dynamic Deixis is distributed in the verb and the satellite. The verb 去 *qù* ‘go’ refers to the centrifugal direction of the Figure (i.e., 你 *nǐ* ‘2SG’) in a spontaneous motion while the satellite 来 *-lai* ‘hither’ indicates the centripetal direction of another Figure (i.e., 自行车 *zìxíngchē* ‘bicycle’) accompanied by the agent (i.e., 你 *nǐ* ‘2SG’) in a caused motion. As shown in Table 74, such pattern is extremely rare (only one occurrence) in the data under analysis.

- (616) 你去把那韩经理的自行车搬来! (MFTY_7_0929)
 Nǐ qù bǎ Hán jīnglǐ de zìxíngchē bān-lai.
 2SG go OM Han director GEN bicycle displace-hither
 ‘Go (over there) and move Director Han’s bicycle here (towards the deictic center)!’

Data type	Data sets	Tokens of differentiated pattern	
TV series	<i>MFTY</i> (N=971)	0.1%	(1)

Table 74. The number of clauses using Dynamic Deixis and the occurrences of differentiated pattern

5.5. Summary

Based on Sinha & Kuteva's (1995) distributed spatial semantic approach, this chapter examined patterns of distribution of Path and Dynamic Deixis, respectively. Three patterns, namely redundant pattern and differentiated pattern, together with parallel pattern (a subpattern of redundant pattern), were investigated in the Standard Chinese data.

Regarding the patterns of distribution in the expression of Path, we found that:

- The encoding of Path revealed the use of two main patterns: redundant pattern and differentiated pattern. Depending on the type of data (i.e., descriptive vs. dialogical) and the spatial relation information (i.e., different portion(s) of Path) being encoded, the two patterns behaved differently.
- As far as the redundant pattern is concerned, the redundancy of Source, Medium, and Goal is more frequent in the descriptive data than in the dialogical data. Regarding different spatial semantics being encoded, Source is expressed more frequently by the redundant pattern than Goal and Medium (see Table 75, Table 76, and Table 77). The redundant pattern in Source expression (Table 75) was attested dominantly in the descriptive data and it accounts for 85.0% in the *Trajectoire* and 67.9% in the *Put & Take*. By contrast, very few occurrences of the redundant pattern was attested in the dialogical data; it accounts only for 7.2% in the *MFTY* data and 3.6% in the *LZHL* data. Note that the *Put & Take* data do not include the expression of Medium (Table 76). Among the three other data sets which do comprise clauses expressing Medium, only the *Trajectoire*

data revealed the use of the redundant pattern; it accounts for 53.8%. By contrast, in the dialogical data, (i.e., the *MFTY* data and the *LZHL* data), the Medium information is encoded by one single morpheme. The redundant pattern of Goal (Table 77) is more frequent in the descriptive data than in the dialogical data, in particular, in the *Put & Take* data (i.e., caused motion), and it accounts for 86.2%. Besides, the redundant pattern of Source, Medium, and Goal also show different preference in terms of the number of different morphemes. Generally speaking, the Source information tends to be repeated by three different morphemes in the descriptive data and two in the dialogical data. Medium tends to be repeated by three different morphemes in the descriptive data. Goal tends to be expressed simultaneously by two different morphemes (Table 78).

- With respect to the differentiated pattern, it was found in both the descriptive data (cf. Table 70, Table 71) and the dialogical data (Table 72). Depending on the spatial semantics to be encoded, the information can be distributed differentially in two up to four morphosyntactic slots, as illustrated in Table 78.

Data type	Data sets	Redundant pattern	
Descriptive data	<i>Trajectoire</i> (N=140)	85.0%	(119)
	<i>Put & Take</i> (N=308)	67.9%	(209)
Dialogical data	<i>MFTY</i> (N=83)	7.2%	(6)
	<i>LZHL</i> (N=110)	3.6%	(4)

Table 75. The number of clauses expressing Source and the occurrences of redundant pattern

Data type	Data sets	Redundant pattern	
Descriptive data	<i>Trajectoire</i> (N = 210)	53.8%	(113)
	<i>Put & Take</i> (N = 0)	-	
Dialogical data	<i>MFTY</i> (N = 54)	0%	(0)
	<i>LZHL</i> (N = 50)	0%	(0)

Table 76. The number of clauses expressing Medium and the occurrences of redundant pattern

Data type	Data sets	Redundant pattern	
Descriptive data	<i>Trajectoire</i> (N=182)	35.2%	(64)
	<i>Put & Take</i> (N=370)	86.2%	(319)
Dialogical data	<i>MFTY</i> (N=318)	0.6%	(2)
	<i>LZHL</i> (N=284)	3.5%	(10)

Table 77. The number of clauses expressing Goal and the occurrences of redundant pattern

Portion(s) of Path	Descriptive data		Dialogical data	
	<i>Trajectoire</i>	<i>Put & Take</i>	<i>MFTY</i>	<i>LZHL</i>
S	3	3	2	2
M	3	-	-	-
G	2	2	2	2
S + G	4	3	2	-
S + M	3	-	-	-
M + G	2	-	-	-
S + M + G	4	-	-	-

Table 78. The number of different morphemes in patterns of distribution in the expression of Path

Concerning the patterns of distribution in the expression of Dynamic Deixis, we observed that:

- The encoding of Dynamic Deixis can rely on the use of three main patterns: parallel pattern, redundant pattern, and differentiated pattern.
- The parallel pattern is considered as the most overt pattern. We only identified clauses expressing Dynamic Deixis in the

dialogical data and mainly in patterns expressing associated motion. The spatial information, either centripetal direction or centrifugal direction, is repeated twice at both levels, form and meaning, within the clause. However, such pattern is infrequent in the expression of centripetal direction (accounting for 1.3% in the *MFTY* data and 0.3% in the *LZHL* data) (Table 79), and in the expression of centrifugal direction (accounting for 5.5% in the *MFTY* data and 2.3% in the *LZHL* data) (Table 80). Both centripetal and centrifugal directions can be distributed over the deictic verbs and the associated motion markers, and the deictic satellites and the associated motion markers. Besides, we also found the deictic verbs and the deictic satellites appear in the same clause repeating the centrifugal direction.

- The redundant pattern in the expression of Dynamic Deixis occurs only in the descriptive data (9 occurrences) which involves exclusively the expression of centripetal direction. This information can only be expressed redundantly over two different morphemes, namely the prepositional phrases (with a Ground expressed exclusively by the first person pronoun) and the deictic satellites.
- The differentiated pattern in the expression of Dynamic Deixis is extremely rare. There is only one occurrence found in the dialogical data, i.e., the *MFTY* data in which the centripetal and the centrifugal directions are expressed by two different morphemes within the same clause.
- We notice that the information of Dynamic Deixis can be distributed parallelly, redundantly, and differentially over two different morphemes (Table 81).

Data type	Data sets	Parallel pattern	
Descriptive data	<i>Trajectoire</i> (N=179)	0%	(0)
	<i>Put & Take</i> (N=159)	0%	(0)
Dialogical data	<i>MFTY</i> (N=478)	1.3%	(6)
	<i>LZHL</i> (N=307)	0.3%	(1)

Table 79. The number of clauses using centripetal morpheme and the occurrences of parallel pattern

Data type	Data sets	Parallel pattern	
Descriptive data	<i>Trajectoire</i> (N=65)	0%	(0)
	<i>Put & Take</i> (N=3)	0%	(0)
Dialogical data	<i>MFTY</i> (N=469)	5.5%	(26)
	<i>LZHL</i> (N=397)	2.3%	(9)

Table 80. The number of clauses using centrifugal morpheme and the occurrences of parallel pattern

Direction(s) of Dynamic Deixis	Descriptive data		Dialogical data	
	<i>Trajectoire</i>	<i>Put & Take</i>	<i>MFTY</i>	<i>LZHL</i>
centripetal	-	-	2	2
centrifugal	-	-	2	2
centripetal + centrifugal	-	-	2	-

Table 81. The number of same / different morphemes in patterns of distribution in the expression of Dynamic Deixis

The analysis of the ways Path and Dynamic Deixis information is distributed within the clause revealed both similarities and differences. Firstly, Both Path and Dynamic Deixis displayed the use of redundant and differentiated patterns. What’s more, Dynamic Deixis also revealed the use of parallel pattern. Secondly, the different morphosyntactic devices contributing to the encoding of Path relies on verbs, satellites, prepositions, and localizers whereas deictic verbs, deictic satellites, associated motion markers, and prepositional phrases share the task of Dynamic Deixis encoding.



Lastly, the spatial information of Path can be simultaneously expressed from two up to four different morphemes whereas only two different morphemes are found to express the spatial semantics of Dynamic Deixis. The comparison of Path and Dynamic Deixis information distribution reveals more differences than similarities between the two semantic components and thus support the idea that they should be better treated separately.

Chapter 6

(A)SYMMETRIES IN THE EXPRESSION OF PATH AND DYNAMIC DEIXIS

6.1. Introduction

Over the last few decades, the issue of the linguistic bias towards the Goal of motion, as opposed to the Source, has drawn linguists' attention. In previous studies, the hypothesis of the Source-Goal asymmetry has been attested within and across languages (Ikegami 1979, 1987; Bourdin 1997; Stefanowitsch & Rohde 2004; Lakusta & Landau 2005; Regier & Zheng 2007; Ishibashi 2010; Kopecka & Ishibashi 2011; Kopecka & Vuillermet 2021; Aurnague 2022; *inter alia*). However, only a small number of studies relevant to spatial asymmetries have been carried out in Chinese, merely focusing on forms (i.e., motion verbs and directional complements) and tackling their meaning from the semasiological perspective (Gāo 2007; Zuǒ 2007; Lì 2008; Xu 2008; Tóng 2009; Hú 2010).

The purpose of this chapter is to further explore such bias by examining the expression of Path and Dynamic Deixis in Standard Chinese from the onomasiological perspective. More specifically, we focus on different aspects of (a)symmetries in the expression of Source and Goal, and the expression of centripetal and centrifugal directions. We aim at investigating the following questions: do Source and Goal, centripetal and centrifugal directions receive equal linguistic treatment? If one portion of Path and one direction of

Dynamic Deixis receive more attention than the other portion and the other direction in the Standard Chinese data under analysis, which portion and which direction are concerned and how do they manifest themselves and at which levels (e.g., discourse, morphosyntactic, semantic)?

To address the above issues, the analysis in this chapter will find its focus in the descriptive data (i.e., data collected with elicitation tools which provide an homogeneous context), revisited from a published chapter (J.-K. Song 2022). Besides, we also provide some preliminary results in the dialogical data without developing a fine-grained analysis due to the complex case by case context of each utterance in dialogues.

The present chapter is organized as follows: section 6.2 provides an overview of the Source-Goal asymmetry hypothesis in the literature. Sections 6.3 and 6.4 focus on the analysis in the expression of Source and Goal and of centripetal and centrifugal directions, respectively. Section 6.5 summarizes the main (a)symmetries found in the expression of Path and Dynamic Deixis in the Standard Chinese data.

6.2. Source-Goal asymmetry

Source, Medium, and Goal, which represent three portions of Path of motion, refer to the starting, the intermediate, and the ending points, respectively. Among these three portions, Source and Goal have received more attention than Medium. Concerning the relation between Source and Goal, Ikegami (1987) makes the following observation:

From a logical point of view, the source and the goal, as contrasting notions, are to all intents and purposes on an equal footing. [...] There is, however, a good deal of evidence which indicates that the source and the goal do not constitute an equal



and mutually contrasting pair of concepts and that language seems to manifest a peculiar dissymmetry in this respect.

(Ikegami 1987: 122)

More specifically, Ikegami (1987: 135) observes that “the goal is invariably the more natural and more dominant element, while the source is uncertain and instable”. This is what the author called the ‘goal-over-source principle’.

Dirven & Verspoor (2004 [1999]: 84) also make a similar observation regarding the relationship between Source and Goal. They notice that in a motion event, Source and Goal are equally salient and can all occur independently as shown in Figure 21 and Figure 22, and illustrated by examples (617) and (618), respectively. However, when human volition is involved, Goal is far more salient than Source. Therefore, according to the authors, example (619) which intends to express Source seems to be strange and unacceptable, whereas (620) which indicates Goal is much more natural.



Figure 21. Apple falling from tree
(ibid.)

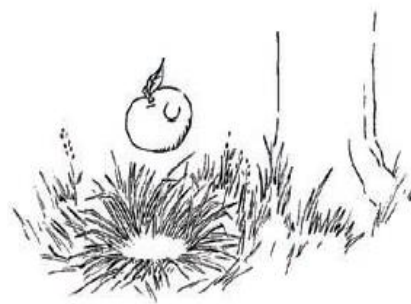


Figure 22. Apple falling into grass
(ibid.)

(617) *The apple fell **from the tree**.* (Source)

(ibid.)

(618) *It fell **into the grass**.* (Goal)

(ibid.)

(619) * *I climbed **from my room***. (Source)

(ibid.)

(620) *I climbed **onto the roof***. (Goal)

(ibid.)

Generally speaking, Dirven & Verspoor (2004 [1999]: 84-85) conclude that “there is a strong hierarchy in the every-day experience of the ‘source-path-goal’ schema: For human actions, the goal is usually more important than the source and the source and goal are usually more important than the path”.¹⁵⁰

In line with Ikegami (1987) and Dirven & Verspoor (2004 [1999]), other studies (Bourdin 1997; Stefanowitsch & Rohde 2004; Kopecka & Ishibashi 2011) also show that there is an asymmetry in the expression of Source and Goal and that speakers of different languages tend to favor the expression of Goal. This unequal status between Source and Goal is labelled under different terms, such as **Goal over Source principle** (Ikegami 1979, 1987; Dirven & Verspoor 2004 [1999]), **Goal-bias** (Bourdin 1997; Stefanowitsch & Rohde 2004; Lakusta & Landau 2005; Lakusta, Wagner, O’Hearn, & Landau 2007; Stefanowitsch 2018), and **Source-Goal asymmetry** (Ishibashi 2010, 2012; Kopecka & Ishibashi 2011; *inter alia*). In this dissertation, we use the term Source-Goal asymmetry to refer to this phenomenon. Such asymmetry has been found at different levels of linguistic expression, namely, discourse, morphological, syntactic, and semantic levels, as reviewed in detail in the special issue on *Source-Goal (a)symmetries across language* edited by Kopecka & Vuillermet (2021b: 7-13). Below we will briefly present these four levels of asymmetry.

At the discourse level, especially in corpus and text-based studies, Goals are found to be encoded more frequently than Sources in expressions of motion. Such tendency has been observed in different languages (e.g., Japanese, English, and cross-linguistic

¹⁵⁰ In Dirven & Verspoor (2004 [1999]), ‘path’ refers to the intermediate point which corresponds to what we call ‘Medium’.

investigation of parallel copora, etc.) and are based on different data types (e.g., journalistic, literary, etc.).

At the morphological level, Goal morphemes are usually morphologically simpler than Source morphemes. Take French as an example, French prepositions tend to be morphologically simple in encoding the Goal (e.g., *derrière* 'behind', *sous* 'under'), whereas they tend to be morphologically complex in encoding the Source (e.g., *de derrière* 'from behind', *de dessous / de sous* 'from under'). Pengo, a Dravidian language, provides a further example of the morphological asymmetry of Source and Goal. In this language, Goal is expressed by means of the postposition only (e.g., *bitre* 'inside'). By contrast, Source is encoded by both the postposition and the case marker (e.g., *bitre-taŋ* [inside-ABL]) (Bourdin 1997; cited in Kopecka & Vuillermet 2021: 10-11).

At the syntactic level, the expression of Goal is more straightforward and less constrained than that of Source. Regarding the 'straightforwardness', monoclausal encoding is considered more straightforward than biclausal encoding (Bourdin 1997: 12). The Papuan language Kobon illustrates such syntactic asymmetry of Source and Goal. In this language, the Goal information is expressed via one verb clause, whereas the Source information is encoded by two verb clauses. Concerning the syntactic 'constraints', Goal PPs combine more easily with verbs than Source PPs. Take the deictic verbs *come* and *go* as an example. The English prepositions *into* and *to* expressing Goal can combine with both *come* and *go*, as illustrated in (621) and (622). However, the preposition *from* expressing Source can only combine with *come* and is constrained to combine with *go*, as in (623) and (624).

(621) *The man came into her bedroom.*

(622) *He went to London for a week.*

(623) *He came from somewhere.*

(624) **He went from somewhere.*

(Fillmore 1972: 369-377; cited in Kopecka & Vuillermet 2021: 13)

At the semantic level, the expression of Goal is semantically more specific than the expression of Source. Kopecka & Vuillermet (2021b: 7) point out that there is a tendency across languages to conflate Goal and Locative meanings by encoding them by means of the same morpheme, and to express Source meaning by means of a distinct morpheme. Georgian distinguishes different spatial configurations for the Goal/Location by as many as six different case markers while such semantic relations are neutralized in the expression of Source and are conveyed only by one case marker (Bourdin 1997; cited in Kopecka & Vuillermet 2021: 8-9). What's more, previous studies also suggest that languages usually have a greater variety of morphemes to express Goal than to express Source. A cross-linguistic study of Svorou (1994) based on 26 languages reveals a remarkable difference in the diversity of ALLATIVE (Goal) and ABLATIVE (Source) markers, with a 153 ALLATIVE morphemes and 68 ABLATIVE morphemes in her data sample (Kopecka & Vuillermet 2021: 8).

In the light of previous research on Source-Goal asymmetry, we will first examine the (a)symmetries in the expression of Path and then in the expression of Dynamic Deixis.

6.3. (A)symmetries in Path encoding

The analysis of the data in Standard Chinese reveals several symmetrical and asymmetrical phenomena at different linguistic levels in Path encoding. We focus on the (a)symmetries of Source and Goal expressions in the descriptive data and also look at some preliminary results in the dialogical data.

6.3.1. Source-Goal (a)symmetry in discourse frequency

The encoding of Path in the Standard Chinese data relies on the use of various lexical and grammatical devices comprising verbs, satellites, prepositions, and localizers, as presented in Chapter 4 (§ 4.3). Table 82 shows the diversity of linguistic devices encoding

Source and Goal found in the data under analysis. In general, we observe that the number of markers available for the encoding of Goal is higher than those for the encoding of Source.

Starting from the category of verbs, the data identify three verbs expressing Source and seven verbs expressing Goal. As for satellites, the data reveal the use of four satellites to encode Source and six to encode Goal. As to prepositions, two were found in the expression of Source in contrast with five in the expression of Goal.¹⁵¹

devices	Source	Goal
verb	出 <i>chū</i> 'exit'	到 <i>dào</i> 'arrive'
	来 <i>lái</i> 'come'	回 <i>huí</i> 'return'
	起 <i>qǐ</i> 'ascend'	进 <i>jìn</i> 'enter'
		来 <i>lái</i> 'come'
		去 <i>qù</i> 'go'
		上 <i>shàng</i> 'ascend'
		下 <i>xià</i> 'descend'
satellite	出 <i>-chu</i> 'out'	到 <i>-dao</i> 'to'
	开 <i>-kai</i> 'apart, away'	回 <i>-hui</i> 'back'
	起 <i>-qi</i> 'up'	进 <i>-jin</i> 'into'
	下 <i>-xia</i> 'down'	入 <i>-ru</i> 'into'
		上 <i>-shang</i> 'up'
		下 <i>-xia</i> 'down'
preposition	从 <i>cóng</i> 'from'	朝 <i>cháo</i> 'towards'
	由 <i>yóu</i> 'from'	往 <i>wǎng</i> 'towards'
		向 <i>xiàng</i> 'towards'
		在 <i>zài</i> 'at'
		给 <i>gěi</i> 'to'

Table 82. Devices expressing Source and Goal found in the Standard Chinese data

¹⁵¹ Localizers which convey the meaning of spatial configuration will be analyzed in §6.3.3 when we discuss the relation of Source-Goal (a)symmetry in relation to Ground.

We shall first look at the descriptive data. In order to make the Source-oriented events and Goal-oriented events comparable, we select systematically from each stimulus set two groups of events for data analysis. The first group is composed of simple motion events including one portion of Path, either Source or Goal. It comprises corresponding pairs of clips showing events involving Source-oriented Path and Goal-oriented Path (see Appendix 9 and Appendix 10). The second group is concerned with complex motion events that includes Source-Goal-oriented Path which describe a Figure moving from a source location to a goal location (see Appendix 11 and Appendix 12). The selection of the above video clips will also be applied to analyses in §6.3.2 and §6.3.3 which deal with Source-Goal asymmetry in morphosyntax and in relation to Ground.

Table 83 and Table 84 present the information encoded in simple Path events in the *Trajectoire* and the *Put & Take* data, respectively. As illustrated in Table 83, in the *Trajectoire* data showing spontaneous motion, speakers choose to express Source the most frequently in clips involving Source-oriented Path (71.9%) and Goal the most frequently in clips showing Goal-oriented Path (79.2%). What's more, speakers also have the choice to express other portion(s) of Path than only Source in clips showing Source-oriented Path and only Goal in clips showing Goal-oriented Path.

Clips involving Source-oriented Path (N=96)			Clips involving Goal-oriented Path (N=96)		
Encoded information	Tokens		Encoded information	Tokens	
S	71.9%	(69)	G	79.2%	(76)
S + G	10.4%	(10)	S + G	15.6%	(15)
S + M	6.3%	(6)	M + G	5.2%	(5)
M	5.2%	(5)			
G	5.2%	(5)			
S + M + G	1.0%	(1)			

Table 83. Distribution of Path in simple Path events in the *Trajectoire* data (spontaneous motion)



Taking the clip 032 (Path_F_walk_awayfrom_tree_front) as an example, this scene shows a woman walking away from the tree which involves Source-oriented Path. Although the expression of the Source information is expected, speakers choose to express not only the Source individually, as in (625), or combined with Goal (e.g., (626)), or Medium (e.g., (627)), or Medium and Goal (e.g., (630)), but also the Medium or Goal individually, without specifying Source at all, as exemplified in (628) and (629).

(625) 一个女人从树下走开。 (Traj_032_S6)

Yí gè nǚrén cóng shù=xia zǒu-kai.
 one CL woman from tree=downside walk-apart
 'A woman walks away from the tree.'

(626) 女人从大树旁边走到了远处。 (Traj_032_S7)

Nǚrén cóng dàshù=pángbiān zǒu-dao-le yuǎnchù.
 woman from big.tree=side walk-to-PFV distance
 'The woman walked from the side of the big tree to afar.'

(627) 一个女人从大树旁边走过来。 (Traj_032_S1)

Yí gè nǚrén cóng dà shù=pángbiān zǒu-guo-lai.
 one CL woman from big tree=side walk-over-hither
 'A woman walked over from the tree (towards the deictic center).'

(628) 一个女人慢慢地走了过来。 (Traj_032_S4)

Yí gè nǚrén mànmande zǒu-le-guo-lai.
 one CL woman slowly walk-PFV-over-hither
 'A woman walked over slowly (towards the deictic center).'

(629) 一个女人向我们走来。 (Traj_032_S12)

Yí gè nǚrén xiàng wǒmen zǒu-lai.
 one CL woman towards 1PL walk-hither
 'A woman walks towards us (towards the deictic center).'

(630) 这个女孩儿从树旁边向我们走过来。 (Traj_032_S5)

Zhè gè nǚhái cóng shù=pángbiān xiàng wǒmen zǒu-guo-lai.
 this CL girl from tree=side towards 1PL walk-over-hither
 'The girl walks over towards us from the tree (towards the deictic center).'

Now taking the clip 061 (Path_F_walk_toward_tree_back) as an example, this clip shows a woman walking towards the tree which

involves Goal-oriented Path. In spite of the fact that Goal is anticipated to be encoded, speakers have chosen to encode not only Goal independently, as shown in (631), but also a combination of Goal with either Source (e.g., (632)) or Medium (e.g., (633)).

(631) 一个女人走向一棵大树。 (Traj_061_S11)

Yí gè nǚrén zǒu xiàng yì kē dàshù.
 one CL woman walk towards one CL big.tree
 'A woman walks towards a big tree.'

(632) 一个女人从远处走到了大树旁边儿。 (Traj_061_SS7)

Yí gè nǚrén cóng yuǎnchù zǒu-dao-le dàshù=pángbiānr.
 one CL woman from distance walk-to-PFV big.tree=side
 'A woman walked to the side of the big tree from afar.'

(633) 一个女人向大树走了过去。 (Traj_061_S6)

Yí gè nǚrén xiàng dàshù zǒu-le-guo-qu.
 one CL woman towards big.tree walk-PFV-over-thither
 'A woman walked over towards the big tree (away from the deictic center).'

The information encoded in the *Put & Take* data showing caused motion reveal a similar tendency. As shown in Table 84, speakers choose to express Source the most dominantly in clips involving Source-oriented Path (93.2%) and Goal the most dominantly in clips involving Goal-oriented Path (93.9%). Besides, they also encode other portion(s) than the information being expected.

Clips involving Source-oriented Path (N=264)		Clips involving Goal-oriented Path (N=264)	
Encoded information	Tokens	Encoded information	Tokens
S	93.2% (246)	G	93.9% (248)
G	3.4% (9)	S + G	2.3% (6)
S + G	1.9% (5)	S	0.8% (2)

Table 84. Distribution of Path in simple Path events in the *Put & Take* data (caused motion)

Let us look at the clip 120 (pour water out of a tin) involving Source-oriented Path. This scene shows someone pouring water out

of a tin. Although we expect that Source information should be encoded, as in (634), other portions of Path, such as the combination of Source and Goal (e.g., (635)), or Goal (e.g., (636)) singly are also the options chosen by speakers.

(634) 他缓缓地把水倒出来。 (P&T_120_S3)

Tā huǎnhuǎnde bǎ shuǐ dào-chu-lai.
 3SG slowly OM water pour-out-hither
 'He poured out the water slowly.'

(635) 他把罐头里的水倒在草地上。 (P&T_120_S5)

Tā bǎ guàntou=li de shuǐ dào zài cǎodi=shang.
 3SG OM tin=inside GEN water pour at grass=upside
 'He poured the water from the tin on the grass.'

(636) 这个人把水倒在了草地上。 (P&T_120_S8)

Zhè gè rén bǎ shuǐ dào zài le cǎodi=shang.
 this CL person OM water pour at PFV grass=upside
 'The man poured the water on the grass.'

As far as clips involving Goal-oriented Path are concerned, speakers have chosen to encode not only Goal information, but also to combine Goal with Source. Taking the clip 002 (put plastic cup on table with mouth) as an example, it shows someone putting a plastic cup on the table with his mouth. As expected, some speakers have described only the Goal information, as in (637), while others have expressed both Source and Goal, as illustrated in (638).

(637) 这个人用嘴把杯子放到了桌子上。 (P&T_002_S7)

Zhè gè rén yòng zuǐ bǎ bēizi fàng-dào-le zhuōzi=shang.
 this CL person with mouth OM cup put-to-PFV table=upside
 'The man put the cup on the table with his mouth.'

(638) 一个女的把嘴里叼着的杯子放在桌子上。 (P&T_002_S1)

Yí gè nǚde bǎ zuǐ=li diāo=zhe de bēizi
 one CL woman OM mouth=inside hold.in.the.mouth=DUR GEN cup
fàng zài zhuōzi=shang.
 put at table=upside
 'A woman put the cup that was held in the mouth to the table.'

Table 85 and Table 86 illustrate the information encoded in complex Path events of spontaneous motion and caused motion, respectively. The result shows that speakers tend to encode the most frequently both Source and Goal information simultaneously in the description of clips showing Source-Goal-oriented Path. Such a combination of Source and Goal accounts for 51.7% in data showing spontaneous motion and 77.8% in data showing caused motion, as illustrated in (639) and (640).

Clips involving Source-Goal-oriented Path (N=60)		
Encoded information	Tokens	
S + G	51.7%	(31)
S	46.7%	(28)
G	1.6%	(1)

Table 85. Distribution of Path encoding in complex Path events in the *Trajectoire* data (spontaneous motion)

Clips involving Source-Goal-oriented Path (N=36)		
Encoded information	Tokens	
S + G	77.8%	(28)
G	22.2%	(8)

Table 86. Distribution of Path encoding in complex Path events in the *Put & Take* data (caused motion)

(639) 男孩儿从一个石头上跳到另一个石头上。 (Traj_075_S9)

Nánháir cóng yí gè shítou=shang tiào-dao líng yí
 boy from one CL rock=upside jump-to other one
 gè shítou=shang.
 CL rock=upside

'The boy jumped from one rock to the other.'

(640) 这个人把一包糖从桌子上放到了椅子上。 (P&T_050_S8)

Zhè gè rén bǎ yí bāo táng cóng zhuōzi=shang
 this CL person OM one CL candy from table=upside
 fàng-dao-le yǐzi=shang.
 put-to=upside chair=upside

'The person moved a bag of candy from the table to the chair.'

Apart from the encoding of Source and Goal simultaneously for clips showing complex Path events, some speakers also encode one portion of Path only. When a single piece of information is expressed, the distribution of Source and Goal behave asymmetrically in the *Trajectoire* data (spontaneous motion). Interestingly, the encoding of Source is more frequent than the encoding of Goal (Source 46.7% vs. Goal 1.6%), as exemplified in (641) and (642). We observe that the preference of encoding Source only occurs in certain context. Among the five clips showing complex Path, Source is expressed dominantly in two clips. All the twelve speakers encode unanimously only Source information in the description of the clip 028 (Path_C_walk_out_of_cave_to_sea_sideLR) which shows a child walking out of the cave and walking to the sea with a perspective of the camera from left to right side. Eleven out of twelve speakers encode only Source information for the clip 030 (Path_C_walk_out_of_cave_toward_C_sideLR) that describes a child walking out of the cave and walking towards another child with a perspective of the camera from left to right side. These two clips share a common context: the Source is boundary-crossing and the perspective is taken from the left to the right side. The asymmetry revealed in *Trajectoire* data contrasts with the *Put & Take* data where Source was not found to be encoded; only Goal information was expressed (22.2%), as in (643).

(641) 一个小男孩儿从山洞里走了出来。 (Traj_028_S7)

Yí gè xiǎo nánháiér cóng shāndòng=li zǒu-le-chu-lai.
 one CL little boy from cave=upside walk-PFV-out-hither
 'A little boy walked out of the cave (towards the deictic center).'

(642) 男孩儿跳向湖里。 (Traj_S10_064)

Nánháiér tiào xiàng hú=li.
 boy jump towards lake=inside
 'The boy jumps towards the lake.'

(643) 一个人将一个箱子移到了草坪上。 (P&T_052_S11)

Yí gè rén jiāng yí gè xiāngzi yí-dao-le cǎopíng=shang.
 one CL person OM one CL suitcase move-to-PFV lawn=upside
 'A man moved a suitcase to the lawn.'

We now examine the spatial information encoded in the dialogical data. Table 87 illustrates the distribution of Path in the TV series-based data. Dialogical data is different from descriptive data collected with stimulus sets since there is no clips to be depicted. Data of both TV series reveal that Goal tends to be encoded more frequently than Source in dialogues. The encoding of Goal accounts for 71.6% and 64.9% in the *MFTY* and the *LZHL* data, as exemplified in 0. The encoding of Source accounts for 16.9% and 24.5% in the *MFTY* and the *LZHL* data, as exemplified in (645). There is also a small number of utterances that encode Medium information, as exemplified in (646). Very few utterances encode Source and Goal simultaneously, as in (647).

Encoded information	<i>MFTY</i> (N=521)		<i>LZHL</i> (N=478)	
G	71.6%	(373)	64.9%	(310)
S	16.9%	(88)	24.5%	(117)
M	10.4%	(54)	10.5%	(50)
S + G	1.2%	(6)	0.2%	(1)

Table 87. Distribution of Path encoding in the dialogical data

(644) 云芳，你进来吧！ (LZHL_2_2438)

Yúnfāng, nǐ jìn-lai ba!
 Yunfang 2SG enter-hither SUG
 'Yunfang, come in!'

(645) 我把你们俩都扔出去。 (MFTY_7_3514)

Wǒ bǎ nǐmen liǎ dōu rēng-chū-qu.
 1SG OM 2PL two all throw-out-thither
 'I (will) throw you both out (away from the deictic center).'

(646) 一大群马跑过来。 (LZHL_4_2913)

Yí dà qún mǎ pǎo-guò-lái.
 one large group horse run-over-hither
 'A large group of horses ran over (towards the deictic center).'

(647) 赵姨已经从老家回来一阵子了。 (MFTY_9_0502)

Zhào yí yǐngjīng cóng lǎojiā huí-lái yízhènzǐ le.
 Zhao aunt already from hometown return-hither for.a.while CRS
 'Aunt Zhao has already been back from her hometown for a while (towards the deictic center).'

6.3.2. Source-Goal asymmetry in morphology

According to the Goal-bias hypothesis, at the morphological level, we may expect to find more complex morphological marking for elements representing the Source than the Goal. Let us first look at the descriptive data. Table 88 and Table 89 illustrate the patterns of distribution in the expression of Source and Goal in spontaneous motion and caused motion, respectively. As shown in the *Trajectoire* data (spontaneous motion, see Table 88), Source information is conveyed predominantly by a combination of three elements (i.e., prepositional phrase + localizer + satellite). By contrast, Goal information is usually conveyed by a single grammatical device, either a satellite or a postverbal prepositional phrase. In the *Put & Take* data (caused motion, see Table 89), Source information is conveyed frequently in both a combination of three elements (i.e., prepositional phrase + localizer + satellite) and a single element (i.e., satellite). Nevertheless, Goal information is also frequently conveyed by more than one element (i.e., postverbal prepositional phrase + localizer and satellite + localizer) showing an opposite trend from the *Trajectoire* data. It is also important to note that, in the expression of Goal, PPs occur more frequently after the verb than before the verb, as observed in both types of events.



Patterns in expression of Source (N = 69)			Patterns in expression of Goal (N = 76)		
PP + LOC + SAT	75.4%	(52)	SAT	31.6%	(24)
PP + SAT	7.2%	(5)	PP (AFTER V)	28.9%	(22)
SAT	7.2%	(5)	SAT + LOC	22.4%	(17)
PP + LOC + V	4.3%	(3)	PP (AFTER V) + LOC	7.9%	(6)
PP	2.9%	(2)	PP (BEFORE V) + LOC	2.6%	(2)
PP + LOC + V + SAT	1.4%	(1)	PP (BEFORE V)	2.6%	(2)
V	1.4	(1)	V	1.3%	(1)
			V + LOC	1.3%	(1)
			V + SAT	1.3%	(1)

Table 88. Distribution patterns in the *Trajectoire* data (spontaneous motion)

Patterns in expression of Source (N = 246)			Patterns in expression of Goal (N = 248)		
PP + LOC + SAT	48.0%	(118)	PP (AFTER V) + LOC	48.0%	(119)
SAT	31.7%	(78)	SAT + LOC	37.5%	(93)
LOC + SAT	9.8%	(24)	SAT	13.3%	(33)
PP + LOC + SAT	8.1%	(20)	PP (BEFORE V) + LOC	0.8%	(2)
PP + LOC	1.2%	(3)	PP (BEFORE V) + LOC +		
PP + SAT	1.2%	(3)	SAT	0.4%	(1)

Table 89. Distribution patterns in the *Put & Take* data (caused motion)

Examples (648)-(651) illustrate the encoding of Source information. As mentioned above, Source is most often expressed by a combination of PPs, localizers, and satellites, as in (648) depicting spontaneous motion and in (650) depicting caused motion. Although speakers prefer to encode Source by multiple elements, they sometimes also choose a single element, as in (649) and (651). In both examples, Source is expressed by means of satellites. However, the expression of Source varies in spontaneous motion and caused motion. In spontaneous motion, the satellite is always followed by a Ground NP, as in (649), whereas in caused motion, the Ground NP is usually omitted; instead, the Path satellite

is followed by a deictic satellite indicating the perspective taken by the speaker, as in (651).

(648) 男人从丛林里走出来。 (Traj_055_S10)

Nánrén cóng cónglín=li zǒu-chu-lai.
 man from wood=inside walk-out-hither
 'The man walked here from out of the woods.'

(649) 一个女人走出山洞。 (Traj_025_S1)

Yí gè nǚrén zǒu-chu shāndòng.
 one CL woman walk-out cave
 'A woman walked out of the cave.'

(650) 他从箱子里面拿出一个橘子。 (P&T_111_S10)

Tā cóng xiāngzi=límian ná-chu-le yí gè júzi.
 3SG from box=inside take-out-PFV one CL orange
 'He took an orange out of the box.'

(651) 他把黄瓜拿出来。 (P&T_115_S5)

Tā bǎ huánghuā ná-chu-lai le.
 3SG OM cucumber take-out-hither CRS
 'He took out the cucumber (towards the deictic center).'

Examples (652)-(655) show how Goal is encoded in spontaneous motion and caused motion. As shown in the two tables above, Goal is expressed most frequently by a single element in the *Trajectoire* data (spontaneous motion), either a satellite or a postverbal prepositional phrase. The satellites are used relatively more frequently than the prepositional phrases in spontaneous motion, as exemplified in (652) and (653). In the *Put & Take* data (caused motion), the use of two elements is frequent, either postverbal prepositional phrase + localizer, as in (654), or satellite + localizer, as in (655). The difference of the encoding of Goal between the descriptive data (using one element) and the dialogical data (using two elements) might be due to the nature of the Ground found in two types of events. As illustrated in (652), the Ground NP (i.e., 田地 *tiándì* 'field') in spontaneous motion is usually a noun with an inherently locative value and used to refer to a specific place. Thus, the satellite alone is sufficient to encode Path. By contrast, the Ground



NP (i.e., 桶 *tǒng* 'bucket') in caused motion, as in example (655), is usually a common noun which requires a localizer to function as a place word. Therefore, the localizer usually co-occurs with either a satellite or a PP (e.g., (654)) to express Path.

(652) 一个女人走进一块田地。 (Traj_069_S12)

<i>Yí</i>	<i>gè</i>	<i>nǚrén</i>	<i>zǒu-jìn</i>	<i>yí</i>	<i>kuài</i>	<i>tiándì.</i>
one	CL	woman	walk-into	one	CL	field

'A woman walked into a field.'

(653) 一位女士走向一棵树。 (Traj_S4_061)

<i>Yí</i>	<i>wèi</i>	<i>nǚshì</i>	<i>zǒu</i>	<i>xiàng</i>	<i>yì</i>	<i>kē</i>	<i>shù.</i>
one	CL	lady	walk	towards	one	CL	tree

'A lady walks towards a tree.'

(654) 他把绳子放在树杈上。 (P&T_027_S3)

<i>Tā</i>	<i>bǎ</i>	<i>shéngzi</i>	<i>fàng</i>	<i>zài</i>	<i>shùchà=shàng.</i>
3SG	OM	rope	put	at	branch= <u>upside</u>

'He hung the rope over the tree branch.'

(655) 他把头伸进了桶里。 (P&T_024_S5)

<i>Tā</i>	<i>bǎ</i>	<i>tóu</i>	<i>shēn-jìn-le</i>	<i>tǒng=lǐ.</i>
3SG	OM	head	stretch-into-PFV	bucket= <u>inside</u>

'He put his head into the bucket.'

Now we look at the encoding of Source and Goal in the dialogical data. Table 90 and Table 91 illustrate the patterns of distribution of Source and Goal in the *MFTY* data and the *LZHL* data, respectively. As illustrated in the two tables below, the encoding of Source behaves symmetrically as compared with the encoding of Goal. In both data sets, Source and Goal favor the use of a single element: verbs being the most frequent, and satellites being the second most frequent.



Patterns in expression of Source (N = 88)			Patterns in expression of Goal (N = 373)		
V	77.3%	(68)	V	83.9%	(313)
SAT	14.8%	(13)	SAT	13.9%	(52)
PP	2.3%	(2)	V + LOC	0.8%	(3)
PP + LOC	1.1%	(1)	V + SAT	0.5%	(2)
PP + LOC + SAT	1.1%	(1)	LOC	0.5%	(2)
PP + SAT	1.1%	(1)	PP (BEFORE V)	0.3%	(1)
PP + V	1.1%	(1)			
V + SAT	1.1%	(1)			

Table 90. Distribution of Source and Goal patterns in the *MFTY* data

Patterns in expression of Source (N = 117)			Patterns in expression of Goal (N = 310)		
V	71.8%	(84)	V	86.8%	(269)
SAT	24.8%	(29)	SAT	8.7%	(27)
PP + V	1.7%	(2)	V + LOC	3.2%	(10)
PP + LOC + SAT	0.9%	(1)	PP (BEFORE V) + LOC	0.6%	(2)
PP + LOC + V + SAT	0.9%	(1)	SAT + LOC	0.3%	(1)
			V + SAT	0.3%	(1)

Table 91. Distribution of Source and Goal patterns in the *LZHL* data

When verbs are used in the expression of Source, the verb must be followed by either a deictic satellite or a Ground NP, as illustrated in (656) and (657), respectively. By contrast, when verbs are used in the expression of Goal, the verb can be followed either by a deictic satellite or a Ground NP, as in (658) and (659). Furthermore, the verb can also be used alone (e.g., (660)).

- (656) 明儿早点儿出来! (MFTY_1_0958)
Míng *zǎodiǎnr* *chū-lai!*
 tomorrow early exit-hither
 'Come out early tomorrow!'

- (657) 刚出厕所, [...] (LZHL_1_1155)
Gāng chū cèsuǒ, [...]
 just exit toilet
 '(The moment when she) just got out of the toilet, [...]'
- (658) 你回来! (LZHL_1_1509)
Nǐ huí-lai!
 2SG return-hither
 'Come back!'
- (659) 咱们上楼! (MFTY_5_1916)
Zánmen shàng lóu!
 1PL.INCL ascend stairs
 'Let's go upstairs!'
- (660) 您不能进! (MFTY_9_3052)
Nín bùnéng jìn!
 2SG.HON cannot enter
 'You cannot enter!'

6.3.3. Source-Goal asymmetry in relation to Ground

In this section, we look at the expression of Source and Goal in relation to Ground, which is the reference object with respect to which the Figure moves. In the expression of motion events, the Ground can be explicitly expressed or remain implicit. When explicitly expressed, the reference location is usually introduced by a preposition. The prepositions can either be followed only by the Ground NP (e.g., (661)) or by the Ground NP followed by the localizer indicating the spatial configuration (e.g., (662)). Such reference location can also be introduced by Path verbs and Path satellites. In the same way, these Path verbs and Path satellites can either be followed only by Ground NPs (e.g., (663), (665)) or by Ground NPs followed by localizers (e.g., (664), (666)).

- (661) 一位女士走向一棵树。 (Traj_S4_061)
Yí wèi nǚshì zǒu xiàng yì kē shù.
 one CL lady walk towards one CL tree
 'A lady walks towards a tree.'

(662) 一个人把书放在了地上。 (P&T_007_S11)

Yí gè rén bǎ shū fàng zài le dì=shang
 one CL person OM book put at PFV **floor=upside**

‘A person put the book on the floor.’

(Lit. A person put the book at the upside of the floor.)

(663) 一个小男孩儿进了山洞。 (Traj_058_S2)

Yí gè xiǎo nánháir jìn-le **shāndòng**.
 one CL young boy enter-PFV **cave**

‘A little boy entered the cave.’

(664) 一个小男孩儿奔跑着进了海里。 (Traj_059_S4)

Yí gè xiǎo nánháir bēnpǎo-zhe jìn-le hǎi=li.
 one CL young boy run.quickly-DUR enter-PFV **sea=inside**

‘A little boy entered the sea running quickly.’

(665) 一个女人走进山洞。 (Traj_053_S1)

Yí gè nǚrén zǒn-jìn **shāndòng**.
 one CL woman walk-into **cave**

‘A woman walked into the cave.’

(666) 一个女人走进山洞中。 (Traj_053_S12)

Yí gè nǚrén zǒn-jìn **shāndòng=zhong**.
 one CL woman walk-into **cave=inside**

‘A woman walked into the cave.’

(Lit. A woman walked into the inside of the cave.)

Regarding the encoding of Ground in the expression of Source and Goal in the descriptive data, we observe that the Ground is overwhelmingly present in the *Trajectoire* data (spontaneous motion), accounting for 98.6%, as illustrated in Table 92. The Ground information is also frequently encoded in the *Put & Take* data (caused motion), accounting for 70.3%, as shown in Table 93.

Encoded information	+ Ground	- Ground
Source (N = 69)	98.6% (68)	1.4% (1)
Goal (N = 76)	100% (76)	0% (0)

Table 92. The overt and covert encoding of Grounds in the *Trajectoire* data (spontaneous motion)

Encoded information	+ Ground		- Ground	
Source (<i>N</i> = 246)	70.3%	(173)	29.7%	(73)
Goal (<i>N</i> = 248)	90.3%	(224)	9.7%	(24)

Table 93. The overt and covert encoding of Grounds in the *Put & Take* data (caused motion)

More precisely, in the *Trajectoire* data (spontaneous motion), nearly all the Source expressions encode Ground overtly. There is only one occurrence in which the Ground is not encoded. When being explicitly encoded, the Source Grounds are placed before the verb most of the time (63 out of 68) and are usually introduced by the preposition 从 *cóng* 'from', as illustrated in (667). Besides, although more rarely, the Source Grounds can also be placed after the verb (5 out of 68) and are introduced by Path satellite, such as 出 *-chu* 'out' which introduce 山洞 *shāndòng* 'cave' in (668). The tendency showing the relative frequency of the position of Ground corresponds to the remark in Lamarre (2007a: 10) who observes that sentences like (668) are less frequent in spoken language. It is worth noting that not all the Ground NPs are followed by localizers. As we introduced previously in Chapter 2 (§2.2.2), common nouns are usually followed by monosyllabic and dissyllabic localizers which indicate the spatial relationship of the Figure relative to the Ground. Taking the Ground NP 山洞 *shāndòng* 'cave' as an example, when it is used in a PP placed before the verb, the localizer usually follows the noun (55 out of 63), as in (667). However, the localizer can also be optional (8 out of 63), as in (669). However, the localizer can not follow the Ground NP when it is placed after the verb, as in (670). When the Ground is covertly encoded, a deictic satellite is often used in replace of the Ground NP, as illustrated in example (671).

- (667) 一个女人从山洞里走出来。 (Traj_023_S7)
 Yí gè nǚrén cóng shāndòng=li zǒu-chu-lai.
 one CL woman from cave=inside walk-out-hither
 'A woman walked out of the cave (towards the deictic center).'

(668) 一个女人走出山洞。 (Traj_025_S1)

Yí gè nǚrén zǒu-**chu** shāndòng.
 one CL woman walk-out cave
 'A woman walked out of the cave.'

(669) 女人从山洞走出来。 (Traj_023_S10)

Nǚrén **cóng** shāndòng zǒu-chu-lai.
 woman **from** cave walk-out-hither
 'The woman walked out of the cave (towards the deictic center).'

(670) *一个女人走出山洞里。

*Yí gè nǚrén zǒu-**chu** shāndòng=li.
 one CL woman walk-out cave=inside
 'A woman walked out of the cave.' (intended meaning)

(671) 这位女士出来了。 (Traj_023_S11)

Zhè wèi nǚshì chū-lai le.
 this CL lady exit-hither CRS
 'The lady came out.'

In the selected *Trajectoire* data (spontaneous motion), all the Goal expressions encode Ground overtly. Contrary to the tendency displayed in the Source expressions, the Goal Grounds are placed after the verbs most of the time (72 out of 76), as in (672). Only a few occurrences (4 out of 76) show the Goal Grounds being placed before the verb, as in (673). When the Goal Grounds are placed before the verbs, they can only be introduced by prepositions, not satellites. Unlike Source Grounds which have restriction in combining with the localizers when the Ground NPs are placed after the verbs (e.g., (670)), the Goal Grounds can combine with the localizers regardless of their positions with respect to the verbs, either after or before the verbs, as exemplified in (674) and (675), respectively. It is worth noting that when the Ground NP is placed after the verb, the localizer is usually omitted (47 out of 72), as shown in (672).

(672) 一个女人走进山洞。 (Traj_053_S1)

Yí gè nǚrén zǒn-**jin** shāndòng.
 one CL woman walk-into cave
 'A woman walked into the cave.'

(673) 女人向山洞走去。 (Traj_053_S10)

Nǚrén xiàng shāndòngjǐ zǒu-qu.
 woman towards cave walk-thither

'The woman walks towards the cave (away from the deictic center).'

(674) 一个女人走进山洞中。 (Traj_053_S12)

Yí gè nǚrén zǒn-jìn shāndòng=zhong.
 one CL woman walk-into cave=inside

'A woman walked into the cave.'

(Lit. A woman walked into the inside of the cave.)

(675) 女人向山洞里走来。 (Traj_053_S10)

Nǚrén xiàng shāndòng=lǐ zǒu-lai.
 woman towards cave=inside walk-hither

'The woman walks towards the cave (towards the deictic center).'

We shall take a closer look at the encoding of Ground in the *Put & Take* data (caused motion). As can be seen in Table 93 above, the overt encoding of Ground in Goal expressions (90.3%) is higher than in Source expressions (70.3%). When Source Grounds are expressed explicitly, they are placed more frequently before the verbs (165 out of 173) than after the verbs (8 out of 173). Source Grounds being placed before the verbs can be introduced either by the preposition 从 *cóng* 'from' (123 out of 166) or the genitive marker 的 *de* 'GEN' (42 out of 165), functioning like phrasal modifiers, as illustrated in (676) and (677), respectively. Source Grounds occurring after the verbs can only be introduced by the genitive marker 的 *de* 'GEN', as in (678).

(676) 一个女人从地上捡起了一本杂志。 (P&T_107_S11)

Yí gè nǚrén cóng dì=shang jiǎn-qi-le yì běn zázhì.
 one CL woman from floor=upside pick.up-up-PFV one CL magazine

'A woman picked up a magazine from the floor.'

(677) 这个人把地上的杂志捡了起来。 (P&T_107_S8)

Zhè gè rén bǎ dì=shang de zázhì jiǎn-le-qi-lai.
 this CL person OM floor=upside GEN magazine pick.up-PFV-up-hither

'The man picked up the magazine that was on the floor.'

(678) 他捡起了地上的杂志。 (P&T_107_S10)

Tā jiǎn-qi-le dì=shàng de zázhì.
 3SG pick.up-up-PFV floor=upside GEN magazine
 'He picked up the magazine that was on the floor.'

We now look in more detail at the overt encoding of Ground in Goal expressions. When Goal Grounds are expressed explicitly, they are placed more frequently after the verb (211 out of 224) than before the verb (13 out of 224). Note that in the *Put & Take* data (caused motion), the preposition 在 *zài* 'at' (113 out of 211) is used to introduce Goal Grounds for more than half of the descriptions, as in (679). As to the rest of the descriptions containing Goal Ground, it is introduced by the following satellites 到 *-dao* 'to', 回 *-hui* 'back', 进 *-jin* 'into', and 入 *-rù* 'into', as exemplified in (680).

(679) 他把书放在了地上。 (P&T_007_S10)

Tā bǎ shū fàng zài le dì=shàng.
 3SG OM book put at PFV floor=upside
 'He put the book on the floor.'

(680) 他把一个苹果放进了碗里。 (P&T_011_S5)

Tā bǎ yí gè píngguǒ fàng-jìn-le wǎn=lǐ.
 3SG OM one CL apple put-into-PFV bowl=inside
 'He put an apple in the bowl.'

As we may see in Table 92 and Table 93 above, the Source and Goal Grounds tend to be omitted more often in caused motion events (39.4%) as compared to spontaneous motion events (1.4%). Furthermore, in caused motion descriptions, the omission of Source Grounds is higher than Goal Grounds (29.7% vs. 9.7%). After examining the frequency of descriptions in which Source Grounds are omitted, we found that such omission usually occurs in the expression to describe events in which the Grounds are either body parts or surfaces. However, in the expression which depict the events implying boundary-crossing, Grounds are rarely omitted. Taking the video clip 126 (take off sock) as an example, this scene shows someone taking off one sock from her foot. All of the twelve speakers described unanimously this scene without specifying the

Ground (i.e., the foot), as exemplified in (681). Another clip 103 (take banana off table with long tongs) shows someone taking a banana off table with long tongs. Nine out of twelve speakers described such scene without encoding explicitly the Ground (i.e., the table), as in (682). The omission of Goal Grounds shows the similar context as that of Source Grounds: the Grounds are body parts, as exemplified in (683).

(681) 她把袜子脱了下来。 (P&T_126_S3)

Tā bǎ wàzi tuō-le-xia-lai.
 3SG OM sock take.off-PFV-off-hither
 'She took off her sock (towards the deictic center).'

(682) 这个人用钳子把香蕉夹了起来。 (P&T_103_S8)

Zhè gè rén yòng qiánzi bǎ xiāngjiāo jiā-le-qi-lai.
 this CL person with tong OM banana press.from.both.sides-PFV-up-hither
 'The man picked up the banana with tongs (towards the deictic center).'

(683) 她穿上了她的靴子。 (P&T_026_S3)

Tā chuān-shang-le tāde xuēzi.
 3SG put.on-up-PFV her boot
 'She put on her boot.'

Looking now at the encoding of Ground in the expression of Source and Goal in the dialogical data, Table 94 and Table 95 show the overt and covert encoding of Grounds in the data extracted from the two TV series. Interestingly, the Ground information in both data sets remain mostly implicit. The encoding of Ground is infrequent especially in Source expressions. Instead, deictic markers are usually used in replace of Grounds, as in (684) and (685). When Grounds are expressed explicitly, they are usually used to emphasize that the place is somewhere other than the home and is not known to both the speaker and the addressee, as in (686)-(688). It is worth noting that Source Grounds are introduced by prepositions, such as 从 *cóng* 'from' in (686) whereas Goal Grounds are introduced by either verbs (e.g., (687)) or satellites (e.g., (688)).



Encoded information	+ Ground		- Ground	
Source (N = 88)	14.8%	(13)	85.2%	(75)
Goal (N = 373)	37.3%	(139)	62.7%	(234)

Table 94. The overt and covert encoding of Grounds in the *MFTY* data

Encoded information	+ Ground		- Ground	
Source (N = 117)	8.2%	(16)	91.8%	(101)
Goal (N = 310)	49.4%	(153)	50.6%	(157)

Table 95. The overt and covert encoding of Grounds in the *LZHL* data

(684) 明儿早点儿出来! (MFTY_1_0958)

Míngr *zǎodiǎnr* *chū-lai!*
 tomorrow early exit-hither
 'Come out early tomorrow!'

(685) 善大爷，我回来了。 (MFTY_4_4424)

Shàn-dàye *wǒ* *huí-lai* *le.*
 Shan-uncle 1SG return-hither CRS
 'Uncle Shan, I came back.'

(686) 我从缆车上掉下来了。 (LZHL_2_1709)

Wǒ ***cóng*** *lǎnchē=shang* *diào-xia-lai* *le.*
 1SG **from** cable.car=upside fall-down-hither CRS
 'I fell down from the cable car (towards the deictic center).'

(687) 姐，咱们上医院! (LZHL_6_3851)

Jiě, *zánmen* ***shàng*** *yīyuàn!*
 sisiter 1PL.INCL **move.to** hospital
 'Sister, let's go to the hospital!'

(688) 你把它送到索尼公司去。 (MFTY_10_3355)

Nǐ *bǎ* *tā* *sòng-dao-suǒníqōngsī-qu.*
 2SG OM 3SG send-to-Sony.corporation-thither
 'Send it to the Sony (away from the deictic center).'

6.4. (A)symmetries in Dynamic Deixis encoding

In this section, our aim is to examine how frequently Dynamic Deixis is encoded at the discourse level, in particular, how frequently centripetal and centrifugal directions are encoded. Furthermore, we also aim at investigating the (a)symmetries of centripetal and centrifugal directions in relation to Ground.

6.4.1. The use and non-use of Dynamic Deixis in discourse frequency

When describing a translational motion, Dynamic Deixis can either be expressed overtly or covertly. As stated by Berman & Slobin (1994: 39): “there is no single ‘objective’ story, because narrators are free to choose perspectives on events”. In order to examine the occurrence of the use of Dynamic Deixis, we have counted clauses which express Dynamic Deixis, including deictic verbs, deictic satellites, and associated motion markers and clauses which do not comprise Dynamic Deixis. Table 96 illustrates a striking difference between the use and non-use of Dynamic Deixis in the two types of data. Dynamic Deixis expressions are found to appear less often in the descriptive data accounting for 36.3% and 22.0% in the *Trajectoire* data and the *Put & Take* data, respectively. By contrast, Dynamic Deixis expressions are predominant in both TV series accounting for 95.1% and 87.9% in the *MFTY* data and the *LZHL* data.

Data type	Corpora	+ Dynamic Deixis		- Dynamic Deixis	
Descriptive data	<i>Trajectoire</i> (N=672)	36.3%	(244)	63.7%	(428)
	<i>Put & Take</i> (N=736)	22.0%	(162)	78.0%	(574)
Dialogical data	<i>MFTY</i> (N=997)	95.1%	(948)	4.9%	(49)
	<i>LZHL</i> (N=802)	87.9%	(705)	12.1%	(97)

Table 96. The use and non-use of Dynamic Deixis expressions in the data

Below we will examine in detail in which contexts the use and non-use of Dynamic Deixis are triggered in the descriptive data. Let us first look at the *Trajectoire* data (spontaneous motion), out of the 55 target scenes, Dynamic Deixis is encoded at least once in 47 scenes and is absent in 8 scenes. Among the 47 scenes, 44.7% (21 out of 47 scenes) of them are encoded frequently with Dynamic Deixis expressions by more than half of the twelve speakers (see Appendix 15). By examining the 21 target scenes, we found 10 target scenes showing Source-oriented Path, 5 showing Medium-oriented Path, 3 showing Source-Medium-oriented Path, and 3 showing Source-Goal-oriented Path. None of the scenes showing Goal-oriented Path, Medium-Goal-oriented Path, and Source-Medium-Goal-oriented Path are expressed frequently with Dynamic Deixis. Furthermore, we observe that 6 target scenes are encoded with Dynamic Deixis expressions by all the 12 speakers unanimously. What these 6 target scenes have in common is that all of them display a boundary-crossing event, as exemplified in example (689).

(689) 一个女人从山洞里走出来。 (Traj_023_S7)
 Yí gè nǚrén cóng shāndòng=li zǒu-chu-lai.
 one CL woman from cave=inside walk-out-hither
 ‘A woman walked out of the cave (towards the deictic center).’

There are 12 out of the 21 target scenes showing the front perspective of the moving entity and 3 showing the back perspective. We observe that the clips showing front perspective are all described with the centripetal morpheme 来 *-lai* ‘hither’ and the back perspective are all described with the centrifugal morpheme 去 *-qu* ‘thither’. As to the 6 target scenes showing either left to right or right to left perspectives, 5 of them are described with the centripetal morpheme 来 *-lai* ‘hither’ by all the speakers choosing to express Dynamic Deixis. There is one exception of the target scene 048 (Path_F_walk_across_path_sideLR). Out of the 12 speakers, 8 of them describe it with centripetal morpheme 来 *-lai* ‘hither’, as in (690); whereas 2 speakers describe it with centrifugal morpheme 去 *-qu* ‘thither’, as in (691). This is probably due to the fact that

Standard Chinese does not have any ‘transverse’ marker indicating that a moving entity moves across somewhere, i.e., neither towards nor away from a deictic center. Therefore, both centripetal and centrifugal markers can be used to describe such transversal event. What’s more, since the centrifugal morpheme 去 *-qu* ‘thither’ can be characterized as not only by ‘moving away from the speaker (the deictic center)’, but also by ‘moving in another direction than that of the speaker (the deictic center)’, the use of centrifugal marker in a direction from left to right makes total sense.

(690) 她从树里面穿了过来。 (Traj_048_S5)

Tā cóng shù=límian chuān-le-guo-lai.
 3SG from tree=inside cross-PFV-across-hither
 ‘She came crossing from the inside of the tree.’

(691) 一个女士从一条路上穿过去。 (Traj_048_S3)

Yí gè nǚshì cóng yì tiáo lù=shang
 one CL woman from one CL road=upside
chuān-guo-qu.
 pass.through-across-thither
 ‘A woman went across a road walking.’

Now let us look at the 8 target scenes in which Dynamic Deixis is not expressed at all (Appendix 16). Among these 8 scenes, 4 of them show Goal-oriented Path, 3 show Medium-oriented Path, and 1 show Source-Goal-oriented Path. What is common in the descriptions of the 8 target scenes is the overt encoding of Ground. In Standard Chinese, Ground NPs indicating Goal and Medium rarely co-occur with Dynamic Deixis morphemes. Example (692) describes a scene showing Goal-oriented Path. In this example, the Ground is expressed overtly by the NPloc 树丛里 *shùcóng=li* ‘grove=inside’. Adding a Dynamic Deixis morpheme in this context would render it ungrammatical, like in (693). The only way to keep the centripetal Dynamic Deixis is to omit the Ground NP in condition that the location should usually be the place where the speaker is situated, as in (694).



(692) 一个男人走进了树丛里。 (Traj_026_S6)

Yí gè nánrén zǒu-jìn-le shùcóng=li.
 one CL man walk-into-PFV grove=inside
 'A man walked into the grove.'

(693) *一个男人走进了树丛里来。

**Yí gè nánrén zǒu-jìn-le shùcóng=li-lai.*
 one CL man walk-into-PFV grove=inside-hither
 'A man walked into the grove (towards the deictic center).'

(694) 一个男人走进来。

Yí gè nánrén zǒu-jìn-lai.
 one CL man walk-into-hither
 'A man walked in (towards the deictic center).'

Example (695) describes Medium-oriented Path with a Ground NP being explicitly expressed. Similarly, one cannot add a Dynamic Deixis morpheme to express the perspective, as in (696). However, if the location is a place from which the Figure moves away or a place other than that of the speaker, the centrifugal Dynamic Deixis can be used instead of the Ground NP, as illustrated in (697).

(695) 一个男孩儿跳过一块石头。 (Traj_063_S12)

Yí gè nánháir tiào-guo yí kuài shítou.
 one CL boy jump-over one CL stone
 'A boy jumped over a stone.'

(696) *一个男孩儿跳过一块石头去。

**Yí gè nánháir tiào-guo yí kuài shítou-qu.*
 one CL boy jump-over one CL stone-thither
 'A boy jumped over a stone (away from the deictic center).'

(697) 一个男孩儿跳过去。

Yí gè nánhái'r tiào-guo-qu.
 one CL boy jump-over-thither
 'A boy jumped over (away from the deictic center).'

In the *Put & Take* data, out of the 63 target scenes, 34 are encoded with Dynamic Deixis at least once and 29 are not encoded with Dynamic Deixis at all. In these 34 target scenes, 29 of them show Source-oriented Path, 2 scenes showing Goal-oriented Path, and 3 scenes showing Source-Goal-oriented Path. Among these 34 scenes, 18 out of 34 scenes are encoded frequently with Dynamic Deixis expressions by more than half of the twelve speakers (see Appendix 17). Among almost all the video clips (17 out of 18), the majority show Source-oriented Path, with only one of them showing Goal-oriented Path. Some of the scenes showing Source-oriented Path belong to boundary-crossing events (i.e., out of somewhere), as in (698). Other scenes are either showing the removing of the Figure (i.e., off somewhere) or indicating the original places of the moving entity (i.e., from somewhere), as shown in (699) and (700). Furthermore, we notice that in the 18 scenes which encode frequently Dynamic Deixis, more than half of the scenes (10 out of 18) are expressed only by the centripetal marker 来 *-lai* 'hither', as in the examples (698)-(700).

(698) 她把脑袋从桶里伸了出来。 (P&T_124_S9)

Tā bǎ nǎodai cóng tǒng=li shēn-le-chu-lai.
 3SG OM head from bucket=inside extend-PFV-out-
 hither
 'She took her head out the bucket.'

(699) 一个人把碟子从杯子上拿下来。 (P&T_131_S11)

Yí gè rén bǎ diézi cóng bēizi=shang ná-xia-lai.
 one CL person OM saucer from cup=upside take-down-hither
 'A person took the saucer off the cup.'



(700) 这个人把绳子从树枝上拿下来了。 (P&T_127_S7)

Zhè gè rén bǎ shéngzi cóng shùzhī=shang
 this CL person OM rope from branch=upside

ná-xia-lai le
 take-down-hither CRS

'The man took the rope off the branch.'

It is worth noting that none of the 18 video clips is described with the centrifugal marker 去 *-qu* 'thither'. However, there is one exception as to the target scene 118 (take flower out of hair-unskewer) in which both the centripetal marker 来 *-lai* 'hither' and the centrifugal marker 去 *-qu* 'thither' are used to depict this scene. Seven out of twelve speakers describe the scene 118 with Dynamic Deixis expressions. Six out of seven speakers used the morpheme 来 *-lai* 'hither' indicating centripetal direction, as shown in (701) and one speaker used the morpheme 去 *-qu* 'thither' indicating centrifugal direction, as exemplified in (702). One interpretation to explain this exceptional case is that the speakers might choose different locations as their deictic center. When speakers consider themselves as the deictic center, they usually use the morpheme expressing centripetal direction. By contrast, when speakers shift the deictic center from themselves to the location of the object (e.g., the head of the person in scene 118), they can thus use the morpheme expressing centrifugal direction. Regarding the 29 scenes which are not encoded with Dynamic Deixis at all, all of them show Goal-oriented Path (see Appendix 18).

(701) 这个人把插在头上的花拿了下來。 (P&T_118_S2)

Zhè gè rén bǎ chā zài tóu=shang de
 this CL person OM insert at head=upside GEN

huā ná-le-xia-lai.

flower take-PFV-down-hither

'The man took the flower from (her) head.'

(702) 他把一朵花从那个人的脑袋上拿下去了。 (P&T_118_S4)

Tā bǎ yì duǒ huā cóng nà gè rén de
 3SG OM one CL flower from that CL person GEN
nǎodai=shang ná-xia-qu le
 head=upside take-off-thither CRS
 'He took a flower off the person's head.'

6.4.2. Centripetal and centrifugal (a)symmetry in relation to Ground

Let us take a closer look at the encoding of centripetal and centrifugal directions of Dynamic Deixis. As presented in Chapter 4 (§4.4), the expression of Dynamic Deixis in Standard Chinese relies on a diversity of morphosyntactic devices including deictic verbs, deictic satellites, and associated motion markers. In order to examine the frequency of the expression encoding centripetal and centrifugal directions, the three types of devices mentioned above are taken in consideration. Generally speaking, in the descriptive data, speakers tend to express more often centripetal direction than centrifugal direction (Table 97). However, the dialogical data shows the opposite tendency in which the centrifugal direction is privileged as compared to the centripetal direction (Table 98).

Corpora	CTP		CTF	
<i>Trajectoire</i> (N=672)	26.6%	(179)	9.7%	(65)
<i>Put & Take</i> (N=736)	21.6%	(159)	0.4%	(3)

Table 97. Expression of centripetal (CTP) and centrifugal (CTF) directions in the descriptive data



Corpora	CTP		CTF	
<i>MFTY</i> (N=997)	48.6%	(485)	49.7%	(496)
<i>LZHL</i> (N=802)	38.5%	(309)	50.6%	(406)

Table 98. Expression of centripetal (CTP) and centrifugal (CTF) directions in the dialogical data

Nevertheless, we may note that these morphosyntactic devices exhibit both symmetry and asymmetry in terms of frequency. Deictic verbs are only used in the dialogical data. As shown in Table 99, the centripetal and centrifugal directions used in data from both TV series show a (quasi-)symmetry. By contrast, deictic satellites and associated motion markers reveal an asymmetry, as shown in Table 100 and Table 101. These two morphosyntactic devices show the opposite trend. Deictic satellites are found in both the descriptive and dialogical data. In both data sets, the centripetal direction tends to be expressed more frequently than the centrifugal direction. As for associated motion markers, they are only used in the dialogical data and show a striking difference between the centripetal and centrifugal directions in which the centrifugal direction is predominantly used.

Corpora	CTP		CTF	
<i>MFTY</i> (N=997)	19.0%	(189)	19.9%	(198)
<i>LZHL</i> (N=802)	14.7%	(118)	14.2%	(114)

Table 99. Use of deictic verbs encoding centripetal (CTP) and centrifugal (CTF) directions

Data type	Corpora	CTP		CTF	
Descriptive data	<i>Trajectoire</i> (N=672)	26.6%	(179)	9.7%	(65)
	<i>Put & Take</i> (N=736)	21.6%	(159)	0.4%	(3)
Dialogical data	<i>MFTY</i> (N=997)	28.7%	(286)	15.5%	(155)
	<i>LZHL</i> (N=802)	23.1%	(185)	19.5%	(156)

Table 100. Use of deictic satellites encoding centripetal (CTP) and centrifugal (CTF) directions



Corpora	CTP		CTF	
<i>MFTY</i> (N=997)	1.0%	(10)	14.3%	(143)
<i>LZHL</i> (N=802)	0.7%	(6)	17.0%	(136)

Table 101. Use of associated motion markers encoding centripetal (CTP) and centrifugal (CTF) directions

Having examined the frequency of the encoding of centripetal and centrifugal directions, we shall now look at how the two directions relate to Ground. As shown in Table 102 and Table 103, Ground tends to be encoded more covertly when centripetal (95.2% and 90.7%) and centrifugal (69.7% and 78.1%) directions are indicated, as exemplified in (703) and (704). When Ground is overtly encoded, it can either precede the expression of the centripetal and centrifugal directions, as in (705) and (708), or follow it, as in (706) and (709).

Encoded information	+ Ground		- Ground	
CTP (N=189)	4.8%	(9)	95.2%	(180)
CTF (N=198)	30.3%	(60)	69.7%	(138)

Table 102. The overt and covert encoding of Grounds in the *MFTY* data

Encoded information	+ Ground		- Ground	
CTP (N=118)	9.3%	(11)	90.7%	(107)
CTF (N=114)	21.9%	(25)	78.1%	(89)

Table 103. The overt and covert encoding of Grounds in the *LZHL* data

(703) 马上就来。 (MFTY_4_3659)

Mǎshàng *jiù* *lái.*
 immediately at.once come
 ‘(I) will come immediately.’

(704) 云芳，你先去！ (LZHL_8_3525)

Yúnfāng, *nǐ* *xiān* *qù!*
 Yunfang 2SG first go
 ‘Yunfang, you go first!’

(705) 成长哥，总务处来人了。 (MFTY_1_1718)

Chéng Zhǎng gē, zǒngwùchù lái rén le.
 Cheng Zhang brother **office.of.general.services** come person CRS
 'Brother Cheng Zhang, someone from the Office of general affaires came.'

(706) 你老来这儿呀? (MFTY_2_1621)

Nǐ lǎo lái zhèr ya?
 2SG always come **here** PRT
 'Do you always come here?'

(707) 他们家来了一个炸药包。 (MFTY_6_0534)

*Tāmen jiā lái-le yí gè zhà'yào bāo.*¹⁵²
 3PL home come-PFV one CL pack.of.dynamite
 'A pack of dynamite came to their house.'

(708) 你们厂我去了两趟。 (MFTY_2_0808)

Nǐmen chǎng wǒ qù le liǎngtàng.
 2PL factory 1SG go PFV twice
 'I went to your factory twice.'
 (Lit. Your factory, I went twice.)

(709) 赶紧去医院! (LZHL_8_3431)

Gǎnjǐn qù yīyuàn!
 hurriedly go **hospital**
 'Go to the hospital hurriedly!'

(Context: The child of Damin and Yunfang has got a fever at home, Damin said to his wife Yunfang that they need to bring their child to the hospital immediately.)

(710) 你赶紧去台里! (MFTY_4_0430)

*Nǐ gǎnjǐn qù tái=lǐ!*¹⁵³
 2SG hurriedly go **TV.station=inside**
 'Go to the TV station hurriedly!'

Let us look at more about the cases in which Ground is expressed overtly in the expression of Dynamic Deixis. We note that

¹⁵² The Figure 炸药包 *zhà'yào bāo* 'a pack of dynamite' in this example is used metaphorically which refers to the girlfriend of Cheng Zhang who is someone with an explosive temper.

¹⁵³ According to the context, 台 *tái* 'TV station' used in this example is an abbreviated term which refers to the TV station (电视台 *diànshìtái*). When the full form is used as a Ground NP, the localizer is no longer obligatory.

when Ground is expressed in the expression of centripetal direction (with the CTP marker 来 *lái* 'come'), it is placed before the centripetal marker in most of the times (18 out of 20 occurrences in the two dialogical data), as in (705). The Ground placed after the centripetal marker is very rare, accounting for only 2 occurrences, as in (706). By contrast, when Ground is expressed in the expression of centrifugal direction (with the CTF marker 去 *qù* 'go'), it is often placed after the centrifugal marker (63 out of 85 occurrences in the two dialogical data), as illustrated in (709). The Ground placed after the centrifugal marker is less frequent (22 out of 85 occurrences), as in (708).

What's more, we also made an interesting observation regarding the centripetal and centrifugal markers (来 *lái* 'come' and 去 *qù* 'go') and the use of Source and Goal Grounds. When centripetal marker is used, the Ground NP can combine with both Source Grounds (e.g., (705)) or Goal Ground (e.g., (706), (707)). While when centrifugal marker is used, the Ground NP combines only with Goal Grounds, as in (708)-(710). The analysis of the Standard Chinese data reveals the same syntactic asymmetry revealed in English and French observed by Fillmore (1972) and Bourdin (1997), as mentioned in Kopecka & Vuillermet (2021, cf. §6.2). Lastly, we also notice that when Grounds are combined with deictic verbs, they are rarely followed by localizers. We only found one occurrence in which the Ground NP is followed by a localizer, as in (710).

6.5. Summary

In this chapter, we investigated the phenomenon of spatial (a)symmetry in Path and Dynamic Deixis encoding. The Standard Chinese data revealed both spatial symmetry and asymmetry at different levels of the linguistic structure.

Regarding the encoding of Path, we found the following (a)symmetries:

- At the discourse level, generally speaking, the results show that in terms of the frequency, Goal appears more frequently than Source in both the descriptive and the dialogical data, which confirms the goal-over-source principle. However, depending on the event types, Source sometimes appears more frequently than Goal in spontaneous motion events showing complex Path (Source-Goal oriented Path).
- At the morphological level, in general, the inventory found in the Standard Chinese data shows a higher number of morphosyntactic devices used to encode Goal than Source. Besides, Source and Goal behave differently in two types of data. In the descriptive data, Source is conveyed predominantly by a combination of three elements (i.e., PP + LOC + SAT) where as Goal is conveyed frequently by single elements (i.e., either SAT or PP (AFTER V)) in the *Trajectoire* data (spontaneous motion) and by two elements (i.e., either PP (AFTER V) + LOC or SAT + LOC) in the *Put & Take* data (caused motion). The result in the descriptive data corresponds to the observation in previous literature in which Goal morphemes are usually morphologically simpler than Source morphemes. By contrast, in the dialogical data, the symmetry has been revealed in which both Source and Goal favor the use of a single element (i.e., v). As can be seen from the above results, depending on the data types (i.e., descriptive vs. dialogical), Source and Goal behave both asymmetry and symmetry at the morphological level.
- As to the expression of Source and Goal in relation to the Ground, we also found asymmetries in the two types of data. Both Source (98.6% in spontaneous motion and 70.3% in caused motion) and Goal (100% in spontaneous motion and 90.3% in caused motion) Grounds are overwhelmingly expressed overtly in the descriptive data. Contrastively, both Source (85.2% in the *MFTY* data and 91.8% in the *LZHL* data) and Goal (62.7% in the *MFTY* data and 50.6% in the *LZHL* data) Grounds remain covertly expressed in the dialogical data.

This difference favoring the use of Grounds in the descriptive data and favoring the non-use of Grounds in the dialogical data also shows the importance of comparing different data types within one language in order to capture the complexity of the phenomenon of asymmetry.

Concerning the encoding of Dynamic Deixis, we observed the following (a)symmetries:

- At the discourse level, Dynamic Deixis is expressed predominantly in the dialogical data (95.1% in the *MFTY* data and 87.9% in the *LZHL* data) whereas it is expressed less frequently in the descriptive data (36.3% in spontaneous motion and 22.0% in caused motion).
- At the morphological level, centripetal and centrifugal markers revealed symmetry and asymmetry depending on the morphosyntactic devices used. Deictic satellites are found in both the descriptive and the dialogical data in which centripetal direction (over 20%) is expressed more frequently than centrifugal direction (less than 9%). Deictic verbs and associated motion markers are only found in the dialogical data. As for the deictic verbs, centripetal and centrifugal directions manifest a (quasi-)symmetry in the *MFTY* data (19.0% vs. 19.9%) and in the *LZHL* data (14.7% and 14.2%). As to the associated motion markers, a striking difference is manifested in which centrifugal direction (14.3% in the *MFTY* data and 17.0% in the *LZHL* data) is preferred to be expressed in contrast to centripetal direction (1.0% in the *MFTY* data and 0.7% in the *LZHL* data).
- As to the expression of centripetal and centrifugal directions in relation to the Ground, we only examined the use of deictic verbs in the dialogical data. The result shows that Ground tends to be encoded covertly when it is combined with both centripetal (95.2% in the *MFTY* data and 90.7% in the *LZHL* data) and centrifugal directions (69.7% in the *MFTY* data and 78.1% in the *LZHL* data). When Ground is overtly encoded,

we found an asymmetry at the syntactic level between the combination of Source and Goal Grounds and centripetal and centrifugal directions. Both Source and Goal Grounds can be combined with the centripetal marker (来 *lái* 'come') whereas only Goal Ground is combined with the centrifugal marker (去 *qù* 'go'). The combinability between deictic verbs and Source and Goal Grounds in the Standard Chinese data confirms the same syntactic asymmetry revealed in previous literature (English in Fillmore 1972; French in Bourdin 1997; *inter alia*).

The above spatial (a)symmetries found in the expression of Path and Dynamic Deixis in the Standard Chinese data and their different manifestations provide yet another evidence in favour of the idea that Path and Deixis should be better treated separately.

CONCLUSION AND PERSPECTIVES

This concluding chapter comprises two parts. First, we summarize the main findings and present the contribution of this dissertation. Then, in the second part, we discuss the limitations of this study and provide some perspectives for future research.

Findings and contribution

This dissertation presented a typologically-oriented study of the expression of Dynamic Deixis in Standard Chinese. By adopting the onomasiological approach, the focus of the present work was on Dynamic Deixis, a semantic element that has been relatively less investigated as compared to Path and Manner of motion.

In particular, we explored how Dynamic Deixis is expressed linguistically by speakers of Standard Chinese in two types of data, descriptive and dialogical. Generally speaking, the data revealed that the expression of Dynamic Deixis relies on different types of devices: deictic verbs, deictic satellites, associated motion markers, and prepositional phrases. We note that prepositional phrases can only be used to express centripetal direction and are restricted to Goal prepositions (e.g., 向 *xiàng* 'towards') followed by first person pronouns. Besides, to convey the deictic meaning, prepositional phrases must be combined with deictic satellites and can not be used alone. The descriptive and the dialogical data show one

similarity and differences. In both data types, the deictic satellites were used. In addition to deictic satellites, we also found prepositional phrases + deictic satellites in the descriptive data, and deictic verbs, deictic verbs + associated motion markers, and deictic verbs + deictic satellites in the dialogical data. These findings show that Dynamic Deixis can be expressed in different ways in Standard Chinese depending on the data types.

Furthermore, we examined the relation between Dynamic Deixis and Path by looking at the following three issues: the coding strategies, the patterns of distribution, and the spatial (a)symmetries. The analyses of the two semantic elements show that they greatly differ from each other.

Firstly, based on Wälchli's (2001) typology, i.e., verbal, adnominal, adverbial encodings, we found four coding strategies used to express Dynamic Deixis: (1) verbal, (2) adverbial, (3) verbal + adverbial, (4) adnominal + adverbial encodings, and seven coding strategies used to express Path: (1) verbal, (2) adverbial, (3) adnominal, (4) verbal + adverbial, (5) adnominal + adverbial, (6) adnominal + verbal, (7) adnominal + verbal + adverbial encodings. However, there are differences between the descriptive and the dialogical data.

Regarding the encoding of Dynamic Deixis in the descriptive data, two following coding strategies were found:¹⁵⁴

- adverbial encoding;
- adnominal + adverbial encoding.

By contrast, in the dialogical data, three coding strategies were found:

- adverbial encoding;
- verbal encoding;

¹⁵⁴ The coding strategies of Dynamic Deixis and Path presented in the descriptive and the dialogical data follow the order of frequency (from more to less frequent).

- verbal + adverbial encoding.

Concerning Path encoding, seven coding strategies were found in the descriptive data (all the seven strategies were found in the *Trajectoire* data (spontaneous motion), only the first three strategies were found in the *Put & Take* data (caused motion)):

- adnominal + adverbial encoding;
- adverbial encoding;
- adnominal encoding;
- adnominal + verbal + adverbial encoding;
- verbal + adverbial encoding;
- verbal encoding;
- adnominal + adverbial encoding.

Contrastively, the dialogical data revealed six coding strategies below:

- verbal encoding;
- verbal + adverbial encoding;
- adverbial encoding;
- adnominal + adverbial encoding;
- adnominal + verbal + adverbial encoding;
- adnominal + verbal encoding.

The analysis of the coding strategies used to express Dynamic Deixis and Path in Standard Chinese indicate that Dynamic Deixis tends to be encoded predominantly by means of a single encoding, either the adverbial or the verbal coding. Interestingly, the adverbial encoding prevails in the descriptive data, whereas in the dialogical data both the adverbial encoding and the verbal encoding prevail. Path, on the other hand, tends to be encoded predominantly by both a combination of different encodings and a single encoding: the adnominal + adverbial encoding, the adverbial encoding, and the adnominal encoding are primarily used in the descriptive data, and

the verbal encoding, the verbal + adverbial encoding, and the adverbial encoding are frequent in the dialogical data.

The above findings in the Standard Chinese data reveal that the encoding of Dynamic Deixis and Path supports only partially Talmy's typology (2000) in which satellites are used frequently to encode Path in Chinese (remind that Talmy considers Deixis a component of Path). In addition to satellites, our result also show the use of other morphosyntactic devices discussed in previous studies: verbs, prepositional phrases, and localizers for Path encoding (Chu 2004; Lamarre 2008, 2013; Fàn 2013; Liú 2013; *inter alia*), as well as deictic verbs, deictic satellites, and associated motion markers for Dynamic Deixis encoding (Lamarre 2008a, 2020). However, it is important to underline that the encoding of Path and Dynamic Deixis is not only restricted to a single morphosyntactic device, but is also extended to a combination of different morphosyntactic devices, as observed in the present study. What's more, the preferential coding strategy, i.e., verbal encoding, used in the dialogical data corresponds to Lamarre (2008a) in which verbs are overwhelmingly prevalent in dialogues. Nevertheless, the proportion of verbs used in the spoken descriptive data (only in the *Trajectoire* data showing spontaneous motion) (1.6%) displays a different tendency compared to the use of verbs in the written descriptive data (around 50%) in Lamarre (2008a). Such difference suggests that not only the data types (descriptive vs. dialogical) plays an importance role in the selection of coding strategies, but that the modality (spoken vs. written) within the same data type also needs to be taken into consideration.

Secondly, by adopting Sinha & Kuteva's (1995) distributed spatial semantics approach, we analyzed patterns of distribution in the expression of Dynamic Deixis and Path. In general, patterns of distribution were found infrequent in the expression Dynamic Deixis than in the expression of Path.

Regarding different direction(s) of Dynamic Deixis, centripetal and centrifugal directions reveal the use of parallel and redundant

patterns; centripetal + centrifugal directions show the use of differentiated pattern. More specifically,

- The parallel pattern was only found in the dialogical data and mainly in the expression involving associated motion markers (as opposed to deictic satellites) in a serial verb construction. In this pattern, either the centripetal or centrifugal direction is repeated twice at both form and meaning level within a clause.
- With regard to the redundant pattern, it was only found in the descriptive data and it only involves the expression of centripetal direction. Such pattern is very rare in the data: it accounts for only 9 occurrences, and it involves the prepositional phrase 向我们 *xiàng wǒmen* 'towards us' and the deictic satellite 来 *-lai* 'hither'. This confirms the observation made in Lamarre (2008a: 70) who claims that in Chinese, "...deictic path is expressed much more often through satellites or verbs than through prepositional phrases...".
- The differentiated pattern is extremely rare and was only attested in the dialogical data (one occurrence).

Concerning the different portion(s) of Path, Source, Medium, and Goal all display the redundant patterns; Source + Medium, Medium + Goal, Source + Goal, and Source + Medium + Goal reveal the use of the differentiated pattern. Generally speaking, both the redundant and the differentiated patterns are used more frequently in the descriptive data than in the dialogical data.

- As far as the redundant pattern is concerned, each of the three portions of Path behaves differently. Source information is distributed dominantly in three morphosyntactic slots in the descriptive data, while in the dialogical data, it appears more frequently in two morphosyntactic slots. The redundancy of Medium was only found in the descriptive data (i.e., *Trajectoire* data showing spontaneous motion) and this information tends to be

distributed simultaneously in three morphosyntactic slots. As for Goal, it was encoded redundantly mostly in two morphosyntactic slots in both data types.

- As for the differentiated pattern, depending on the information being encoded, the data types, and the event types, the number of morphemes used to express each information varies. The results show that in the descriptive data depicting spontaneous motion, Source + Goal and Source + Medium + Goal are distributed more frequently over four morphemes, Source + Medium tend to be distributed in three morphemes, while Medium + Goal prompt the use of two morphemes. In the descriptive data depicting caused motion, Source + Goal tend to be distributed predominantly over three morphemes. By contrast, in the dialogical data, although there are only a few number of clauses expressing Source + Goal information (6 occurrences), all of them are distributed over two morphemes.

The analysis of the expression of Dynamic Deixis and Path shows both similarities and differences. Firstly, both Dynamic Deixis and Path can be mapped to a selection of devices belonging to different form classes showing redundant and differentiated distribution. Besides, Dynamic Deixis also displays parallel distribution. Secondly, both Dynamic Deixis and Path can be simultaneously expressed in two morphosyntactic slots. What's more, Path can also be encoded from two up to four different morphemes. Lastly, although Sinha & Kuteva's (1995) distributed spatial semantics approach can be applied to both Dynamic Deixis and Path, patterns of distribution were found to be less in the expression of Dynamic Deixis than in the expression of Path. The above differences displayed in Dynamic Deixis and Path expressions provide a piece of evidence at the semantic level in favor to the idea that these two semantic components should be treated separately.

Finally, we investigated the spatial (a)symmetries in the expression of Dynamic Deixis and Path. Several (a)symmetries at different levels have been found in the data.

Before presenting the (a)symmetries found in the expression of Dynamic Deixis, we observed that Dynamic Deixis was expressed predominantly in the dialogical data (95.1% in the *MFTY* data and 87.9% in the *LZHL* data) than in the descriptive data (36.3% in the *Trajectoire* data and 22.0% in the *Put & Take* data). As regards the (a)symmetries in the expression of centripetal and centrifugal directions, the following findings might be highlighted:

- At the morphosyntactic and discourse levels, centripetal and centrifugal markers revealed both symmetry and asymmetry depending on the morphosyntactic devices used. Deictic satellites are found in both the descriptive and the dialogical data and the centripetal direction is expressed more frequently than centrifugal direction. Deictic verbs and associated motion markers are found exclusively in the dialogical data. As for the use of deictic verbs, centripetal and centrifugal directions show a (quasi-)symmetry; the use of associated motion markers on the other hand shows that the centrifugal direction is more frequently expressed than centripetal direction .
- Looking at the expression of centripetal and centrifugal directions in relation to the Ground, we only examined the use of deictic verbs in the dialogical data. The results show that Ground tends to be encoded covertly when it is combined with the centripetal (over 90%) and the centrifugal directions (over 69%). Besides, we found one interesting manifestation of asymmetry at the syntactic level when Ground is overtly expressed. Both Source and Goal Grounds can be combined with the centripetal marker (来 *lái* 'come'), whereas only Goal Ground is combined with the centrifugal marker (去 *qù* 'go'). This observation in Standard Chinese confirms the asymmetrical phenomenon revealed previously

in the literature on other languages (Fillmore 1972 on English; Bourdin 1997 on French; *inter alia*).

Concerning the Source-Goal (a)symmetries:

- At the discourse level, and in terms of frequency, our result shows that Goal appears more frequently than Source in both the descriptive and the dialogical data. Hence, the Standard Chinese data confirms the goal-over-source principle found in other languages (Ikegami 1987; Bourdin 1997; *inter alia*).
- At the morphosyntactic level, the descriptive data and the dialogical data display the asymmetry and the symmetry, respectively. In the descriptive data, Goal is conveyed frequently by single elements (i.e., either SAT or PP (AFTER V)) in the *Trajectoire* data (spontaneous motion) and by two elements (i.e., either PP (AFTER V) + LOC or SAT + LOC) in the *Put & Take* data (caused motion) whereas Source is conveyed predominantly by a combination of three linguistic devices (i.e., PP + LOC + SAT). This confirms the observation made in previous studies that the expression of Goal tend to be less complex than the expression of Source (Bourdin 1997; Ishibashi 2012). By contrast, the dialogical data reveal a symmetry in which both Source and Goal favor the use of a single element (i.e., v).
- When examining the expression of Source and Goal in relation to the Ground, we found that both Source and Goal Grounds are overwhelmingly expressed overtly in the descriptive data while in the dialogical data, they remain covertly expressed.

The various spatial (a)symmetries displayed in the expression of Dynamic Deixis differ from Path at different levels, providing yet another argument in favor of the view that the two semantic elements should be treated distinctly.

The principal contributions of this dissertation are as follows.

The present dissertation investigated in a comprehensive way the expression of Dynamic Deixis as compared to the expression of Path by adopting the onomasiological approach. The empirical choice for this study differs from the majority of previous studies devoted to Standard Chinese and other languages that adopted the semasiological approach by tackling first the form (e.g., COME and GO), and then looking at its meaning and its semantic extension. In the domain of motion events, the choice of the onomasiological approach is of great significance since motion events consist of several semantic components and, to express the same concept, different languages or speakers of a given language may resort to different linguistic devices. Therefore, taking as a point of departure the concept of 'Dynamic Deixis' and exploring various forms used to express this concept can give us a more comprehensive understanding of the diversity of strategies that can be used to convey this notion.

In addition, in the light of Lamarre (2008a, 2013) who examined Standard Chinese by comparing written descriptive data (TV series) and spoken dialogical data (novel), this research complements previous studies by investigating spoken descriptive data (stimulus-based elicitation). A comparative analysis of the data belonging to different genres (descriptive vs. dialogical), different modalities (written vs. spoken), and different event types (spontaneous motion vs. caused motion) allows us to better understand similarities and differences in the expression of Dynamic Deixis displayed within the same language.

Finally, this dissertation provides news insights into the issue of the relation between Dynamic Deixis and Path. In addition to the aspectual, pragmatic, morphosyntactic, and functional evidence suggested in previous studies (Koga et al. 2008; Lamarre 2008; Morita 2011; Matsumoto et al. 2017), the results of our analyses, including coding strategies, distributed spatial semantics, and spatial (a)symmetries, also reveal that the expression of Dynamic

Deixis differs greatly from the expression of Path and thus reinforces the view that these two semantic elements behave differently and thus should be treated distinctly.

To conclude, from a typological perspective, the present study on Dynamic Deixis in the expression of motion events, together with Path, in Standard Chinese has shown that within a given language, the linguistic encoding of a given concept does not always behave in the same way, rather, it varies a lot depending on different factors such as data type and event type.

Limitations and perspectives

There are two major limitations of this study that should be addressed in further research.

The first limitation concerns the methodological framework. Relying on two types of data, this dissertation aimed at comparing descriptive and dialogical data. Nevertheless, the descriptive data might be confined to its uses given the fact that they are based on visual stimulus sets in which each video clip is meant to show a certain event type, e.g., *Trajectoire* for spontaneous motion, and *Put & Take* for caused motion. Therefore, it is not surprising that neither deictic verbs nor associated motion markers were found in the descriptions of the clips since they were not developed to elicit description of such specific event types. In order to complement the data set, it would be worthwhile to use an elicitation material which aims at investigating associated motion, for example, the elicitation tool designed by Boeg Thomsen & Nielsen (2020).¹⁵⁵ This would allow us to investigate the use of deictic verbs and associated motion markers in spoken descriptive data in a more systematic way.

The second limitation is linked to data analysis. In the present work, we have examined the expression of Dynamic Deixis mainly

¹⁵⁵ A detailed manual with guidelines for data collection is available on the following site: <https://osf.io/4bpxd/>.

from a qualitative point of view; the quantitative data were merely descriptive. Despite of the great amount of deictic expressions used in the dialogical data, we only provided some preliminary results showing the use and non-use of Dynamic Deixis without elaborating a fine-grained analysis of the contexts which favor and disfavor its uses due to the complex case by case context of each utterance in dialogues. Based on the qualitative analysis, we observed that there are different factors playing important roles in the encoding of Dynamic Deixis such as the data type, the event type, the animacy of the Figure, the visibility of the Figure, and the boundary-crossing. A quantitative and multifactorial analysis of such factors carried out with the help of the software R should allow us in further research to investigate the interplay of these factors and their specific role, showing which factor(s) is more likely to trigger the expression of Dynamic Deixis.



APPENDIXES A

INFORMATION OF

STIMULUS SETS

Order	Scene code	Description
1	V1_scene01_010	010_training_M_handpass_ball_to_F
2	V1_scene02_013	013_training_F_spread_blanket
3	V1_scene03_076	076_Path_C_walk_down_rock_front
4	V1_scene04_031	031_Path_M_run_outof_sea_sideRL
5	V1_scene05_006	006_Filler_M_drink_water
6	V1_scene06_074	074_Path_F_walk_up_from_lake_front
7	V1_scene07_022	022_Path_F_walk_down_into_cave_front
8	V1_scene08_072	072_Path_M_jump_over_tronc_back
9	V1_scene09_050	050_Path_C_cross_water_sideRL
10	V1_scene10_002	002_Filler_M_sleep_side
11	V1_scene11_039	039_Path_M_walk_behind_tree_sideLR
12	V1_scene12_019	019_Filler_F_comb_hair
13	V1_scene13_065	065_Path_C_walk_up_path_sideLR
14	V1_scene14_045	045_Path_3_walk_across_bridge_back
15	V1_scene15_064	064_Path_C_jump_from_cliff_into_water_sideLR
16	V1_scene16_059	059_Path_C_run_into_sea_sideRL



17	V1_scene17_036	036_Path_M_walk_toward_F_back
18	V1_scene18_001	001_Filler_M_pick_fruit_back
19	V1_scene19_051	051_Path_F_cross_field_front
20	V1_scene20_068	068_Path_M_walk_front_people_into_cave_back
21	V1_scene21_018	018_Filler_F_footpass_ball_to_M
22	V1_scene22_052	052_Path_F_cross_field_back
23	V1_scene23_042	042_Path_C_run_behind_stone_sideLR
24	V1_scene24_024	024_Path_F_walk_out_front_take_walk_into_cave_back
25	V1_scene25_009	009_Filler_M_footpass_ball_to_F
26	V1_scene26_069	069_Path_F_walk_into_field_sideLR
27	V1_scene27_056	056_Path_M_walk_into_bush_back
28	V1_scene28_034	034_Path_C_jump_from_stone_run_front
29	V1_scene29_011	011_Filler_F_give_banana
30	V1_scene30_020	020_Filler_F_plait_hair
31	V1_scene31_027	027_Path_F_walk_outof_woods_sideRL
32	V1_scene32_063	063_Path_C_jump_over_stone_front
33	V1_scene33_046	046_Path_M_walk_across_bridge_walk_front_women_back
34	V1_scene34_021	021_Filler_F_pour_water
35	V1_scene35_033	033_Path_F_run_awayfrom_tree_front
36	V1_scene36_060	060_Path_M_walk_out_cave_sideRL_pass_walk_into_cave_back
37	V1_scene37_048	048_Path_F_walk_across_path_sideLR
38	V1_scene38_026	026_Path_M_walk_into_woods_back
39	V1_scene39_037	037_Path_M_run_up_from_river_front
40	V1_scene40_023	023_Path_F_walk_outof_cave_front
41	V1_scene41_003	003_Filler_M_read_book
42	V1_scene42_070	070_Path_F_walk_up_stairs_front



43	V1_scene43_016	016_Filler_F_fold_cloth
44	V1_scene44_029	029_Path_F_walk_outof_cave_up_stairs_back
45	V1_scene45_067	067_Path_C_walk_down_path_front
46	V1_scene46_053	053_Path_F_walk_into_cave_back
47	V1_scene47_040	040_Path_F_walk_front_tree_sideRL
48	V1_scene48_032	032_Path_F_walk_awayfrom_tree_front
49	V1_scene49_041	041_Path_3_walk_under_branch_behind_tree_front
50	V1_scene50_008	008_Filler_M_takeoff_jumper
51	V1_scene51_038	038_Path_F_walk_outof_field_sideRL
52	V1_scene52_062	062_Path_C_run_toward_stone_jump_on_stone_si deRL
53	V1_scene53_030	030_Path_C_walk_outof_cave_toward_C_sideLR
54	V1_scene54_047	047_Path_F_walk_across_bridge_front_man_sideL R
55	V1_scene55_073	073_Path_F_walk_down_to_lake_back
56	V1_scene56_055	055_Path_M_walk_outof_woods_front
57	V1_scene57_035	035_Path_M_walk_awayfrom_F_front
58	V1_scene58_049	049_Path_M_walk_across_path_sideRL
59	V1_scene59_043	043_Path_F_run_behind_tree_sideRL
60	V1_scene60_004	004_Filler_M_eat_banana
61	V1_scene61_005	005_Filler_M_feed_ducks
62	V1_scene62_057	057_Path_F_walk_into_woods_sideLR
63	V1_scene63_071	071_Path_F_walk_up_stairs_back
64	V1_scene64_075	075_Path_C_jump_from_rock_to_rock_sideRL
65	V1_scene65_014	014_Filler_F_puton_flipflop
66	V1_scene66_028	028_Path_C_walk_outof_cave_to_sea_sideLR
67	V1_scene67_044	044_Path_F_run_front_tree-sideLR
68	V1_scene68_017	017_Filler_F_takeoff_flipflop
69	V1_scene69_007	007_Filler_M_puton_jumper



70	V1_scene70_054	054_Path_F_walk_into_cave_front
71	V1_scene71_058	058_Path_C_walk_into_cave_sideRL
72	V1_scene72_012	012_Filler_F_takeoff_cardigan
73	V1_scene73_025	025_Path_F_walk_outof_cave_back
74	V1_scene74_015	015_Filler_F_sitdown_blanket
75	V1_scene75_061	061_Path_F_walk_toward_tree_back
76	V1_scene76_066	066_Path_5_walk_across_road_toward_lake_back

Appendix 1. Scene descriptions of target event in the *Trajectoire* stimulus set

Subject	Age	Gender	Major	Province, city	Mother tongue
S1	20	M	Engineering mechanics	Héběi, Chéngdé	Standard Chinese, Chéngdé dialect
S2	22	F	Microbiology	Shānxī, Línfén	Standard Chinese, Línfén dialect
S3	24	F	Microbiology	Héběi, Xíngtái	Standard Chinese, Xíngtái dialect
S4	19	F	Mathematics	Héběi, Zhāngjiākǒu	Standard Chinese
S5	23	F	pharmacodynamics	Héběi, Cāngzhōu	Standard Chinese, Cāngzhōu dialect
S6	21	M	civil engineering	Běijīng	Standard Chinese, Beijing Mandarin
S7	22	M	civil engineering	Héběi, Hándān	Standard Chinese, Shè Xiàn dialect



S8	21	M	civil engineering	<i>Héběi, Shìjīāzhuāng</i>	Standard Chinese, Gàochéng dialect
S9	20	F	communication engineering	<i>Héběi, Qínhuángdǎo</i>	Standard Chinese, Lúlóng dialect
S10	20	F	communication engineering	<i>Héběi, Hándān</i>	Standard Chinese, Hándān dialect
S11	20	M	chemistry	<i>Héběi, Xíngtái</i>	Standard Chinese, Shāhé dialect
S12	19	M	electrical engineering and automation	<i>Hénán, Shāngqiū</i>	Standard Chinese, Shāngqiū

Appendix 2. Information of the 12 speakers using the *Trajectoire* stimulus set

Order	Scene code	Description
1	begin_001	throw ball
2	begin_002	tear cloth
3	begin_003	open jar
4	014	put a candle into a candle stand
5	002	put plastic cup on table with mouth
6	004	put armload of books on table
7	126	take off sock
8	028	put poster on wall
9	031	put saucer on top of cup
10	119	take stone out of pot of water
11	010	toss book on floor
12	103	take banana off table with long tongs



13	009	drop book accidentally on floor
14	115	take a cucumber out a recorder case
15	006	put box up on shelf
16	112	dump blocks out of tin
17	012	drop apple into bag
18	130	take suitcase out of elevator, going out of room
19	123	take hand out of hole
20	025	put a hat on head
21	118	take flower out of hair - unskewer
22	122	take a coke can from someone
23	011	put apple in bowl
24	019	put stone into pot of water
25	005	put a fistful of rice on a table
26	135	take pen out a hole
27	104	take armload of books off table
28	120	pour water out of a tin
29	020	pour liquid into container
30	016	put stone into pocket
31	021	spill water onto table when pick up glass
32	101	take a cup off a table
33	035	put pen in a hole
34	127	unhang' rope from tree branch
35	114	take a candle out of a candle stand
36	106	take box down from shelf
37	008	drop book deliberately onto floor
38	017	stuff rag into car exhaust
39	024	put head into a bucket
40	105	take a handful of beans from flat surface



41	124	take head out of bucket
42	022	give a cup to someone
43	003	put banana on table with long tongs
44	117	take rag out of car exhaust
45	007	put book on floor
46	013	flip block off notepad into bowl
47	111	take orange from box
48	113	knock over bucket so blocks spill out
49	125	take off hat
50	133	take off coat
51	026	put boot on foot
52	102	take plastic cup off table with mouth
53	001	put cup on table
54	027	hang rope over tree branch
55	131	take saucer off cup
56	033	put on coat
57	023	put hand into hole in tree
58	116	take stone out of pocket
59	015	put celery bunch into a recorder case
60	129	put suitcase out of room, while staying in room
61	128	take poster off wall
62	018	put flower into hair - skewer
63	107	take magazine from floor
64	050	take bag of corn from table and move to chair
65	051	take apple from pile of books and move to shoe
66	052	push suitcase from car to tree

Appendix 3. Scene descriptions of target event in the *Put & Take* stimulus set



Subject	Age	Gender	Major	Province
S1	32	M	Educational Sciences	<i>Liáoníng</i>
S2	30	M	Computer science	<i>Liáoníng</i>
S3	26	F	Educational Sciences	<i>Liáoníng</i>
S4	29	F	Japanese	<i>Liáoníng</i>
S5	26	F	Chinese	<i>Běijīng</i>
S6	25	M	English	Húběi
S7	20	F	Applied Foreign Languages	Húnán
S8	20	F	Educational Sciences	Jiāngxī
S9	29	F	Fine Arts	<i>Liáoníng</i>
S10	33	M	English	Shǎnxī
S11	27	M	Law	Shǎnxī
S12	29	F	Economy	Qīnghǎi

Appendix 4. Information of the 12 speakers using the *Put & Take* stimulus set



Order	Clips showing simple Path	Portion of Path
1	023_Path_F_walk_outof_cave_front	
2	025_Path_F_walk_outof_cave_back	
3	027_Path_F_walk_outof_woods_sideRL	
4	031_Path_M_run_outof_sea_sideRL	
5	032_Path_F_walk_awayfrom_tree_front	Source-oriented Path
6	033_Path_F_run_awayfrom_tree_front	
7	034_Path_C_jump_from_stone_run_front	
8	035_Path_M_walk_awayfrom_F_front	
9	038_Path_F_walk_outof_field_sideRL	
10	055_Path_M_walk_outof_woods_front	
11	039_Path_M_walk_behind_tree_sideLR	
12	040_Path_F_walk_front_tree_sideRL	
13	041_Path_3_walk_under_branch_behind_tree_front	
14	042_Path_C_run_behind_stone_sideLR	
15	043_Path_F_run_behind_tree_sideRL	
16	044_Path_F_run_front_tree-sideLR	
17	045_Path_3_walk_across_bridge_back	
18	046_Path_M_walk_across_bridge_walk_front_women_back	Medium-oriented Path
19	047_Path_F_walk_across_bridge_front_man_sideLR	
20	048_Path_F_walk_across_path_sideLR	
21	049_Path_M_walk_across_path_sideRL	
22	050_Path_C_cross_water_sideRL	
23	051_Path_F_cross_field_front	
24	052_Path_F_cross_field_back	
25	063_Path_C_jump_over_stone_front	
26	065_Path_C_walk_up_path_sideLR	
27	067_Path_C_walk_down_path_front	



28	070_Path_F_walk_up_stairs_front	
29	071_Path_F_walk_up_stairs_back	
30	072_Path_M_jump_over_tronc_back	
31	076_Path_C_walk_down_rock_front	
32	026_Path_M_walk_into_woods_back	
33	036_Path_M_walk_toward_F_back	
34	053_Path_F_walk_into_cave_back	
35	054_Path_F_walk_into_cave_front	
36	056_Path_M_walk_into_bush_back	
37	057_Path_F_walk_into_woods_sideLR	Goal-oriented
38	058_Path_C_walk_into_cave_sideRL	Path
39	059_Path_C_run_into_sea_sideRL	
40	061_Path_F_walk_toward_tree_back	
41	062_Path_C_run_toward_stone_jump_on_stone_sideRL	
42	069_Path_F_walk_into_field_sideLR	

Appendix 5. *Trajectoire* clips showing simple Path



Order	Clips showing complex Path	Portion of Path
1	029_Path_F_walk_outof_cave_up_stairs_back	Source-Medium-oriented Path
2	037_Path_M_run_up_from_river_front	
3	074_Path_F_walk_up_from_lake_front	
4	022_Path_F_walk_down_into_cave_front	Medium-Goal-oriented Path
5	066_Path_5_walk_across_road_toward_lake_back	
6	068_Path_M_walk_front_people_into_cave_back	
7	073_Path_F_walk_down_to_lake_back	
8	024_Path_F_walk_out_front_take_walk_into_cave_back	Source-Goal-oriented Path
9	028_Path_C_walk_outof_cave_to_sea_sideLR	
10	030_Path_C_walk_outof_cave_toward_C_sideLR	
11	064_Path_C_jump_from_cliff_into_water_sideLR	
12	075_Path_C_jump_from_rock_to_rock_sideRL	
13	060_Path_M_walk_out_cave_sideRL_pass_walk_into_cave_back	Source-Medium-Goal-oriented Path

Appendix 6. *Trajectoire* clips showing complex Path



Order	Scene code	Scene description (target event)	Portion of Path
1	112	dump blocks out of tin	
2	113	knock over bucket so blocks spill out	
3	120	pour water out of a tin	
4	129	put suitcase out of room, while staying in room	
5	122	take a coke can from someone	
6	114	take a candle out of a candle stand	
7	115	take a cucumber out a recorder case	
8	101	take a cup off a table	
9	105	take a handful of beans from flat surface	
10	104	take armload of books off table	
11	103	take banana off table with long tongs	
12	106	take box down from shelf	
13	118	take flower out of hair - unskewer	Source-oriented Path
14	123	take hand out of hole	
15	124	take head out of bucket	
16	107	take magazine from floor	
17	133	take off coat	
18	125	take off hat	
19	126	take off sock	
20	111	take orange from box	
21	135	take pen out a hole	
22	102	take plastic cup off table with mouth	
23	128	take poster off wall	
24	117	take rag out of car exhaust	
25	131	take saucer off cup	
26	116	take stone out of pocket	



27	119	take stone out of pot of water	
28	130	take suitcase out of elevator, going out of room	
29	127	unhang' rope from tree branch	
30	012	drop apple into bag	
31	009	drop book accidentally on floor	
32	008	drop book deliberately onto floor	
33	013	flip block off notepad into bowl	
34	022	give a cup to someone	
35	027	hang rope over tree branch	
36	020	pour liquid into container	
37	014	put a candle into a candle stand	
38	005	put a fistful of rice on a table	
39	025	put a hat on head	
40	011	put apple in bowl	
41	004	put armload of books on table	
42	003	put banana on table with long tongs	Goal-oriented Path
43	007	put book on floor	
44	026	put boot on foot	
45	006	put box up on shelf	
46	015	put celery bunch into a recorder case	
47	001	put cup on table	
48	018	put flower into hair - skewer	
49	023	put hand into hole in tree	
50	024	put head into a bucket	
51	033	put on coat	
52	035	put pen in a hole	
53	002	put plastic cup on table with mouth	
54	028	put poster on wall	



55	031	put saucer on top of cup
56	016	put stone into pocket
57	019	put stone into pot of water
58	021	spill water onto table when pick up glass
59	017	stuff rag into car exhaust
60	010	toss book on floor

Appendix 7. *Put & Take* clips showing simple Path

Order	Scene code	Scene description (target event)	Portion of Path
1	050	take bag of corn from table and move to chair	Source-Goal-oriented Path
2	051	take apple from pile of books and move to shoe	
3	052	push suitcase from car to tree	

Appendix 8. *Put & Take* clips showing complex Path



#	Clips involving Source-oriented Path	Clips involving Goal-oriented Path
1	023_Path_F_walk_outof_cave_front	053_Path_F_walk_into_cave_back
2	025_Path_F_walk_outof_cave_back	054_Path_F_walk_into_cave_front
3	027_Path_F_walk_outof_woods_sideR L	057_Path_F_walk_into_woods_sideL R
4	031_Path_M_run_outof_sea_sideRL	059_Path_C_run_into_sea_sideRL
5	032_Path_F_walk_awayfrom_tree_front	061_Path_F_walk_toward_tree_back
6	035_Path_M_walk_awayfrom_F_front	036_Path_M_walk_toward_F_back
7	038_Path_F_walk_outof_field_sideRL	069_Path_F_walk_into_field_sideLR
8	055_Path_M_walk_out_of_woods_front	026_Path_M_walk_into_woods_back

Appendix 9. Simple Path events (8 clips showing Source-oriented Path and 8 clips showing Goal-oriented Path) selected from the *Trajectoire* stimulus set



#	Clips involving Source-oriented Path		Clips involving Goal-oriented Path	
1	101	take a cup off a table	001	put cup on table
2	102	take plastic cup off table with mouth	002	put plastic cup on table with mouth
3	103	take banana off table with long tongs	003	put banana on table with long tongs
4	104	take armload of books off table	004	put armload of books on table
5	105	take a handful of beans from flat surface	005	put a fistful of rice on a table
6	106	take box down from shelf	006	put box up on shelf
7	107	take magazine from floor	007	put book on floor
8	111	take orange from box	011	put apple in bowl
9	114	take a candle out of a candle stand	014	put a candle into a candle stand
10	115	take a cucumber out a recorder case	015	put celery bunch into a recorder case
11	116	take stone out of pocket	016	put stone into pocket
12	117	take rag out of car exhaust	017	stuff rag into car exhaust
13	118	take flower out of hair - unskewer	018	put flower into hair - skewer
14	119	take stone out of pot of water	019	put stone into pot of water
15	120	pour water out of a tin	020	pour liquid into container
16	124	take head out of bucket	024	put head into a bucket
17	125	take off hat	025	put a hat on head
18	126	take off sock	026	put boot on foot
19	127	unhang' rope from tree branch	027	hang rope over tree branch
20	128	take poster off wall	028	put poster on wall
21	131	take saucer off cup	031	put saucer on top of cup
22	133	take off coat	033	put on coat

Appendix 10. Simple Path events (22 clips showing Source-oriented Path and 22 clips showing Goal-oriented Path) selected from the *Put & Take* stimulus set



#	Clips involving Source-Goal-oriented Path
1	024_Path_F_walk_out_front_take_walk_into_cave_back
2	028_Path_C_walk_out_of_cave_to_sea_sideLR
3	030_Path_C_walk_out_of_cave_toward_C_sideLR
4	064_Path_C_jump_from_cliff_into_water_sideLR
5	075_Path_C_jump_from_rock_to_rock_sideRL

Appendix 11. Complex Path events (5 clips showing Source-Goal-oriented Path) selected from the *Trajectoire* stimulus set

#	Clips involving Source-Goal-oriented Path
1	050 take bag of corn from table and move to chair
2	051 take apple from pile of books and move to shoe
3	052 push suitcase from car to tree

Appendix 12. Complex Path events (3 clips showing Source-Goal-oriented Path) selected from the *Put & Take* stimulus set

#	Scene code	Scene description (target event)	Frequency
1	126	take off sock	12
2	133	take off coat	11
3	125	take off hat	10
4	103	take banana off table with long tongs	9
5	102	take plastic cup off table with mouth	9
6	104	take armload of books off table	6
7	101	take a cup off a table	5
8	105	take a handful of beans from flat surface	3
9	116	take stone out of pocket	3
10	107	take magazine from floor	2
11	120	pour water out of a tin	1



12	114	take a candle out of a candle stand	1
13	115	take a cucumber out a recorder case	1
14	118	take flower out of hair - unskewer	1
15	124	take head out of bucket	1
16	117	take rag out of car exhaust	1
17	119	take stone out of pot of water	1
18	127	unhang' rope from tree branch	1

Appendix 13. The covert encoding of Source Ground in the *Put & Take* stimulus set showing caused motion

#	Scene code	Scene description (target event)	Frequency
1	026	put boot on foot	11
2	033	put on coat	10
3	025	put a hat on head	8
4	017	stuff rag into car exhaust	2
5	031	put saucer on top of cup	1

Appendix 14. The covert encoding of Goal Ground in the *Put & Take* stimulus set showing caused motion



#	Target scenes	Portion of Path	N° of speakers expressing Dynamic Deixis
1	023_Path_F_walk_outof_cave_front	Source-oriented Path	12
2	027_Path_F_walk_outof_woods_sideRL	Source-oriented Path	12
3	028_Path_C_walk_outof_cave_to_sea_sideLR	Source-Goal-oriented Path	12
4	038_Path_F_walk_outof_field_sideRL	Source-oriented Path	12
5	051_Path_F_cross_field_front	Medium-oriented Path	12
6	055_Path_M_walk_outof_woods_front	Source-oriented Path	12
7	024_Path_F_walk_out_front_take_walk_into_cave_back	Source-Goal-oriented Path	10
8	034_Path_C_jump_from_stone_run_front	Source-oriented Path	10
9	048_Path_F_walk_across_path_sideLR	Medium-oriented Path	10
10	030_Path_C_walk_outof_cave_toward_C_sideLR	Source-Goal-oriented Path	9
11	032_Path_F_walk_awayfrom_tree_front	Source-oriented Path	9
12	029_Path_F_walk_outof_cave_up_stairs_back	Source-Medium-	8



		oriented Path	
13	035_Path_M_walk_awayfrom_F_front	Source- oriented Path	8
14	033_Path_F_run_awayfrom_tree_front	Source- oriented Path	7
15	076_Path_C_walk_down_rock_front	Medium- oriented Path	7
16	025_Path_F_walk_outof_cave_back	Source- oriented Path	6
17	031_Path_M_run_outof_sea_sideRL	Source- oriented Path	6
18	037_Path_M_run_up_from_river_front	Source- Medium- oriented Path	6
19	041_Path_3_walk_under_branch_behind_tree_front	Medium- oriented Path	6
20	070_Path_F_walk_up_stairs_front	Medium- oriented Path	6
21	074_Path_F_walk_up_from_lake_front	Source- Medium- oriented Path	6

Appendix 15. Target scenes in the *Trajectoire* stimulus set which are expressed frequently with Dynamic Deixis



#	Target scenes	Portion of Path
1	026_Path_M_walk_into_woods_back	Goal-oriented Path
2	045_Path_3_walk_across_bridge_back	Medium-oriented Path
3	049_Path_M_walk_across_path_sideRL	Medium-oriented Path
4	058_Path_C_walk_into_cave_sideRL	Goal-oriented Path
5	059_Path_C_run_into_sea_sideRL	Goal-oriented Path
6	063_Path_C_jump_over_stone_front	Medium-oriented Path
7	069_Path_F_walk_into_field_sideLR	Goal-oriented Path
8	075_Path_C_jump_from_rock_to_rock_sideRL	Source-Goal-oriented Path

Appendix 16. Target scenes in the *Trajectoire* stimulus set which are not expressed with Dynamic Deixis

#	Scene code	Target scenes	Portion of Path	N° of speakers expressing Dynamic Deixis
1	124	take head out of bucket	Source-oriented Path	12
2	131	take saucer off cup	Source-oriented Path	12
3	114	take a candle out of a candle stand	Source-oriented Path	11
4	127	unhang' rope from tree branch	Source-oriented Path	11
5	101	take a cup off a table	Source-oriented Path	10
6	106	take box down from shelf	Source-oriented Path	10
7	119	take stone out of pot of water	Source-oriented Path	10
8	125	take off hat	Source-oriented Path	9
9	128	take poster off wall	Source-oriented Path	9
10	104	take armload of books off table	Source-oriented Path	8
11	123	take hand out of hole	Source-oriented Path	8
12	117	take rag out of car exhaust	Source-oriented Path	8



13	118	take flower out of hair - unskewer	Source-oriented Path	7
14	021	spill water onto table when pick up glass	Goal-oriented Path	6
15	105	take a handful of beans from flat surface	Source-oriented Path	6
16	107	take magazine from floor	Source-oriented Path	6
17	111	take orange from box	Source-oriented Path	6
18	102	take plastic cup off table with mouth	Source-oriented Path	6

Appendix 17. Target scenes in the *Put & Take* stimulus set which are expressed frequently with Dynamic Deixis

#	Scene code	Target scenes	Portion of Path
1	012	drop apple into bag	Goal-oriented Path
2	008	drop book deliberately onto floor	Goal-oriented Path
3	013	flip block off notepad into bowl	Goal-oriented Path
4	022	give a cup to someone	Goal-oriented Path
5	027	hang rope over tree branch	Goal-oriented Path
6	020	pour liquid into container	Goal-oriented Path
7	014	put a candle into a candle stand	Goal-oriented Path
8	005	put a fistful of rice on a table	Goal-oriented Path
9	025	put a hat on head	Goal-oriented Path
10	011	put apple in bowl	Goal-oriented Path
11	004	put armload of books on table	Goal-oriented Path
12	003	put banana on table with long tongs	Goal-oriented Path
13	007	put book on floor	Goal-oriented Path
14	026	put boot on foot	Goal-oriented Path
15	006	put box up on shelf	Goal-oriented Path



16	015	put celery bunch into a recorder case	Goal-oriented Path
17	001	put cup on table	Goal-oriented Path
18	018	put flower into hair - skewer	Goal-oriented Path
19	023	put hand into hole in tree	Goal-oriented Path
20	024	put head into a bucket	Goal-oriented Path
21	033	put on coat	Goal-oriented Path
22	035	put pen in a hole	Goal-oriented Path
23	002	put plastic cup on table with mouth	Goal-oriented Path
24	028	put poster on wall	Goal-oriented Path
25	031	put saucer on top of cup	Goal-oriented Path
26	016	put stone into pocket	Goal-oriented Path
27	019	put stone into pot of water	Goal-oriented Path
28	017	stuff rag into car exhaust	Goal-oriented Path
29	010	toss book on floor	Goal-oriented Path

Appendix 18. Target scenes in the *Put & Take* stimulus set which are not expressed with Dynamic Deixis



APPENDIXES B

SELECTED EXAMPLES

FROM THE CORPORA

#	Chinese character	Pinyin	Meaning	Semantics	Number of examples
1	拔	<i>bá</i>	pull out	Cause	(38)
2	摆	<i>bǎi</i>	place	Cause	(65)
3	办	<i>bàn</i>	do	Cause	(129)
4	搬	<i>bān</i>	move, displace	Manner	(93), (153)
5	搬	<i>bān</i>	move, displace	Cause	(56), (115), (161)
6	抱	<i>bào</i>	hold in the arms	Cause	(42), (108), (163)
7	背	<i>bēi</i>	carry on the back	Cause	(167)
8	蹦	<i>bèng</i>	jump	Manner	(15)
9	奔跑	<i>bēnpǎo</i>	run quickly	Manner	(17)
10	别	<i>bié</i>	clip, pin	Cause	(58)
11	蹭	<i>cèng</i>	drag along	Manner	(156)
12	插	<i>chā</i>	insert	Cause	(27)
13	撤	<i>chè</i>	remove	Cause	(168)
14	抽	<i>chōu</i>	draw	Cause	(49), (173)
15	出	<i>chū</i>	exit	Path	(2), (83), (143)
16	穿	<i>chuān</i>	pass through	Path	(1)
17	穿	<i>chuān</i>	put on	Cause	(26), (116)
18	搭	<i>dā</i>	hang over	Cause	(66)
19	打 (电话)	<i>dǎ (diànhuà)</i>	make (a phone call)	Cause	(130)
20	带	<i>dài</i>	carry	Cause	(105), (169)
21	戴	<i>dài</i>	put on	Cause	(36)
22	倒	<i>dào</i>	pour	Cause	(22)
23	到	<i>dào</i>	arrive	Path	(89), (148)



24	到	dào	move to	Path	(88), (149)
25	蹬	dēng	pedal	Cause	(117)
26	递	dì	give	Cause	(37)
27	叼	dīāo	hold in the mouth	Cause	(41), (174)
28	吊	diào	hang	Cause	(170)
29	掉	diào	fall	Path	(33), (95), (151)
30	调	diào	transfer	Cause	(109), (164)
31	丢	dīu	throw	Cause	(57)
32	堵	dǔ	block	Cause	(59)
33	端	duān	hold sth. level with both hands	Cause	(67), (175)
34	躲	duǒ	hide	Manner	(131)
35	发	fā	send off	Cause	(118)
36	放	fàng	put	Cause	(20), (119)
37	分	fēn	distribute; assign; allot	Cause	(110)
38	盖	gài	cover	Cause	(68)
39	赶	gǎn	hurry	Manner	(96)
40	给	gěi	give	Cause	(50)
41	挂	guà	hang (up)	Cause	(53)
42	滚	gǔn	get away	Path	(99)
43	过	guò	cross	Path	(84), (144)
44	轰	hōng	drive off	Cause	(176)
45	呼	hū	call	Cause	(132)
46	还	huán	give back	Cause	(181), (187)
47	回	huí	return	Path	(4), (82), (138)
48	寄	jì	send (sth.)	Cause	(106), (177)
49	夹	jiā	press from both sides	Cause	(30), (31)
50	捡	jiǎn	gather, pick up	Cause	(39)
51	叫	jiào	call	Cause	(120)
52	借	jiè	borrow	Cause	(188)
53	接	jiē	receive; meet; pick up (someone)	Cause	(69), (104), (162)
54	揭	jiē	tear off	Cause	(62)
55	进	jìn	enter	Path	(3), (87), (145)
56	进入	jìnrù	enter	Path	(5)
57	经过	jīngguò	pass by	Path	(7)
58	揪	jiū	hold tight and pull	Cause	(121)
59	举	jǔ	raise	Cause	(178)
60	扛	káng	carry on the shoulder	Cause	(171)
61	跨	kuà	step	Manner	(14)
62	拉	lā	transport by vehicle; organize	Cause	(111), (112), (166)



63	来	<i>lái</i>	come	Path + Dynamic Deixis	(80), (139)
64	拎	<i>līn</i>	carry in one's hand	Cause	(45)
65	领	<i>lǐng</i>	lead	Cause	(179)
66	路过	<i>lùguò</i>	pass by	Path	(8)
67	摞	<i>luò</i>	pile up	Cause	(70), (180)
68	埋	<i>mái</i>	bury	Cause	(71)
69	卖	<i>mài</i>	sell	Cause	(133)
70	迈	<i>mài</i>	stride	Manner	(18)
71	买	<i>mǎi</i>	buy	Cause	(127), (185)
72	拿	<i>ná</i>	take	Cause	(21), (102), (159)
73	撵	<i>niǎn</i>	oust	Cause	(113)
74	弄	<i>nòng</i>	dummy verb:make, do	Cause	(72), (107), (165)
75	挪	<i>nuó</i>	move, shift	Cause	(54), (122)
76	爬	<i>pá</i>	climb	Manner	(19), (155)
77	派	<i>pài</i>	send; dispatch; assign; appoint	Cause	(114)
78	盼	<i>pàn</i>	look forward to	Cause	(189)
79	跑	<i>pǎo</i>	run	Manner	(12), (94), (152)
80	跑	<i>pǎo</i>	run away	Path	(100)
81	碰	<i>pèng</i>	knock (against)	Cause	(60)
82	起	<i>qǐ</i>	ascend	Path	(91), (150)
83	擒	<i>qín</i>	capture	Cause	(123)
84	去	<i>qù</i>	go	Path + Dynamic Deixis	(81), (140)
85	取	<i>qǔ</i>	take, fetch	Cause	(32), (124)
86	取	<i>qǔ</i>	draw (money)	Cause	(181)
87	娶	<i>qǔ</i>	marry (a woman)	Cause	(134)
88	扔	<i>rēng</i>	throw	Cause	(23), (125), (182)
89	洒	<i>sǎ</i>	scatter, spill	Cause	(43)
90	撒	<i>sǎ</i>	scatter, spill	Cause	(61)
91	塞	<i>sāi</i>	stuff	Cause	(46), (126)
92	上	<i>shàng</i>	ascend	Path	(6), (86), (142)
93	上	<i>shàng</i>	move to	Path	(85), (141)
94	伸	<i>shēn</i>	extend, stretch	Cause	(28)
95	拾	<i>shí</i>	pick up off the ground	Cause	(73)
96	摔	<i>shuāi</i>	fall	Path	(101)
97	撕	<i>sī</i>	tear	Cause	(55)
98	送	<i>sòng</i>	deliver; send (sb. or sth.)	Cause	(74), (103), (160)
99	抬	<i>tái</i>	lift up	Cause	(172)
100	探	<i>tàn</i>	stretch forward	Cause	(75)



101	躺	<i>tǎng</i>	lie	Manner	(186)
102	掏	<i>tāo</i>	fish out	Cause	(29)
103	套	<i>tào</i>	cover with	Cause	(76)
104	提	<i>tí</i>	lift, carry in one's hand	Cause	(51)
105	踢	<i>tī</i>	kick	Cause	(47)
106	跳	<i>tiào</i>	jump	Manner	(13)
107	挑	<i>tiāo</i>	pick	Cause	(183)
108	贴	<i>tiē</i>	paste	Cause	(40)
109	退	<i>tùi</i>	move backwards	Path	(97)
110	推	<i>tuī</i>	push	Cause	(44)
111	脱	<i>tuō</i>	take off; doff	Cause	(24), (25)
112	挖	<i>wā</i>	discover	Cause	(135)
113	下	<i>xià</i>	descend	Path	(9), (92), (147)
114	衔	<i>xián</i>	hold in the mouth	Cause	(77)
115	写信	<i>xiěxìn</i>	write (a letter)	Cause	(136)
116	移	<i>yí</i>	move	Cause	(63)
117	越	<i>yuè</i>	overstep	Path	(10)
118	扎	<i>zhā</i>	get into	Cause	(64)
119	摘	<i>zhāi</i>	pluck, take off	Cause	(34), (35)
120	粘	<i>zhān</i>	glue	Cause	(78)
121	挣	<i>zhèng</i>	earn	Cause	(137)
122	住	<i>zhù</i>	live	Manner	(190)
123	抓	<i>zhuā</i>	grab	Cause	(48)
124	拽	<i>zhuài</i>	drag	Cause	(79)
125	转	<i>zhuǎn</i>	turn	Manner	(157)
126	装	<i>zhuāng</i>	fill	Cause	(52)
127	走	<i>zǒu</i>	walk	Manner	(11), (98), (154)
128	走	<i>zǒu</i>	leave	Path	(90), (146)
129	钻	<i>zuān</i>	sneak	Manner	(16), (158)
130	坐	<i>zuò</i>	sit	Manner	(128), (184)



Selected examples taken from the *Trajectoire* data

Verbs expressing Path

- (1) 一个男人穿过林间小路。 (Traj_049_S1)
 Yí gè nánrén chuān-guo lín=jiān xiǎolù.
 one CL man pass-through woods=in.between pathway
 'A man crossed the pathway among the woods.'
- (2) 男孩儿从大海里出来。 (Traj_032_S9)
 Nánháir cóng dàhǎi=lǐ chū-lai.
 boy from sea=inside exit-hither
 'The boy came out of the sea.'
- (3) 一个女人提着篮子进了庄稼地。 (Traj_069_S4)
 Yí gè nǚrén tí-zhe lánzi jìn-le zhuāngjiadi.
 one CL woman lift-DUR basket enter-PFV cropland
 'A woman carrying a basket entered the cropland.'
- (4) 他又回到了山洞。 (Traj_053_S11)
 Tā yòu huí-dao-le shāndòng.
 3SG again retron-to-PFV cave
 'He returned to the cave again.'
- (5) 一个男人从山洞中走出来，进入另一个山洞。 (Traj_060_S12)
 Yí gè nánrén cóng shāndòng=zhong zǒu-chu-lai,
 one CL man from cave=in.the.center.of walk-out-hither
 jìnrù lìng yí gè shāndòng.
 enter another one CL cave
 'A man walked out of the cave (towards the deictic center) and entered another cave.'
- (6) 一个小男孩儿沿着山路上山。 (Traj_065_S8)
 Yí gè xiǎo nánháir yán-zhe shānlù shàng shān.
 one CL little boy along-DUR mountain.road ascend mountain
 'A little boy walks up the mountain along the mountain road.'
- (7) 一个小男孩儿从河边的小桥上经过。 (Traj_050_S2)
 Yí gè xiǎo nánháir cóng hébian de xiǎo qiáo=shang jīngguò.
 one CL little boy over riverside GEN small bridge=upside pass.by
 'A little boy passed by the small bridge over the river.'



- (8) 一个男人**路过**一棵树，走进了树丛。 (Traj_049_S6)

Yí gè nánrén **lùguò** yì kē shù, zǒu-jìn-le shùcóng.
 one CL man **pass.by** one CL tree walk-into-PFV grove
 'A man passed a tree and walked into the grove.'

- (9) 一个女人**下**台阶，走向了水边儿。 (Traj_073_S6)

Yí gè nǚrén **xià** táijiē, zǒu xiàng le shuǐ=bianr.
 one CL woman **descend** step walk towards PFV water=side
 'A woman walked down the steps and walks towards the edge of the water.'

- (10) 山洞门口的石头上有一个篮子，男人从一个山洞**越**过篮子，走到了另一个山洞。 (Traj_060_S4)

Shāndòng ménkǒu de shítou=shang yǒu yí gè lánzi,
 cave doorway GEN stone=upside have one CL basket
 nánrén cóng yí gè shāndòng **yuè-guo** lánzi,
 man from one CL cave **overstep-over** basket
 zǒu-dao-le lìng yí gè shāndòng.
 walk-to-PFV another one CL cave
 'There is a basket on the stone at the entrance of the cave. The man overstepped the basket from one cave and walked to another cave.'

Verbs expressing Manner

- (11) 一位男士**走**进了丛林中。 (Traj_056_S2)

Yí wèi nánshì **zǒu-jìn-le** cónglín=zhong.
 one CL man **walk-into-PFV** jungle=inside
 'A man walked into the jungle.'

- (12) 一个女人从树下**跑**过。 (Traj_044_S2)

Yí gè nǚrén cóng shù=xia **pǎo-guo**.
 one CL woman from tree=downside **run-past**
 'A woman ran past the tree.'

- (13) 一个男人**跳**过一棵树桩。 (Traj_072_S12)

Yí gè nánrén **tiào-guo** yì kē shùzhuāng.
 one CL man **jump-over** one CL stump
 'A man jumped over a stump.'



- (14) 一个男士跨过了一根树桩。 (Traj_072_S5)

Yí gè nánshì kuà-guo-le yì gēn shùzhuāng.
one CL man step-over-PFV one CL stump

'A man stepped over a stump.'

- (15) 男孩儿从一个石头蹦到另一个石头上。 (Traj_075_S10)

Nánháir cóng yí gè shítou bèng-dao líng yí gè
boy from one CL stone jump-to another one CL

shítou=shang.

stone=upside

'The boy jumped from one stone to another.'

- (16) 一个小男孩儿钻进山洞中。 (Traj_058_S12)

Yí gè xiǎo nánháir zuān-jìn shāndòng=zhong.
one CL little boy sneak-into cave=inside

'A little boy sneaked into the cave.'

- (17) 一位女士从树边奔跑过来。 (Traj_033_S3)

Yí wèi nǚshì cóng shù=bian bēnpǎo-guo-lai.
one CL lady from tree=side run.quickly-past-hither

'A lady ran quickly from the tree.'

- (18) 一个男孩儿跑着迈过了一个石头。 (Traj_063_S6)

Yí gè nánháir pǎo-zhe mài-guo-le yí gè shítou.
one CL boy run-DUR stride-over-PFV one CL stone

'A boy strode over a stone running.'

- (19) 穿着蓝色上衣的女孩儿爬上了台阶。 (Traj_071_S5)

Chuān-zhe lánsè shàngyī de nǚháir pá-shang-le táijiē.
wear-DUR blue jacket GEN girl climb-up-PFV step

'The girl in the blue jacket climbed up the steps.'



Selected examples in *Put & Take* data

Verbs expressing Cause

- (20) 他把书放在了地上。 (P&T_007_S10)

Tā bǎ shū fàng zài le dì=shang.
 3SG OM book put at PFV floor=upside
 'He put the book on the floor.'

- (21) 他从纸箱里拿出一个水果。 (P&T_111_S9)

Tā cóng zhǐxiāng=li ná-chu-le yí gè shuǐguǒ.
 3SG from carton=inside take-out-PFV one CL fruit
 'He took out a fruit from the carton.'

- (22) 一个男人从水桶里倒出了水。 (P&T_120_S11)

Yí gè nánrén cóng shuǐtǒng=li dào-chu-le shuǐ.
 1SG CL man from bucket=inside pour-out-PFV water
 'A man poured water from the bucket.'

- (23) 他把书扔到了地上。 (P&T_008_S3)

Tā bǎ shū rēng-dao-le dì=shang.
 3SG OM book throw-to-PFV floor=upside
 'He threw the book onto the floor.'

- (24) 他脱掉了外套。 (P&T_133_S9)

Tā tuō-diao-le wàitào.
 3SG take.off-off-PFV coat
 'He took off his coat.'

- (25) 他把袜子脱了下来。 (P&T_126_S3)

Tā bǎ wàzi tuō-le-xia-lai.
 3SG OM sock take.off-PFV-off-hither
 'He took off his socks (towards the deictic center).'

- (26) 他穿上了外套。 (P&T_033_S5)

Tā chuān-shang-le wàitào.
 3SG put.on-up-PFV coat
 'He put on his coat.'



- (27) 她把蜡烛插进了烛台里。 (P&T_014_S5)
Tā bǎ làzhú chā-jìn-le zhútái=li.
 3SG OM candle insert-into-PFV candlestick=inside
 'She inserted the candle into the candlestick.'
- (28) 一个年轻的女人把手伸进了树洞里。 (P&T_023_S12)
Yí gè niánqīngde nǚrén bǎ shǒu shēn-jìn-le shùdòng=li.
 one CL young woman OM hand extend-into-PFV tree.hole=inside
 'A young woman put her hand into the tree hole.'
- (29) 一个女的从她的裤兜里掏出了一个石块儿。 (P&T_116_S4)
Yí gè nǚde cóng tā de kùdōu=li tāo-chū-le
 one CL woman from 3SG GEN trouser.pocket=inside fish.out-out-PFV
yí gè shíkùàir.
 one CL stone
 'A woman took out a stone from her trouser pocket.'
- (30) 这个人用钳子把香蕉夹了起来。 (P&T_103_S8)
Zhè gè rén yòng qiánzi bǎ xiāngjiāo jiā-le-qi-lai.
 this CL person with tong OM banana press.from.both.sides-PFV-up-hither
 'The man picked up the banana with tongs (towards the deictic center).'
- (31) 这个女士用一个工具把一个香蕉夹到了桌子上。 (P&T_003_S2)
Zhè gè nǚshì yòng yí gè gōngjù bǎ xiāngjiāo
 this CL lady with one CL tool OM banana
jiā-dao-le zhuōzi=shang.
 press.from.both.sides-to-PFV table=upside
 'The lady clipped a banana to the table with a tool.'
- (32) 一位女士从墙上取下了一幅画。 (P&T_128_S12)
Yí wèi nǚshì cóng qiáng=shang qǔ-xia-le yí fú huà.
 one CL lady from wall=upside take-off-PFV one CL picture
 'A lady took a picture off the wall.'
- (33) 他双手抱着一摞书，一本掉在了地上。 (P&T_009_S10)
Tā shuāngshǒu bào-zhe yì luò shū, yì běn
 3SG both.hands hold.in.the.arms-DUR one CL book one CL
diào zài le dì=shang.
 fall at PFV floor=upside
 'He holds a stack of books in his hands, and one fell to the floor.'



- (34) 她把帽子摘了下来。 (P&T_125_S3)
Tā bǎ màozi zhāi-le-xia-lai.
 3SG OM hat **take.off**-PFV-off-hither
 ‘She took off her hat (towards the deictic center).’
- (35) 她摘了帽子。 (P&T_125_S10)
Tā zhāi-le màozi.
 3SG **take.off**-PFV hat
 ‘She took off her hat.’
- (36) 这个人戴上了帽子。 (P&T_025_S7)
Zhè gè rén dài-shang-le màozi.
 this CL person **put.on**-on-PFV hat
 ‘The man put on his hat.’
- (37) 这个人把杯子递给另外一个人。 (P&T_022_S8)
Zhè gè rén bǎ bēizi dì gěi lingwài yí gè rén.
 this CL person OM cup **give** to another one CL person
 ‘The man handed over the cup to another man.’
- (38) 一个女人将蜡烛从烛台上拔了出来。 (P&T_114_S11)
Yí gè nǚrén jiāng làzhú cóng zhútái=shang bá-le-chu-lai.
 one CL woman OM candle from candlestick=upside **pull.out**-out-hither
 ‘A woman took a candle out of the candlestick (towards the deictic center).’
- (39) 一个女人从地上捡起了一本杂志。 (P&T_107_S11)
Yí gè nǚrén cóng dì=shang jiǎn-qi-le yì běn zázhì.
 one CL woman from floor=upside **pick.up**-up-PFV one CL magazine
 ‘A woman picked up a magazine from the floor.’
- (40) 这个人把一幅画贴在了墙上。 (P&T_028_S2)
Zhè gè rén bǎ yí fú huà tiē zài le qiáng=shang.
 this CL person OM one CL picture **paste** at PFV wall=upside
 ‘The man put a picture on the wall.’
- (41) 这个人用嘴把杯子叼了起来。 (P&T_102_S8)
Zhè gè rén yòng zuǐ bǎ bēizi diāo-le-qi-lai.
 this CL person with mouth OM cup **hold.in.the.mouth**-PFV-up-hither
 ‘The man picked up the cup with his mouth.’



- (42) 一个女的把一叠书抱走了。 (P&T_104_S1)
Yí gè nǚde bǎ yì dié shū bào-zou le.
 one CL woman OM one CL book **hold.in.the.arms-away** CRS
 'A woman took away a pile of books.'
- (43) 他把杯子的水洒在了桌子上。 (P&T_021_S5)
Tā bǎ bēizi de shuǐ sǎ zài le zhuōzi=shang.
 3SG OM cup GEN water **spill** at PFV table=upside
 'He spilled the water in the cup onto the table.'
- (44) 一个男生将车子旁边的行李推到了树旁边。 (P&T_052_S6)
Yí gè nánshēng jiāng chēzi=pángbiān de xínglǐxiāng
 one CL boy OM car=beside GEN suitcase
tuī-dao-le shù-pángbian.
push-to-PFV tree-beside
 'A boy pushed the suitcase beside the car to the side of the tree.'
- (45) 一个年轻的女人拎起了箱子，走出了门。 (P&T_130_S12)
Yí gè niánqīngde nǚrén līn-qi-le xiāngzi,
 one CL young woman **lift-up-PFV** suitcase
zǒu-chu-le mén.
 walk-out-PFV door
 'A young woman lifted up the suitcase and walked out of the door.'
- (46) 这个先生把一团布塞进了汽车的排气筒里。 (P&T_017_S2)
Zhè gè xiānsheng bǎ yì tuán bù sāi-jìn-le
 this CL gentleman OM one CL rag **stuff-into-PFV**
qìchē de páqìtǒng=li.
 car GEN exhaust=inside
 'The gentleman stuffed a wad of rag into the exhaust of the car.'
- (47) 他把桶踢倒了。 (P&T_113_S5)
Tā bǎ tǒng tī-dǎo le.
 3SG OM bucket **kick-over** CRS
 'He kicked the bucket down.'
- (48) 他抓起了一把豆子。 (P&T_105_S7)
Tā zhuā-qi-le yì bǎ dòuzi.
 3SG **grab** one CL bean
 'He grabbed a handful of beans.'



- (49) 一位女士从袋子中**抽**出一根黄瓜。 (P&T_115_S12)
Yí wèi nǚshì cóng dàizi=zhong chōu-chu yì gēn huángguā.
 one CL lady from bag=inside **draw-out** one CL cucumber
 ‘A lady pulled a cucumber out of the bag.’
- (50) 她**给**了她一个杯子。 (P&T_022_S10)
Tā gěi-le tā yí gè bēizi.
 3SG **give**-PFV 3SG one CL cup
 ‘She gave her a cup.’
- (51) 一个女人**提**起一个包。 (P&T_130_S11)
Yí gè nǚrén tí-qi yí gè bāo.
 one CL woman **lift-up** one CL bag
 ‘A woman lifted up a bag.’
- (52) 一位女生将一根芹菜**装**进了一个盒子里。 (P&T_015_S6)
Yí wèi nǚshēng jiāng yì gēn qíncài zhuāng-jìn-le yí gè hézi=li.
 one CL girl OM one CL celery **fill-into**-PFV
 one CL box=inside
 ‘A girl put a celery into a box.’
- (53) 一个人把绳子**挂**在了树枝上。 (P&T_027_S7)
Yí gè rén bǎ shéngzi guà zài le shùzhī=shang.
 one CL person OM rope **hang.up** at PFV branch=upside
 ‘A man hung a rope on the branch.’
- (54) 这个男士把一个包**挪**走了，**挪**到了树的旁边。 (P&T_052_S2)
Zhè gè nánshì bǎ yí gè bāo nuó-zou le, nuó-dao-le shù de pángbiān.
 this CL man OM one CL bag **shift-away** CRS
shift-to-PFV tree gen beside
 ‘The man moved a bag and moved it to the side of the tree.’
- (55) 这个人把画儿从墙上**撕**了下来。 (P&T_128_S8)
Zhè gè rén bǎ huàr cóng qiáng=shang sī-le-xia-lai.
 this CL person OM picture from wall=upside **tear**-PFV-off-hither
 ‘The man tore the picture off the wall.’



- (56) 一个女的把一摞书从桌子上搬走了。 (P&T_104_S4)
Yí gè nǚde bǎ yí luòshū cóng zhuōzi=shang bān-zou le.
 one CL woman OM one CL book from table=upside **move-away** CRS
 'A woman moved a stack of books from the table.'
- (57) 他往锅里丢了一块砖。 (P&T_019_S12)
Tā wǎng guō=li diū-le yí kuài zhuān.
 3SG towards pot=inside **throw-PFV** one CL brick
 'He threw a brick into the pot.'
- (58) 她把花别在一个女人的头上。 (P&T_018_S3)
Tā bǎ huā bié zài yí gè nǚrén de tóu=shang.
 3SG OM flower **pin** at one CL woman GEN head=upside
 'She pinned the flower to a woman's head.'
- (59) 一个男的用一块布把车的排气筒堵上了。 (P&T_017_S1)
Yí gè nánde yòng yí kuài bù bǎ chē de páqìtǒng dǔ-shang le.
 one CL man with one CL cloth OM car GEN
 exhaust **block-up** CRS
 'A man blocked the exhaust of the car with a cloth.'
- (60) 一个女士走路时碰倒了垃圾桶。 (P&T_113_S6)
Yí gè nǚshì zǒulù shí pèng-dǎo-le lājītǒng.
 one CL lady walk when **knock-over-PFV** garbage.can
 'A woman knocked over the garbage can as she walked.'
- (61) 一个女人将一盒积木撒在了地上。 (P&T_112_S11)
Yí gè nǚrén jiāng yí hé jīmù sā zài le dì=shang.
 one CL woman OM one CL block **scatter** at PFV floor=upside
 'A woman scattered a box of blocks on the floor.'
- (62) 一个女的把一张画有马和狗的画从墙上揭了下来。 (P&T_128_S1)
Yí gè nǚde bǎ yí zhāng huà yǒu mǎ hé gǒu de huà cóng qiáng=shang jiē-le-xia-lai.
 one CL woman OM one CL draw have horse and dog
 GEN picture from wall=upside **tear.off-off-hither**
 'A woman took a picture with horses and dogs off the wall.'



- (63) 一个人将一个箱子**移**到了草坪上。 (P&T_052_S11)
Yí gè rén jiāng yí gè xiāngzi yí-dao-le cǎopíng=shang.
 one CL person OM one CL suitcase **move-to-PFV** lawn=upside
 'A man moved a suitcase to the lawn.'
- (64) 一个男的把头**扎**进了小木桶里。 (P&T_024_S1)
Yí gè nánde bǎ tóu zhā-jìn-le
 one CL man OM head **get.into-into-PFV**
xiǎo mùtǒng=li.
 small wooden.barrel=inside
 'A man plunged his head into a small wooden barrel.'
- (65) 一位女士用嘴叼着一个一次性杯子**摆**在桌子上。 (P&T_002_S12)
Yí wèi nǚshì yòng zuǐ diāo-zhe yí gè
 one CL lady with mouth hold.in.the.mouth-DUR one CL
yíxìng bēizi bǎi zài zhuōzi=shang.
 disposable cup **place** at table=upside
 'A lady with a disposable cup in her mouth placed it on the table.'
- (66) 她**搭**了一根绳子在树上。 (P&T_027_S9)
Tā dā-le yí gēn shéngzi zài shù=shang.
 3SG **hang.over-PFV** one CL rope at tree=upside
 'She hung a rope over the tree.'
- (67) 一个人**端**起了一个满是水的杯子。 (P&T_021_S12)
Yí gè rén duān-qǐ-le yí gè
 one CL person hold.sth.level.with.both.hands-up-PFV one CL
mǎn shì shuǐ de bēizi.
 full be water GEN glass
 'A man held up a glass full of water.'
- (68) 这个人用一个小碟把茶杯**盖**住了。 (P&T_031_S7)
Zhè gè rén yòng yí gè xiǎo dié bǎ
 this CL person with one CL small saucer OM
chábēi gài-zhu le.
 teacup **cover-dwell** CRS
 'The man covered the teacup with a small saucer.'
- (69) 男人**接**过了女人手里的水。 (P&T_122_S9)
Nánrén jiē-guò-le nǚrén shǒu=li de shuǐ.
 man **receive-over-PFV** woman hand=inside GEN water
 'The man took the water from the woman's hand.'



- (70) 他把一个盘子
- 摆**
- 在了一个杯子上。 (P&T_031_S5)

Tā bǎ yí gè pánzi **luò** zài le yí gè bēizi=*shang*.
 3SG OM one CL plate **pile.up** at PFV one CL cup=*upside*
 'He put a plate on the top of a cup.'

- (71) 一个男孩儿把头
- 埋**
- 入了水桶中。 (P&T_024_S11)

Yí gè nánháir bǎ tóu **mái-rù-le** shuǐtǒng=*zhong*.
 one CL boy OM head **bury-into-PFV** bucket=*inside*
 'A boy buried his head in a bucket.'

- (72) 他把书
- 弄**
- 到了地上。 (P&T_009_S5)

Tā bǎ shū **nòng-dao-le** dì=*shang*.
 3SG OM book **do.with-to-PFV** floor=*upside*
 'He got the book on the floor.'

- (73) 他把桌子上的豆子
- 拾**
- 起来了。 (P&T_105_S3)

Tā bǎ zhuōzi=*shang* de dòuzi **shí-qǐ-lai** le.
 3SG OM table=*upside* GEN bean **pick.up.off.the.ground-up** CRS
 'He picked up the beans on the table.'

- (74) 一位女士将一个杯子
- 送**
- 到另一个女士手里。 (P&T_022_S6)

Yí wèi nǚshì jiāng yí gè bēizi **sòng-dao** lìng
 one CL lady OM one CL cup **deliver-dao** another
 yí gè nǚshì shǒu=*li*.
 one CL lady hand=*inside*
 'A lady delivers a cup to another lady's hand.'

- (75) 桌子上有一个白色的桶，然后一个男人把头
- 探**
- 进了这个桶里。

(P&T_024_S2)

Zhuōzi=*shang* yǒu yí gè báisè de tǒng, ránhòu
 table=*upside* have one CL white GEN bucket then
 yí gè nánrén bǎ tóu **tàn-jìn-le** zhè gè tǒng=*li*.
 one CL man OM head **stretch.forward-into-PFV** this CL bucket=*inside*
 'There is a white bucket on the table, and then a man stretched his head
 into the bucket.'

- (76) 这个人拿了一串儿绳子，
- 套**
- 到了一个树枝上。 (P&T_027_S2)

Zhè gè rén ná-le yí chuànr shéngzi, **tào-dao-le**
 this CL person take-PFV one CL rope **cover-to-PFV**
 yí gè shùzhī=*shang*.
 one CL branch=*upside*
 'The person took a string of rope and put it on a branch.'



- (77) 这个人用嘴把一个杯子衔了起来。 (P&T_102_S2)

Zhè gè rén yòng zuǐ bǎ yí gè bēizi
 this CL person with mouth OM one CL cup

xián-le-qi-lai.

hold.in.the.mouth-PFV-up-hither

'The person held a cup with his mouth.'

- (78) 一个人把一张图片粘在了墙上。 (P&T_028_S1)

Yí gè rén bǎ yì zhāng túpiàn zhān zài le qiáng=shang.
 one CL person OM one CL picture glue at PFV wall=upside

'A man glued a picture to the wall.'

- (79) 一个人把堵在汽车排气筒里面的布拽了出来。 (P&T_117_S1)

Yí gè rén bǎ dǔ zài qìchē páiqìtǒng=lǐmian de bù
 one CL person OM block at car exhaust=inside GEN rag

zhuài-le-chu-lai.

drag-PFV-out-hither

'A person dragged out the rag that was blocked in the exhaust of the car.'



Selected examples in *Married for Ten Years* data

Verbs expressing Path

- (80) 老周来了。 (MFTY_1_4055)
Lǎo-Zhōu lái le.
 old-Zhou come CRS
 ‘Old Zhou came.’
- (81) 他去单位了。 (MFTY_2_3008)
Tā qù dānwèi le.
 3SG go unit CRS
 ‘He went to work.’
 (Lit.: ‘He went to the unit.’)
- (82) 善大爷，我回来了。 (MFTY_4_4424)
Shàn-dàye wǒ huí-lai le.
 Shan-uncle 1SG return-hither CRS
 ‘Uncle Shan, I came back.’
- (83) 明儿早点儿出来！ (MFTY_1_0958)
Míngr zǎodiǎnr chū-lai!
 tomorrow early exit-hither
 ‘Come out early tomorrow!’
- (84) 成长，你快过来！ (MFTY_5_3955)
Chéng Zhǎng, nǐ kuài guò-lai!
 Cheng Zhang 2SG quickly pass-hither
 ‘Cheng Zhang, come over (here) quickly!’
- (85) 你上哪儿去了？ (MFTY_3_2705)
Nǐ shàng-nǎr-qu le?
 2SG move.to-where-thither CRS
 ‘Where have you been?’
 (Context: Where have you been? I can’t find you this afternoon.)
- (86) 你快上去吧！ (MFTY_8_2626)
Nǐ kuài shàng-qu ba!
 2SG quickly ascend-thither SUG
 ‘Go up quickly!’



- (87) 你快**进**去吧！ (MFTY_6_3058)
Nǐ kuài jìn-qu ba!
 2SG quickly **enter**-thither SUG
 ‘Go in quickly!’
- (88) 你到哪儿去了？ (MFTY_2_0757)
Nǐ dào-nǎr-qu le?
 2SG **move.to**-where-thither CRS
 ‘Where have you been?/Where did you go?’
 (Context: Where have you been? I’ve been looking for you for a long time)
- (89) 明天夏导演就**到**了。 (MFTY_3_0726)
Míngtiān Xià dǎoyǎn jiù dào le.
 tomorrow Xia director then **arrive** CRS
 ‘Director Xia will arrive tomorrow.’
- (90) 你**走**吧！ (MFTY_5_1142)
Nǐ zǒu ba!
 2SG **leave** SUG
 ‘Go away!’
- (91) 快**起**来！ (MFTY_1_2239)
Kuài qǐ-lai!
 quickly **ascend**-hither
 ‘Get up quickly (towards the deictic center)!’
- (92) 早点儿**下**来！ (MFTY_2_0454)
Zǎodiǎnr xià-lai!
 early **descend**-hither
 ‘Come down early!’



Verbs expressing Manner

- (93) 这回是我，我搬出去。 (MFTY_1_0756)

Zhè huí shì wǒ, wǒ bān-chu-qu.

this time be 1SG 1SG **move-out-thither**

'This time is me, I (will) move out (away from the deictic center).'

- (94) 你又跑回来干吗? (MFTY_1_1134)

Nǐ yòu pǎo-hui-lai gàn má?

2SG again **run-back-hither** why

'Why are you running back again (towards the deictic center)?'

- (95) 别让他掉下来! (MFTY_6_4027)

Bié ràng tā diào-xia-lai!

PROH let 3SG **fall-down-thither**

'Don't let him fall down (towards the deictic center)!'

- (96) 我争取今天晚上赶回来。 (MFTY_8_3630)

Wǒ zhēngqǔ jīntiān wǎnshang gǎn-hui-lai.

1SG try today evening **hurry-back-hither**

'I try to come back tonight.'

- (97) 快退回去! (MFTY_4_3314)

Kuài tuì-hui-qu!

quickly **move.backwards-back-thither**

'Go back quickly!'

- (98) 能从火车站一直走回滨河路去。 (MFTY_8_4124)

Néng cóng huǒchēzhàn yìzhí zǒu-hui-Bīnhélù-qu.

can from train.station all.along **walk-back-Binhe.road-thither**

'(I) can walk all the way back to Binhe Road from the train station (away from the deictic center).'

- (99) 你给我滚出去! (MFTY_10_s4127)

Nǐ gěi wǒ gǔn-chu-qu!

2SG for 1SG **get.away-out-thither**

'Get out of my face!'

(Lit.: 'Get away (away from the deictic center)!')



- (100) 跟那个夜总会的聂老板跑了。 (MFTY_8_0806)

Gēn nèi gè yèzǒnghuì de Niè lǎobǎn pǎo le.
with that CL nightclub GEN Nie boss run.away CRS
'(She) ran away with the boss Nie of the nightclub.'

- (101) 从哪儿摔下来了? (MFTY_10_2758)

Cóng nǎr shuāi-xia-lai le?
from where fall-down-hither CRS
'Where did (you) fall (towards the deictic center)?'

Verbs expressing Cause

- (102) 您先把这个拿进去! (MFTY_5_3849)

Nín xiān bǎ zhè gè ná-jìn-qu!
2SG.HON first OM this CL take-into-thither
'Take it in there first (away from the deictic center)!'

- (103) 你把它送到索尼公司去。 (MFTY_10_3355)

Nǐ bǎ tā sòng-dao-suǒnígōngsī-qu.
2SG OM 3SG send-to-Sony.corporation-thither
'Send it to the Sony (away from the deictic center).'

- (104) 他把他爸他妈接过来了。 (MFTY_8_1107)

Tā bǎ tā bà tā mā jiē-guo-lai le.
3SG OM 3SG father 3SG mother pick.up-over-hither CRS
'He picked up his father and mother over (towards the deictic center).'

- (105) 成长, 把汤带过去! (MFTY_3_2835)

Chéng Zhǎng, bǎ tāng dài-guo-qu!
Cheng Zhang OM soup carry-over-thither
'Cheng Zhang, take the soup (away from the deictic center)!'

- (106) 他寄来一包茶叶来。 (MFTY_3_3525)

Tā jì-lai yì bāo chá-yè-lai.
3SG send-hither one CL tea.leaves-hither
'He sent a packet of tea (towards the deictic center).'

- (107) 你先把他弄床上去! (MFTY_10_3031)

Nǐ xiān bǎ tā nòng-chuáng=shang-qu!
2SG first OM 3SG get-bed=upside-thither
'Get him to the bed first (away from the deictic center)!'



- (108) 抱过去了吗? (MFTY_6_4037)

Bào-guo-qu le ma?

hold.in.the.arms-over-thither PFV Q

'Did you carry (him) over (away from the deictic center)?'

- (109) [...], 我一定让领导把你调过来。 (MFTY_2_0930)

[...] *wǒ yídìng ràng lǐngdǎo bǎ nǐ diào-guo-lai.*

1SG certainly let leader OM 2SG **transfer-over-hither**

'[...], I must ask the leader to transfer you over here (towards the deictic center).'

- (110) 总务处刚分进个人去, 你就要结婚。 (MFTY_1_1816)

Zǒngwùchù gāng fēn-jìn-gè-rén-qu,

office.of.general.services just **allot-into-cl-person-thither**

nǐ jiùyào jiéhūn.

2SG about.to marry

'The Office of genral affairs has just been allotted to a person (away from the deictic center), and you are about to get married.'

- (111) 这个三轮车我使一下, 我拉个东西出去。 (MFTY_2_2248)

Zhè gè sānlúnchē wǒ shǐ yíxià,

this CL tricycle 1SG use AMC

wǒ lā-gè-dōngxi-chu-qu.

1SG **transport.by.vehicle-CL-thing-out-thither**

'I will use this tricycle and take something out by the tricycle (away from the deictic center).'

- (112) 正好赶上贾平从海南回来, 我把他也拉来了。 (MFTY_4_1240)

Zhèngchǎo gǎnshàng Jiǎ Píng cóng Hǎinán huí-lai,

by.chance run.into Jia Ping from Hainan return-hither

wǒ bǎ tā yě lā-lai le.

1SG OM 3SG also **organize-hither** CRS

'It happened to be the moment by chance when Jia Ping came back from Hainan, and I also brought him here.'

- (113) 她敢回来, 我就把她撵出去。 (MFTY_7_2105)

Tā gǎn huí-lai, wǒ jiù bǎ tā niǎn-chu-qu.

3SG dare return-hither 1SG then OM 3SG **oust-out-thither**

'(If) she dares to come back, I will then drive her out (away from the deictic center).'



- (114) 咱把成长派过去。 (MFTY_4_0602)

Zán bǎ Chéng Zhǎng pài-guo-qu.
1PL.INCL OM Cheng Zhang send-over-thither

'Let's send Cheng Zhang over there (away from the deictic center).'

- (115) 你给妈把电视搬过去吧！ (MFTY_6_4047)

Nǐ gěi mā bǎ diànshì bān-guo-qu ba!
2SG to mother OM television displace-over-thither SUG

'Move the TV to Mom (away from the deictic center)!'

- (116) 穿上！ (MFTY_1_0923)

Chuān-shang!

put.on-up

'Put (it) on!'

- (117) 小李，一会儿你把这车蹬回去吧！ (MFTY_4_3344)

Xiǎo Lǐ, yíhuìr nǐ bǎ zhè chē
Yound Li a.little.while 2SG OM this vehicle

dēng-hui-qu ba!
pedal-back-thither SUG

'Young Li, pedal this tricycle back in a while (away from the deictic center)!'

- (118) 我要不是离婚了，那怎么能把我发到这儿来呀。 (MFTY_1_3643)

Wǒ yàobúshì líhūn le, nà zěnmé néng bǎ
1SG but.for divorce CRS in.that.case how can OM

wǒ **fā-dao-zhèr-lai** ya.
1SG **send.off-to-here-hither** PRT

'If I hadn't been divorced, how could I have been sent here (towards the deictic center).'

- (119) 麻烦您让小梁把我的自行车放回去吧。 (MFTY_7_1001)

Máfan nín ràng Xiǎo Liáng bǎ wǒ de zìxíngchē
trouble.sb. 2SG.HON let young Liang OM 1SG GEN bike

fàng-hui-qu ba.
put-back-thither SUG

'Please let Xiao Liang put my bike back (away from the deictic center).'

- (120) 把你们老板叫来！ (MFTY_2_3824)

Bǎ nǐmen lǎobǎn jiào-lai!
OM 2PL boss call-hither

'Call your boss to come here!'



- (121) 睡了也得给她揪起来。 (MFTY_2_2213)

Shuì le yě děi gěi tā jiū-qi-lai.

sleep PFV also must BEN 3SG **hold.tight.and.pull-up-hither**
'(We) have to pull her up even if she fell asleep (towards the deictic center).'

- (122) 都挪进来。 (MFTY_7_3547)

Dōu nuó-jin-lai.

all **shift-into-hither**

'Move all in (towards the deictic center).'

- (123) 给你抢走了? (MFTY_1_1222)

Gěi nǐ qín-zou le?

PREP 2SG **capture-away** PFV

'Did (they) take you away?'

- (124) 快把那取下来! (MFTY_5_4244)

Kuài bǎ nèi qǔ-xia-lai!

quickly OM that **take-down-hither**

'Take that down quickly (towards the deictic center)!'

(Context: Take the refrigerator down from the luggage van.)

- (125) 我把你们俩都扔出去。 (MFTY_7_3514)

Wǒ bǎ nǐmen liǎ dōu rēng-chu-qu.

1SG OM 2PL two all **throw-out-thither**

'I (will) throw you both out (away from the deictic center).'

- (126) [...], 然后把钥匙顺着这个门缝给您塞进来。 (MFTY_2_2317)

[...], ránhòu bǎ yàoshi shùnzhè zhè gè ménfèng

then OM key along this CL crack.of.the.door

gěi nín sāi-jin-lai.

to 2SG.HON **stuff-into-hither**

'[...], then we put the key along the crack of the door to you (towards the deictic center).'

- (127) 我把酱油买回来了。 (MFTY_3_4000)

Wǒ bǎ jiàngyóu mǎi-hui-lai le.

1SG OM soy.sauce **buy-back-hither** CRS

'I bought the soy sauce (back towards the deictic center).'

- (128) 韩梦, 你坐上来! (MFTY_2_2341)

Hánmèng, nǐ zuò-shang-lai!

Hanmeng 2SG **sit-up-hither**

'Hanmeng, sit up (towards the deictic center)!'



- (129) 办来再说嘛! (MFTY_1_1851)

*Bàn-lai zài shuō ma!*¹⁵⁶
do-hither again speak PRT

'Let's talk about it when you managed to do it (towards the deictic center)!'

- (130) 成长, 有两个同学给你打来电话。 (MFTY_2_0702)

Chéng Zhǎng, yǒu liǎng gè tóngxué gěi nǐ
Cheng Zhang have two CL classmate for 2SG
dǎ-lai diànhuà.
make.a.phone.call-hither telephone

'Cheng Zhang, two classmates called you (towards the deictic center).'

- (131) 躲哪儿去了? (MFTY_2_0524)

Duǒ-nǎr-qu le?
hide-where-thither CRS

'Where did you hide (away from the deictic center)?'

- (132) 您一大早把我呼来, ...。 (MFTY_7_3958)

Nín yídǎzǎo bǎ wǒ hū-lai, ...
2SG.HON early.in.the.morning OM 1SG call-hither

'You called me early in the morning (towards the deictic center), ...'

- (133) 你卖哪儿去呀? (MFTY_5_3229)

Nǐ mài-nǎr-qu ya?
2SG sell-where-thither PRT

'Where are you going to sell it (away from the deictic center)?'

- (134) 这样就把这么漂亮一个姑娘娶回来了。 (MFTY_2_1833)

Zhèyàng jiù bǎ zhème piàoliang yí gè gūniang
in.this.way then OM such beautiful one CL girl
qǔ-hui-lai le.
marry.(a.woman)-back-hither CRS

'In this way, (you) married such a beautiful girl (back towards the deictic center).'

- (135) 这位是我们从天宇公司挖来的。 (MFTY_9_1623)

Zhè wèi shì wǒmen cóng tiānyǔ gōngsī wā-lai de.
this CL be 1PL from Tianyu company discover-hither PRT

'This (person) is the one that we discovered from Tianyu Company (towards the deictic center).'

¹⁵⁶ The sentence final particle 嘛 *ma* indicates that something is obvious.



(136) 以后你有什么事情，你就写信来！ (MFTY_6_2906)

Yǐhòu nǐ yǒu shénme shìqing, nǐ jiù xiě-xìn-lai!
 afterwards 2SG have what affair 2SG just **write-letter**-hither
 'If something happens to you in the future, just write to me (towards the
 deictic center)!'

(137) 学学以后怎么把那客户的钱挣到咱们的钱包里来！

(MFTY_8_0844)

Xué-xue yǐhòu zěnmē bǎ nèi kèhù de qián
 learn-RDP afterwards how OM that customer GEN money
zhèng-dao zánmen de qiánbāo=lǐ-lai!!
earn-to 1PL.INCL GEN wallet=inside-hither
 'Learn how to earn the customer's money into our wallet (towards the deictic
 center)!'

Selected examples in *Loquacious Zhang Damin's Happy Life* data

Verbs expressing Path

- (138) 早点儿回去! (LZHL_5_0212)
Zǎodiǎnr huí-qu!
 early return-thither
 'Go back early!'
- (139) 您赶紧来吧! (LZHL_10_2147)
Nín gǎnjǐn lái ba!
 2SG.HON immediately come SUG
 'Come immediately!'
- (140) 你快去吧! (LZHL_2_1530)
Nǐ kuài qù ba!
 2SG quickly go SUG
 'Go quickly!'
- (141) 大雪，上这儿来! (LZHL_6_1752)
Dàxuě, shàng-zhèbiānr-lai!
 Daxue move.to-here-hither
 'Daxue, come here!'
- (142) 大军，你上去试试。 (LZHL_4_3221)
Dàjūn, nǐ shàng-qu shì-shì.
 Dajun 2SG ascend-thither try-RDP
 'Dajun, go up and have a try.'
- (143) 他出去了。 (LZHL_6_0230)
Tā chū-qu le.
 3SG exit-thither CRS
 'He went out.'
- (144) 别过去! (LZHL_2_3707)
Bié guò-qu!
 PROH get.through-thither
 'Don't go there!'



- (145) 你赶紧**进**去吧！ (LZHL_3_3932)
Nǐ gǎnjǐn jìn-qu ba!
 2SG immediately enter-thither SUG
 ‘Go in immediately!’
- (146) 别走啊！ (LZHL_8_2039)
Bié zǒu a!
 PROH leave PRT
 ‘Don’t leave!’
- (147) 快下来吧！ (LZHL_7_2154)
Kuài xià-lai ba!
 quickly descend-hither SUG
 ‘Come down quickly!’
- (148) 我这就到。 (LZHL_2_1546)
Wǒ zhè jiù dào.
 1SG now at.once arrive
 ‘I am arriving right now.’
- (149) 你怎么没到店里去啊？ (LZHL_10_3003)
Nǐ zěnméi méi dào-diàn=lǐ-qu a?
 2SG why NEG.REAL move.to-store=inside-thither
 PRT
 ‘Why didn’t you go to the store?’
- (150) 起来，起来！ (LZHL_5_3042)
Qǐ-lai, qǐ-lai!
 ascend-hither ascend-hither
 ‘Get up (towards the deictic center), get up (towards the deictic center)!’



Verbs expressing Manner

- (151) 这个掉下来了。 (LZHL_2_3537)

Zhè gè diào-xia-lai le.
this CL fall-down-hither CRS

'This (the decoration from the ceiling) fell down (towards the deictic center).'

- (152) 一大群马跑过来。 (LZHL_4_2913)

Yí dà qún mǎ pǎo-guo-lai.
one large group horse run-over-hither

'A large group of horses ran over (towards the deictic center).'

- (153) 我怕万一搬走了，...。 (LZHL_5_1811)

Wǒ pà wànyī bān-zou le, ...
1SG be.afraid.of in.case move-away CRS

'I'm afraid that if I moved away, ...'

- (154) [...] 还从那条道上往回走。 (LZHL_8_3039)

[...] hái cóng nèi tiáo dào=shang wǎng huí zǒu.
still from that CL road=upside towards backwards walk

'[...], (and) still walk back from that road.'

- (155) 我妈爬长城去了。 (LZHL_5_3517)

Wǒ mā pá chángchéng=qu le.
1SG mother climb Great.Wall=GO&DO CRS

'My mom went to climb the Great Wall.'

- (156) 我蹭下楼去。 (LZHL_3_0911)

Wǒ cèng-xia-lóu-qu.
1SG drag.along-down-stairs-thither

'I drag along downstairs (away from the deictic center).'

- (157) 转过去! (LZHL_4_3912)

Zhuàn-guo-qu!
turn-over-thither

'Turn over (away from the deictic center)!'

- (158) 怕你想不开**钻**车轱辘底下去。 (LZHL_2_0157)
Pà nǐ xiǎngbukāi zuān chē gūlu
 be.afraid.of 2SG take.things.too.hard **sneak** car wheel
dǐxia-thither
 beneath-thither
 '(Your mom) is afraid that you take things too hard and sneak beneath the wheel of the car.'

Verbs expressing Cause

- (159) 都**拿**去吧！ (LZHL_7_3805)
Dōu ná-qu ba!
 all **take**-thither SUG
 'Take all of them (away from the deictic center)!'

(Context: Xiao Tong said to her master: "Take all the cigarettes!")
- (160) 一会儿给你们**送**过去。 s(LZHL_7_1225)
Yihuìr gěi nǐmen sòng-guo-qu.
 soon to 2PL **deliver**-over-thither
 '(I) will send (the milk) to you in a while (away from the deictic center).'
- (161) 大民，先把梯子**搬**出去！ (LZHL_1_1721)
Dàmin, xiān bǎ tīzi bān-chu-qu!
 Damin first OM ladder **displace**-out-thither
 'Damin, move the ladder out first (away from the deictic center).'
- (162) 云芳，快**接**过去！ (LZHL_8_2359)
Yúnfāng, kuài jiē-guo-qu!
 Yunfang quickly **receive**-over-thither
 'Yunfang, take it over (away from the deictic center)!'
- (163) 云芳，快把孩子**抱**出来！ (LZHL_9_2918)
Yúnfāng, kuài bǎ háizi bào-chu-lai!
 Yunfang quickly OM child **hold.in.the.arms**-out-hither
 'Yunfang, take the child out quickly (towards the deictic center)!'
- (164) 他们要把我**调**到喷漆工段去。 (LZHL_9_0029)
Tāmen yào bǎ wǒ diào-dao-pēnqī-gōngduàn-qu.
 3PL be.about.to OM 1SG **transfer**-to-spray.paint-section-thither
 'They are going to transfer me to the painting section.'



- (165) 你给大军弄碗茶去！ (LZHL_2_3835)

Nǐ gěi Dàjūn nòng wǎn chá=qu!
 2SG for Dajun get CL tea=GO&DO
 'Go and get a cup of tea for Dajun!'

- (166) 把床拉回来就行了。 (LZHL_4_2049)

Bǎ chuáng lā-hui-lai jiù xíng le.
 OM bed convey.by.vehicles-back-hither just be.all.right CRS
 'Just take the bed back (towards the deictic center).'

- (167) 我背你下去。 (LZHL_3_0916)

Wǒ bēi-nǐ-xia-qu.
 1SG carry.on.the.back-down-thither
 'I carry you down (away from the deictic center).'

- (168) 您把我这梯子从脚底下给我撤下去。 (LZHL_1_1620)

Nín bǎ wǒ zhè tīzi cóng jiǎodǐ=xia
 2PL.HON OM 1SG this ladder from sole.of.the.foot=downside
 gěi wǒ chè-xia-qu.
 to 1SG remove-off-thither
 'Take this ladder from the downside of my feet (away from the deictic center).'

- (169) 药我还是下班再带回去。 (LZHL_5_0209)

Yào wǒ hái shì xiàbān zài dài-hui-qu.
 medicine 1SG had.better get.off.work then bring-back-thither
 'The medicine, I'd better take (it) back after get off work.'

- (170) 要是 有办法，我把我们家冰箱也吊起来。 (LZHL_2_4341)

Yàoshi yǒu bànfǎ, wǒ bǎ wǒmen jiā bīngxiāng yě
 if have solution 1SG OM 1PL home refrigerator also
 diào-qi-lai.
 hang-up-hither
 'If there is a solution, I will also hang our refrigerator up (towards the deictic center).'

- (171) 把那两袋儿水泥扛过来！ (LZHL_5_3723)

Bǎ nèi liǎng dàir shuǐní káng-guo-lai!
 OM that two CL cement carry.on.the.shoulder-over-hither
 'Carry those two bags of cement over here (towards the deictic center)!'

- (172) 妈，您快把那炉子给我**抬**起来！ (LZHL_7_1454)
Mā, nín kuài bǎ nèi lúzi gěi wǒ tái-qi-lai!
 mother 2PL.HON quickly OM that stove BEN 1SG **lift.up**-up-hither
 ‘Mom, lift that stove up (towards the deictic center)!’
- (173) 帮我把它**抽**出来！ (LZHL_3_0307)
Bāng wǒ bǎ tā chōu-chu-lai!
 help 1SG OM it **draw**-out-hither
 ‘Help me pull (it) out (towards the deictic center)!’
- (174) 统共就仨猪蹄子，还让猫**叼**去一个。 (LZHL_7_1440)
Tōnggòng jiù sā zhūtizi, hái ràng māo
 altogether as.many.as three pig’s.trotter ADV¹⁵⁷ let cat
diāo-qu yí gè.
hold.in.the.mouth-thither one CL
 ‘There are three pig’s trotters altogether, and one was taken by the cat
 (away from the deictic center).’
- (175) -酸菜汤呢？-给你**端**去了。 (LZHL_9_3142)
-Suāncài tāng ne?
 pickled.Chinese.cabbage soup PRT
-Gěi nǐ duān-qu le.
 for 2SG **hold.sth.level.with.both.hands**-GO&DO CRS
 -‘Where is the pickled Chinese cabbage soup?’s
 -‘(Someone) went and brought (it) for you.’
- (176) 您就拿擀面杖把他给**轰**出去。 (LZHL_2_2419)
Nín jiù ná gǎnmiànzhàng bǎ tā gěi hōng-chu-qu.
 2SG.HON just by.means.ofrolling.pin OM 3SG BEN **drive.off**-out-thither
 ‘Just drive him out with a rolling pin (away from the deictic center).’
- (177) 给你**寄**美元来了，是不是？ (LZHL_1_2045)
Gěi nǐ jì měiyuán-lai le, shì bu shì?
 to 2SG **send** dollar-hither CRS be NEG.IRR be
 ‘(He) sent dollars to you (towards the deictic center), isn’t it?’
- (178) 大伙儿把杯**举**起来。 (LZHL_4_3622)
Dàhuǒr bǎ bēi jǔ-qi-lai.
 all.of.us OM glass **raise**-up-hither
 ‘Everyone raise your glasses (towards the deictic center).’

¹⁵⁷ Used for emphasis or to show sarcasm.



(179) 你答应**领**回来的人呢? (LZHL_1_0827)

Nǐ dāying lǐng-hui-lai de rén ne?
2SG promise **lead-back-hither** GEN person PRT¹⁵⁸

'Where is the person that you promised to bring back (towards the deictic center)?'

(180) 咱把俩双人床给它**摞**起来。 (LZHL_4_3150)

Zán liǎ bǎ shuāngrénchuáng gěi tā luò-qi-lai.
1PL.INCL two OM double.bed PREP it **pile.up-up-hither**

'Let us pile up the double bed (towards the deictic center).'

(181) 到期了**取**出来就**还**给你。 (LZHL_)

Dàoqī le qǔ-chu-lai jiù huán-gěi nǐ.
become.due PFV **draw-out-hither** then **give.back-to** 2SG

'(We) will get money out (towards the deictic center) and then pay back (the money) when it became due.'

(182) 到厕所你给它**扔**到茅坑里。 (LZHL_7_0349)

Dào cèsuǒ nǐ gěi tā rēng-dao máokēng=li.
arrive toilet 2SG BEN it **throw-to** cesspit=inside

'You throw (it) into the cesspit when (you) arrived at the toilet.'

(183) 洗八遍也得先把沙子**挑**出来。 (LZHL_3_1159)

Xǐ bā biàn yě děi xiān bǎ shāzi tiāo-chu-lai.
wash eight one.time also must first OM sand **pick-out-hither**

'(Even you have) washed eight times, (you) must first pick out the sand (towards the deictic center).'

(184) 妈, 您先**坐**下! (LZHL_6_3753)

Mā, nín xiān zuò-xia!
mum 2SG.HON first **sit-down**

'Mum, sit down first!'

(185) 你妈把琴给你**买**回来了。 (LZHL_10_3221)

Nǐ mā bǎ qín gěi nǐ mǎi-hui-lai le.
2SG mum OM piano for 2SG **buy-back-hither** CRS

'Your mum bought the piano for you (towards the deictic center).'

¹⁵⁸ Marker of a special, alternative or rhetorical question.



- (186) 让他先躺下！ (LZHL_7_1236)
Ràng tā xiān tǎng-xia!
 let 3SG first lie-down
 ‘Let him lie down first!’
- (187) 大头的钱还回来了。 (LZHL_10_3043)
Dàtóu de qián huán-hui-lai le.
 Datou GEN money give.back-back-hither CRS
 ‘Datou gave the money back (towards the deictic center).’
- (188) 你上小山子他们家把那个瓦刀借过来！ (LZHL_5_3729)
Nǐ shàng xiǎo Shānzi tāmen jiā bǎ nèi gè wǎdāo jiè-guo-lai!
 2SG move.to young Shanzi 3PL house OM that CL
 cleaver borrow-over-hither
 ‘Go to Xiao Shanzi’s house and borrow the cleaver (towards the deictic center)!’
- (189) 好不容易把你盼回来了。 (LZHL_9_3610)
Hǎobùróngyì bǎ nǐ pàn-hui-lai le.
 difficult OM 2SG look.forward.to-back-hither CRS
 ‘It’s hard to get you back (towards the deictic center).’
- (190) 我老琢磨着能不能住进去。 (LZHL2_2641)
Wǒ lǎo zuómo-zhe néng-bu-néng zhù-jìn-qu.
 1SG often thing.over-DUR can-NEG-can live-into-thither
 ‘I always wonder if I can live in it or not (away from the deictic center).’

REFERENCES

- Aihara, M. 相原真莉子. (2010). 失去位移义“来”的核心功能 Shīqù wèiyí yì “lái” de héxīn gōngnéng [Lái that loses its meaning of motion]. *世界汉语教学 Shìjiè Hànyǔ Jiàoxué [Chinese Teaching in the World]*, 24(1), 37-45.
- Alonso de la Fuente, J. A., & Jacques, G. (2018). Associated motion in Manchu in typological perspective. *Language and Linguistics*, 19(4), 501-524.
- Ameka, F. K. (1995). The linguistic construction of space in Ewe. *Cognitive Linguistics*, 6(2/3), 139-181.
- Ameka, F. K., & Essegbey, J. (2013). Serialising languages: Satellite-framed, verb-framed or neither. *Ghana Journal of Linguistics*, 2(1), 19-38.
- Anderson, M. M. (2015). Notions of “Chinese”. In R. Sybesma (Éd.), *Encyclopedia of Chinese Language and Linguistics*. Brill.
- Anderson, S. R., & Keenan, E. L. (1985). Deixis. In T. Shopen (Éd.), *Language Typology and Syntactic Description Vol. 3: Grammatical categories and the lexicon* (p. 259-308). Cambridge University Press.
- Antonopoulou, E., & Nikiforidou, K. (2002). Deictic motion and the adoption of perspective in Greek. *Pragmatics*, 12(3), 273-295.
- Arslangul, A. (2007). *Les relations spatiales dynamiques en chinois langue étrangère: L'expression des déplacements en chinois* [PhD dissertation]. Institut National des Langues et Civilisations Orientales.

- Arslangul, A. (2019). Introduction d'un nouveau protagoniste dans le récit en français et en chinois: Interaction des structures syntaxique et informationnelle. *Discours*, 25. <https://journals.openedition.org/discours/10191>
- Arslangul, A. (forthcoming). *Ancrage spatial d'un nouveau protagoniste dans le récit en français et en chinois*.
- Aske, J. (1989). Path predicates in English and Spanish: A closer look. In K. Hall, M. Meacham, & R. Shapiro (Éd.), *Proceedings of the Fifteenth Annual Meeting of the Berkeley Linguistics Society* (p. 1-14). Berkeley Linguistics Society.
- Aurnague, M. (2004). *Les structures de l'espace linguistique: Regards croisés sur quelques constructions spatiales du basque et du français*. Peeters.
- Aurnague, M. (2022). Implicit landmarks and opposite polarities in French motion predicates. In L. Sarda & B. Fagard (Éd.), *Neglected Aspects of Motion-Event Description: Deixis, asymmetries, constructions* (p. 125-148). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Aurnague, M., Vieu, L., & Borillo, A. (1997). Représentation formelle des concepts spatiaux dans la langue. In M. Denis (Éd.), *Langage et cognition spatiale* (p. 69-102). Masson.
- Baker, M. C. (1988). *Incorporation: A Theory of Grammatical Function Changing*. The University of Chicago Press.
- Bao, Z. (2015). Tone. In *Encyclopedia of Chinese Language and Linguistics*. Brill.
- Bates, E., Camaioni, L., & Volterra, V. (1975). The acquisition of performatives prior to speech. *Merrill-Palmer Quarterly of Behavior and Development*, 21(3), 205-226.
- Beavers, J., Levin, B., & Tham, S. W. (2010). The typology of motion expressions revisited. *Journal of Linguistics*, 46(2), 331-377. (doi: 10.1017/S0022226709990272)
- Belkadi, A. (2015). Associated motion with deictic directionals: A comparative overview. *SOAS Working Papers in Linguistics*, 17, 49-76.

- Belkadi, A. (2016). Associated Motion Constructions in African Languages. *Africana Linguistica* 22, 43-70.
- Belkadi, A. (2014). Verb meaning and deictic paths in Taqbaylit Berber. In K. Chatsiou & K. Rowan (Éd.), *Language Documentation and Linguistic Theory 4*. London: SOAS University of London.
- Berman, R. A., & Slobin, D. I. (Éd.). (1994). *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Lawrence Erlbaum Associates.
- Berthele, R. (2004). The typology of motion and posture verbs: A variationist account. In B. Kortmann (Éd.), *Dialectology meets Typology. Dialect Grammar from a Cross-Linguistic Perspective* (p. 93-126). Berlin/New York: Mouton de Gruyter.
- Boeg Thomsen, D., & Nielsen, M. (2020). *Associated Motion Video Stimuli*. Copenhagen: University of Copenhagen. <https://osf.io/4bpxd/>
- Bohnemeyer, J., Enfield, N. J., Essegbey, J., Ibarretxe-Antuñano, I., Kita, S., Lüpke, F., & Ameka, F. K. (2007). Principles of event segmentation in language: The case of motion events. *Language*, 83(3), 495-532. (doi: 10.1353/lan.2007.0116)
- Boons, J.-P. (1987). La notion sémantique de déplacement dans une classification syntaxique des verbes locatifs. *Langue Française*, 76, 5-40.
- Borillo, A. (1998). *L'espace et son expression en français*. Ophrys.
- Boro, K. (2017). *A Grammar of Hakhun Tangsa* [PhD dissertation]. Eugene: University of Oregon doctoral dissertation.
- Bottéro, F. (2015). Chinese writing. In R. Sybesma (Éd.), *Encyclopedia of Chinese Language and Linguistics*. Brill.
- Bourdin, P. (1992). Constance et inconstances de la déicticité: La resémantisation des marqueurs andatifs et ventifs. In M.-A. Morel & L. Danon-Boileau (Éd.), *La deixis: Colloque en Sorbonne (8-9 juin 1990)* (p. 287-307). Paris: Presses universitaires de France.
- Bourdin, P. (1997). On Goal-bias across languages: Modal, configurational and orientational parameters. *Proceedings of*

- LP'96: Typology, prototypes, item orderings and universals (Proceedings of the conference held in Prague, Aug. 20-22, 1996)*, 185-218.
- Bowerman, M., Gullberg, M., Majid, A., & Narasimhan, B. (2004). Put project: The cross-linguistic encoding of placement events. In A. Majid (Éd.), *Field Manual Volume 9* (p. 10-24). Nijmegen: Max Planck Institute for Psycholinguistics.
- Bühler, K. (1934). *Sprachtheorie: Die Darstellungsfunktion der Sprache*. Jena: Gustav Fischer.
- Campbell, L., Kaufman, T., & Smith-Stark, T. C. (1986). Meso-America as a Linguistic Area. *Language*, 62(3), 530-570. (doi: 10.2307/415477)
- Chafe, W. (1975). *The Pear Stories*. University of California at Berkeley. <http://chafe.faculty.linguistics.ucsb.edu/pearfilm.htm>
- Chao, Y. R. (1968). *A Grammar of Spoken Chinese*. Berkeley: University of California Press.
- Chappell, H., & Peyraube, A. (2008). Chinese Localizers: Diachrony and some typological considerations. In D. Xu (Éd.), *Space in Languages of China* (p. 15-37). Springer.
- Chen, J. (2010). Putting and Taking Events in Mandarin Chinese. *Linguistic Society of America*, 32-45. (doi: 10.3765/bls.v36i1.3901)
- Chen, J. (2012). "She from bookshelf take-descend-come the box": Encoding and categorizing placement events in Mandarin. In A. Kopecka & B. Narasimhan (Éd.), *Events of "putting" and "taking": A crosslinguistic perspective [Typological Studies in Language, 100]* (p. 37-54). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Chen, L., & Guo, J. (2009). Motion events in Chinese novels: Evidence for an equipollently-framed language. *Journal of Pragmatics*, 41, 1749-1766. (doi: 10.1016/j.pragma.2008.10.015)
- Chirkova, K., & Lamarre, C. (2005). The paradox of the construction [V zai NPloc] and its meanings in the Beijing dialect of Mandarin. *Cahiers de linguistique - Asie Orientale*, 34(2), 169-220. (doi: 10.3406/clao.2005.1735)

- Choi, S., & Bowerman, M. (1991). Learning to express motion events in English and Korean: The influence of language-specific lexicalization patterns. *Cognition*, 41, 83-121.
- Chu, C. (2004). *Event conceptualization and grammatical realization: The case of motion in Mandarin Chinese* [PhD dissertation]. University of Hawai'i.
- Chū, Z. 储泽祥. (2006). 汉语处所词的词类地位及其类型学意义 Hànyǔ chùsuǒ cí de cílèi dìwèi jí qí lèixíng xué yìyì [The word-class status of words of place in Chinese and its typological significance]. *中国语文 Zhōngguó Yǔwén [Studies of the Chinese Language]*, 3, 216-287.
- Clark, E. V., & Garnica, O. K. (1974). Is He Coming or Going? On the Acquisition of Deictic Verbs. *Journal of Verbal Learning and Verbal Behavior*, 13(5), 559-572.
- Cleary-Kemp, J. (2015). *Serial verb constructions revisited: A case study from Koro* [PhD dissertation]. Berkeley: University of California doctoral dissertation.
- Craig, C. G. (1993). Jacaltec Directionals: Their Meaning and Their Function. *Languages of the Word*, 7, 23-36.
- Croft, W. (2003). *Typology and universals* (2nd edition). Cambridge University Press.
- Croft, W., Barðdal, J., Hollmann, W., Sotirova, V., & Taoka, C. (2010). Revising Talmy's typological classification of complex event constructions. In H. C. Boas (Éd.), *Contrastive Studies in Construction Grammar* (p. 201-236). John Benjamins Publishing Company.
- De Pasquale, N. (2017). *Motion event encoding in Ancient Greek—A typological corpus-based study of Path and Manner expression* [Doctoral Dissertation]. Università degli Studi di Salerno.
- De Pasquale, N., & Guillaume, A. (2021, June 15). *Associated motion in Western Sicilian: A preliminary account*. Atelier Typologie sémantique, Lyon, France.
- Di Meola, C. (1994). *Kommen und gehen: Eine kognitiv-linguistische Untersuchung der Polysemie deiktischer Bewegungsverben*. Niemeyer Verlag.

- Diessel, H. (1999). *Demonstratives: Form, function, and grammaticalization*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Dirven, R., Verspoor, M. H., Dirven, R., & Verspoor, M. H. (Éd.). (2004). *Cognitive Exploration of Language and Linguistics*. John Benjamins Publishing Company.
- Dryer, M. (2002). A comparison of preverbs in Kutenai and Algonquian. In D. Pentland (Éd.), *Proceedings of the 30th Algonquian Conference* (p. 63-94). Winnipeg: University of Manitoba.
- Dryer, M. (2007). Kutenai, Algonquian, and the Pacific Northwest from an areal perspective. In H. C. Walfart (Éd.), *Proceedings of the 38th Algonquian Conference* (p. 155-206). Winnipeg: University of Manitoba.
- Dryer, M. S. (2013). *A grammatical description of Kara-Lemakot (Studies in the Languages of Island Melanesia 2)*. Canberra: Asia-Pacific Linguistics Open Access Monographs.
- Ernst, T. (1988). Chinese postpositions? - Again. *Journal of Chinese Linguistics*, 16(2), 219-244.
- Fàn, J. 范继淹. (1963). 动词和趋向性后置成分的结构分析 *Dòngcí hé qūxiàng xìng hòuzhì chéngfèn de jiégòu fēnxī* [Structural analysis of verbs and postpositional directional components]. *中国语文 Zhōngguó Yǔwén [Studies of the Chinese Language]*, 2, 136-160, 175.
- Fàn, J. 范继淹. (1982). 论介词短语“在+处所” *Lùn jiècí duǎnyǔ “zài + chùsuǒ”* [On the prepositional phrase “zai” + location]. *语言研究 Yǔyán Yánjiū [Studies in Language and Linguistics]*, 1, 71-86.
- Fàn, L. 范立珂. (2013). 位移事件的表达方式研究—“运动”与“路径”、“句法核心”与“意义核心”的互动与合作 *Wèiyí shìjiàn de biǎodá fāngshì yánjiū—“Yùndòng” yǔ “lùjìng”, “jùfǎ héxīn” yǔ “yìyì héxīn” de hùdòng yǔ hézuò* [A Cognitive Study on the Expression of Motion Events—The interaction and cooperation of “motion” as “syntactic core” and “path” as “semantic core”] [PhD dissertation]. 上海外国语大学

- Shànghǎi Wàiguóyǔ Dàxué [Shanghai International Studies University].
- Fāng, J. 方经民. (2004). 现代汉语方位成分的分化和语法化 Xiàndài hànyǔ fāngwèi chéngfèn de fēnhuà hé yǔfǎ huà [Differentiation and grammaticalization of locative terms in modern Chinese]. 世界汉语教学 *Shìjiè Hànyǔ Jiàoxué* [Chinese Teaching in the World], 2, 5-15.
- Fillmore, C. J. (1966). Deictic Categories in the Semantics of "come". *Foundations of Language*, 2(3), 219-227.
- Fillmore, C. J. (1971). Toward a theory of deixis. *University of Hawaii Working Papers in Linguistics*, 3(4), 219-242.
- Fillmore, C. J. (1972). How to know whether you're coming or going. In K. Hyldgaard-Jensen (Éd.), *Linguistik 1971, Referate des 6. Linguistischen Kolloquiums (11-14 August 1971, Kopenhagen)* (p. 369-379). Frankfurt: Athenäum.
- Fillmore, C. J. (1975). *Santa Cruz Lectures on Deixis 1971*. Bloomington: Indiana University Linguistics Club.
- Fillmore, C. J. (1983). How to Know Whether You're Coming or Going. In G. Rauh (Éd.), *Essays on Deixis* (p. 219-227). Günter Narr Verlag.
- Foley, W. A. (1986). *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.
- Fortis, J.-M. (2008). *Compte rendu de Davida Ricca, I Verbi Deittici di Movimento in Europa: Una Ricerca Interlinguistica. Firenze, La Nuova Italia Editrice, 1993* [Manuscript].
- Fortis, J.-M., & Fagard, B. (2010). *Space in language*. Leipzig Summer School on Linguistic Typology, Leipzig.
- Fortis, J.-M., Grinevald, C., Kopecka, A., & Vittrant, A. (2011). L'expression de la trajectoire: Perspectives typologiques. *Faits de Langues*, 38(2), 33-41. (doi: 10.1163/19589514-038-02-900000004)
- Fortis, J.-M., & Vittrant, A. (2011). L'organisation syntaxique de l'expression de la trajectoire: Vers une typologie de la construction. *Faits de Langues*, 38, 71-98. (doi: 10.1163/19589514-038-02-900000006)

- Fortis, J.-M., & Vittrant, A. (2016). Path-expressing constructions: Toward a typology. *STUF - Language Typology and Universals*, 69(3), 341-374. (doi: 10.1515/stuf-2016-0015)
- François, A. (2003). Of men, hills and winds: Space directionals in Mwothlap. *Oceanic Linguistics*, 42(2), 407-437.
- Fricke, E. (2003). Origo, pointing, and conceptualization—What gestures reveal about the nature of the origo in face-to-face interaction. In F. Lenz (Éd.), *Deictic Conceptualisation of Space, Time, and Person* (p. 69-93). John Benjamins Publishing Company.
- Gān, L., & Gān, L. 甘露、甘霖. (2009). 浅析由“来”、“去”构成的连动句 Qiǎnxī yóu “lái”, “qù” gòuchéng de liándòng jù [A brief analysis of the serial verb construction with “Lai” and “Qu”]. 中州大学学报 Zhōngzhōu Dàxué Xuébào [Journal of Zhongzhou University], 26(4).
- Gandour, J. (1978). On the Deictic Use of Verbs of Motion Come and Go in Thai. *Anthropological Linguistics*, 20(9), 381-394.
- Gāo, Y. 高艳. (2007). 复合趋向补语不对称现象研究 Fùhé qūxiàng bǔyǔ bú duìchèn xiànxiàng yánjiū [A study of the asymmetrical phenomenon of the directional complements] [Master's thesis]. 首都师范大学 Shǒudū Shīfàn Dàxué [Capital Normal University].
- Gathercole, V. C. (1977). A Study of the Comings and Goings of the Speakers of Four Languages: Spanish, Japanese, English, and Turkish. *Kansas Working Papers in Linguistics*, 2, 61-94. (doi: 10.17161/KWPL.1808.713)
- Gathercole, V. C. (1978). Towards a Universal for Deictic Verbs of Motion. *Kansas Working Papers in Linguistics*, 3, 72-88. (doi: 10.17161/KWPL.1808.726)
- Goddard, C. (1997). The Semantics of Coming and Going. *Pragmatics*, 7(2), 147-162. (doi: 10.1075/prag.7.2.02god)
- Goldberg, A. E. (1995). *Construction: A Construction Grammar Approach to Argument Structure*. Chicago: Chicago University Press.

- Goldberg, A., & Jackendoff, R. (2004). The English Resultatives as a Family of Constructions. *Language*, 80(3), 532-568.
- Greenberg, J. H. (1963). Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of Language* (p. 73-113). London: MIT Press.
- Grinevald, C. (2011). On constructing a working typology of the expression of path. *Faits de Langues*, 38(2), 43-70. (doi: 10.1163/19589514-038-02-900000005)
- Groussier, M.-L. (1978a). Sur les verbes come et go en anglais contemporain. 1ère partie. *TA Informations*, 19(1), 22-41.
- Groussier, M.-L. (1978b). Sur les verbes come et go en anglais contemporain. 2ème partie. *TA Informations*, 19(2), 33-56.
- Gruber, J. (1965). *Studies in lexical relations* [PhD dissertation]. Massachusetts institute of technology.
- Guillaume, A. (2000). Directionals versus associated motions in Cavineña. In A. K. Melby & A. L. Lommel (Éd.), *LACUS Forum XXVI: The lexicon* (p. 395-401). The Linguistic Association of Canada and the United States.
- Guillaume, A. (2006). La catégorie du « mouvement associé » en cavineña: Apport à une typologie de l'encodage du mouvement et de la trajectoire. *Bulletin de la Société de Linguistique de Paris*, 101(1), 415-436.
- Guillaume, A. (2008). *A Grammar of Cavineña (Mouton Grammar Library 44)*. De Gruyter Mouton.
- Guillaume, A. (2009). Les suffixes verbaux de mouvement associé en cavineña. *Faits de Langues: Les Cahiers*, 1, 181-204. (doi: 10.1163/19589514-034-02-900000008)
- Guillaume, A. (2016). Associated motion in South America: Typological and areal perspectives. *Linguistic Typology*, 20(1), 81-177.
- Guillaume, A., & Koch, H. (Éd.). (2021a). *Associated Motion*. De Gruyter Mouton.
- Guillaume, A., & Koch, H. (2021b). Introduction: Associated motion as a grammatical category in linguistic typology. In A.

- Guillaume & H. Koch (Éd.), *Associated Motion* (p. 3-30). De Gruyter Mouton. (doi: 10.1515/9783110692099-001)
- Guō, C. 郭春贵. (2003). 复合趋向补语与非处所宾语的位置问题补议 Fùhé qūxiàng bǔyǔ yǔ fēi chǔsuǒ bīnyǔ de wèizhì wèntí bǔyì [More on the position of the compound directional complement and its non-locative object]. *世界汉语教学 Shìjiè Hànyǔ Jiàoxué [Chinese Teaching in the World]*, 3, 37-45. (doi: 10.13724/j.cnki.ctiw.2003.03.006)
- Guō, C. 郭春贵. (1987). 试论连谓结构“来/去+VP”中的虚化动词“来/去” Shìlùn liánwèi jiégòu “lái/qù +VP” zhōng de xūhuà dòngcí “lái/qù” [On the grammaticalization of the verbs “lái/qù” in the serial construction “lái/qù +VP”]. 第二届国际汉语教学讨论会论文选 *Dì-èr jiè guójì Hànyǔ jiàoxué tāolùn huì lùnwén xuǎn [Collection of papers from the 2nd edition of the International Symposium on Chinese Language Teaching]*, 242-254.
- Guo, Y., & Shen, Y. (2015). Imperatives. In R. Sybesma (Éd.), *Encyclopedia of Chinese Language and Linguistics Online*. Brill. <https://brill.com/view/db/ecl0>
- Hagège, C. (1975). *Le problème linguistique des prépositions et la solution chinoise: Avec un essai de typologie à travers plusieurs groupes de langues*. Société de linguistique de Paris.
- Hagège, C. (2010). *Adpositions*. Oxford: Oxford University Press.
- Halliday, M. A. K., & McDonald, E. (2004). Metafunctional profile of the grammar of Chinese. In A. Caffarel, J. R. Martin, & C. M. I. M. Matthiessen (Éd.), *Language Typology: A functional perspective* (p. 305-396). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Hamon, S., & Leeman, D. (2007). Les verbes de cause à partir de l'exemple de causer. *Langue Française*, 1(153), 74-91. (doi: 10.3917/lf.153.0074)
- Hanks, W. F. (2005). Explorations in the Deictic Field. *Current Anthropology*, 46(2), 191-220. (doi: 10.1086/427120)
- Haviland, J. B. (1991). *The grammaticalization of motion (and time) in Tzotzil*. (Working paper N° 2, Cognitive anthropological

- research group), Nijmegen: Max Planck Institute For Psycholinguistics.
- Haviland, J. B. (1993). The syntax of Tzotzil auxiliaries and directionals: The grammaticalization of 'motion'. *Proceedings of the nineteenth annual meeting of the Berkeley Linguistics Society*. Berkeley: University of California Press.
- Heath, J. (1980). Nunggubuyu deixis, anaphora and culture. *Chicago Linguistic Society: Parasession on pronouns and anaphora*, 151-165.
- Hijazo-Gascón, A. (2017). Motion event contrasts in Romance languages: Deixis in Spanish as a second language. In I. Ibarretxe-Antuñano (Éd.), *Motion and Space across Languages: Theory and applications* (p. 301-328). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Hóu, J. 侯精一, Xú, S. 徐枢, Zhāng, G. 张光正, & Càì, W. 蔡文学. (2001). 中国语补语例释 *Zhōngguó yǔ bǔyǔ lìshì [Examples of Chinese Complements]*. 北京: 商务印书馆 Běijīng: Shāngwù Yīnshūguǎn [Beijing: Commercial Press].
- Hú, X. 胡晓慧. (2010). 动词后“上”与“下”、“来”与“去”的语义演变及其不对称性 *Dòngcí hòu "shàng" yǔ "xià", "lái" yǔ "qù" de yǔyì yǎnbiàn jí qí bù duìchèn xìng [The semantic evolution and asymmetries of tendency verbs "shang", "xia", "lai" and "qu" in Chinese language]* [PhD dissertation]. 浙江大学 Zhèjiāng Dàxué [Zhejiang University].
- Huang, C.-R., & Shi, D. (2016). Preliminaries. In C.-R. Huang & D. Shi (Éd.), *A Reference Grammar of Chinese* (p. 1-13). Cambridge: Cambridge University Press.
- Huang, C.-T. J. (1987). Existential sentences in Chinese and (in) definiteness. In E. J. Reuland & A. G. B. Ter Meulen (Éd.), *The representation of (in) definiteness* (p. 226-253). MIT Press.
- Huang, Y. (2007). *Pragmatics*. Oxford: Oxford University Press.
- Huǒ, Y. 火玥人. (2008). 对外汉语简单趋向补语教学策略 *Duìwài Hànyǔ jiǎndān qūxiàng bǔyǔ jiàoxué cèlüè [Teaching Strategies for the Simple Complement of Direction]*. 华北电

- 力大学学报 *Huáběi Diànlì Dàxué Xuébào [Journal of North China Electric Power University]*, 3, 137-140.
- Iacobini, C., & Masini, F. (2006). The emergence of verb-particle constructions in Italian: Locative and actional meanings. *Morphology*, 16(2), 155-188. (doi: 10.1007/s11525-006-9101-7)
- Ikeda, S. 池田晋. (2005). “来”の代動詞的用法とダイクシス. 中国語学, 144-163.
- Ikegami, Y. (1979). 'GOAL' OVER 'SOURCE': A Case of Dissymmetry in Linguistic Orientation. *Angol Filológiai Tanulmányok / Hungarian Studies in English*, 12, 139-157.
- Ikegami, Y. (1987). 'Source' vs. 'Goal': A Case of Linguistic Dissymmetry. In R. Dirven & G. Radden (Éd.), *Concepts of Case* (p. 122-146). Tübingen: Gunter Narr Verlag.
- Imai, S. (2003). *Spatial Deixis* [PhD dissertation]. State University of New York at Buffalo.
- Imbert, C., Grinevald, C., & Sörös, A. (2011). Pour une catégorie de “satellite” de Trajectoire dans une approche fonctionnelle-typologique. *Faits de Langues*, 38(2), 99-116. (doi: 10.1163/19589514-038-02-900000007)
- Ishibashi, M. (2012). The expression of 'putting' and 'taking' events in Japanese—The asymmetry of Source and Goal revisited. In A. Kopecka & B. Narasimhan (Éd.), *Events of Putting and Taking: A crosslinguistic perspective* (p. 253-272). John Benjamins Publishing Company. <https://benjamins.com/catalog/tsl.100.17ish>
- Ishibashi, M. (2015). A Field Method to Describe Spontaneous Motion Events in Japanese. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society*, 41, 197-218.
- Ishibashi, M. (2010). The (a)symmetry of source and goal in motion events in Japanese: Evidence from narrative data. In G. Marotta, A. Lenci, L. Meini, & F. Rovai (Éd.), *Space in Language 2009: Proceedings of the Pisa International Conference* (p. 515-531). Pisa: Edizioni ETS.

- Ishibashi, M., Kopecka, A., & Vuillermet, M. (2006). *Trajectoire: Matériel visuel pour élicitation des données linguistiques*. Laboratoire Dynamique du Langage, CNRS / Université Lyon 2. Projet de Fédération de recherche en Typologie et Universaux Linguistiques. <http://tulquest.humanum.fr/fr/node/132>
- Jackendoff, R. (1983). *Semantics and Cognition*. Cambridge: MIT Press.
- Jackendoff, R. (1990). *Semantic Structures*. MIT Press.
- Jackendoff, R. (1991). Parts and boundaries. *Cognition*, 41, 9-45. (doi: 10.1016/0010-0277(91)90031-X)
- Jacques, G. (2013). Harmonization and disharmonization of affix ordering and basic word order. *Linguistic Typology*, 17(2), 187-215.
- Jarvella, R. J., & Klein, W. (Éd.). (1982). *Speech, place, and action: Studies in deixis and related topics*. New York: John Wiley & Sons.
- Ji, Y., Hendriks, H., & Hickmann, M. (2011a). Children's Expression of Voluntary Motion Events in English and Chinese. *Journal of Foreign Languages*, 34(4), 2-20.
- Ji, Y., Hendriks, H., & Hickmann, M. (2011b). How children express caused motion events in Chinese and English: Universal and language-specific influences. *Lingua*, 121, 1796-1819. (doi: 10.1016/j.lingua.2011.07.001)
- Ji, Y., Hendriks, H., & Hickmann, M. (2011c). The expression of caused motion events in Chinese and in English: Some typological issues. *Linguistics*, 49(5), 1041-1077. (doi: 10.1515/ling.2011.029)
- Jiǎ, Y. 贾钰. (1998). “来/去”作趋向补语时动词宾语的位置“Lái/qù” zuò qūxiàng bǔyǔ shí dòngcí bīnyǔ de wèizhì [The position of Objects and the directional complements “lai/qu”]. 世界汉语教学 *Shìjiè Hànyǔ Jiàoxué [Chinese Teaching in the World]*, 1, 40-45. (doi: 10.13724/j.cnki.ctiw.1998.01.004)
- Jungbluth, K., & Da Milano, F. (Éd.). (2015). *Manual of Deixis in Romance Languages*. Berlin/Boston: De Gruyter.

- Kahane, S., & Mel'čuk, I. (2006). Les sémantèmes de causation en français. *Linx*, 54, 247-292. (doi: 10.4000/linx.539)
- Kang, J. 康健. (2001). Perfective Aspect Particles or Telic Aktionsart Markers? —Studies of the Directional Verb Compounds [in Chinese: 是完成体的动态助词还是终结情状的标记? —对趋向复合动词的研究]. *Journal of Chinese Linguistics*, 29(2), 281-339.
- Kawachi, K. (2011). Meanings of the spatial deictic verb suffixes in Kupsapiny, the southern Nilotic language of the Sebei region of Uganda. In H. Osamu (Éd.), *Descriptive studies of Nilotic languages (Studies in Nilotic Linguistics 3)* (p. 65-107). Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.
- Kawachi, K. (2014). Patterns of expressing motion events in Kupsapiny. In O. Hieda (Éd.), *Recent advances in Nilotic linguistics* (p. 103-136). Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.
- Kießling, R., & Bruckhaus, S. (2017). Associated locomotion in Datooga (Southern Nilotic). In K. Shigeki (Éd.), *Proceedings of the 8th World Congress of African Linguistics (WOCAL), Kyoto 2015* (p. 243-258). Tokyo: Tokyo University of Foreign Studies.
- Koch, H. (1984). The category of "associated motion" in Kaytej. *Language in Central Australia* 1, 23-34.
- Koga, H., Koloskova, Y., Mizuno, M., & Aoki, Y. (2008). Expressions of spatial motion events in English, German, and Russian: With special reference to Japanese. In C. Lamarre, T. Morita, & T. Ohori (Éd.), *Typological Studies of the Linguistic Expression of Motion Events, Volume II: The Linguistic Expression of Autonomous Motion in Murakami Haruki's Norwegian Wood — A Contrastive study of Japanese, French, English, Russian, German and Chinese* (Vol. 2, p. 13-44). Tokyo: 21st Century COE Program Center for Evolutionary Cognitive Sciences at the University of Tokyo.

- Konnerth, L. (2014). *A grammar of Karbi* [PhD dissertation]. Eugene: University of Oregon doctoral dissertation.
- Konnerth, L. (2015). A new type of convergence at the deictic center: Second person and cislocative in Karbi (Tibeto-Burman). *Studies in Language*, 39(1), 24-45.
- Kopecka, A. (2004). *Étude typologique de l'expression de l'espace: Localisation et déplacement en français et en polonais* [PhD dissertation]. Université Lumière Lyon 2.
- Kopecka, A. (2006). The semantic structure of motion verbs in French: Typological perspectives. In M. Hickmann & S. Robert (Éd.), *Space in Languages: Linguistic Systems and Cognitive Categories* (p. 83-101). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Kopecka, A., & Ishibashi, M. (2011). L'(a-)symétrie dans l'expression de la Source et du But: Perspective translinguistique. *Faits de Langues*, 38(2), 131-149. (doi: 10.1163/19589514-038-02-900000009)
- Kopecka, A., & Vuillermet, M. (Éd.). (2021a). *Source-Goal (a)symmetries across languages* (Vol. 45). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Kopecka, A., & Vuillermet, M. (2021b). Source-Goal (a)symmetries across languages. *Studies in Language*, 45(1), 2-35.
- Lakusta, L., & Landau, B. (2005). Starting at the end: The importance of goals in spatial language. *Cognition*, 96(1), 1-33. (doi: 10.1016/j.cognition.2004.03.009)
- Lakusta, L., Wagner, L., O'Hearn, K., & Landau, B. (2007). Conceptual Foundations of Spatial Language: Evidence for a Goal Bias in Infants. *Language Learning and Development*, 3(3), 179-197. (doi: 10.1080/15475440701360168)
- Lamarre, C. (2007a). The Linguistic Encoding of Motion Events in Chinese: With Reference to Cross-dialectal Variation. In C. Lamarre & O. Toshio (Éd.), *Typological Studies of the Linguistic Expression of Motion Events, Vol. 1: Perspectives from East and*

- Southeast Asia* (p. 3-33). Tokyo: Center for Evolutionary Cognitive Sciences at the University of Tokyo.
- Lamarre, C. (2008a). The Linguistic Categorization of Deictic Direction in Chinese: With Reference to Japanese. In D. Xu (Éd.), *Space in Languages of China: Cross-linguistic, Synchronic and Diachronic Perspectives* (p. 69-97). Dordrecht: Springer.
- Lamarre, C. (2013). Le déplacement en chinois au cœur des débats typologiques. *Faits de langues: Sémantique des relations spatiales*, 42, 175-197.
- Lamarre, C. (2020). An Associated Motion Approach to Northern Mandarin MOTION-CUM-PURPOSE Patterns. In J. Z. Xing (Éd.), *A Typological Approach to Grammaticalization and Lexicalization. East meets West* (p. 131-163). De Gruyter Mouton.
- Lamarre, C., Vittrant, A., Kopecka, A., Voisin, S., Bon, N., Fagard, B., Grinevald, C., Moysse-Faurie, C., Risler, A., Song, J.-K., Tan, A., & Voirin, C. (2022). Deictic directionals revisited in the light of advances in typology. In L. Sarda & B. Fagard (Éd.), *Neglected Aspects of Motion-Event Descriptions. Deixis, asymmetries, constructions* (p. 69-94). John Benjamins Publishing Company.
- Lamarre, C. 柯理思. (2003a). 从河北冀州方言对现代汉语 [V 在+处所词] 格式的再探讨 Cóng Héběi Jìzhōu fāngyán duì Xiàndài Hànyǔ [V zài +chùsuǒ cí] géshì de zài tàntǎo (A new analysis of the modern Chinese [V zai L] construction based on the Jìzhōu dialect data). In Z. Dài (Éd.), 《汉语方言语法研究和探索》 “Hànyǔ fāngyán yǔfǎ yánjiū hé tànsuǒ” [*Studies and Investigations in Dialect Syntax*] (p. 144-154). Hēilóngjiāng Rénmín Chūbǎnshè.
- Lamarre, C. 柯理思. (2003b). 汉语空间位移事件的语言表达—兼论述趋式的几个问题 Hànyǔ kōngjiān wèiyí shìjiàn de yǔyán biǎodá—jiān lùnshù qǐ shì de jǐ gè wèntí [The expression of motion events in Chinese—On Chinese directional verbs]. 現

- 代中国語研究 *Xiàndài Zhōngguóyǔ Yánjiū* [Contemporary Research in Modern Chinese], 5, 1-18.
- Lamarre, C. 柯理思. (2003c). 状態变化、構文、そして言語干渉：中国語の【V＋在＋場所】構文のケース) Jootai henka, koobun, sosite gengo kanshoo—Chuugokugo no [V + zai + basho] koobun no keesu [Change of state, construction meaning and language interference: The case of Chinese [V zai L] construction]. *Tokyo: Koobun Shuppan*, 22, 144-172.
- Lamarre, C. 柯理思. (2007b). Syntactic implications of language levels: Constructions expressing spatial displacement in written and spoken Chinese [in Chinese, original title: 从趋向范畴的方言表述看“书面汉语中的不同层次”的判定]. *Bulletin of the Japanese Society of Chinese Linguistics*, 254, 51-73.
- Lamarre, C. 柯理思. (2008b). 北方话的“动词+趋向补语+处所名词”格式 Běifānghuà de “dòngcí + qūxiàng bǔyǔ + chùsuǒ míngcí” géshì [Directionals followed by locative NP in northern dialect]. In 乔全生 Qiáo (Éd.), 《晋方言研究》 *Jìn fāngyán Yánjiū* [Research on Jin dialects] (p. 215-222). 希望出版社 Xīwàng chūbǎnshè.
- Lamarre, C. 柯理思. (2009). 论北方方言中位移终点标记的语法化和句位义的作用 Lùn běifāng fāngyán zhōng wèiyí zhōngdiǎn biāoji de yǔfǎ huà hé jù wèi yì de zuòyòng [Expression of the Goal of displacement in Mandarin dialects: The role of dedicated Goal markers and the position of locative nouns in the sentence]. In F. 吴福祥 Wú & X. 崔希亮 Cuī (Éd.), 语法化与语法研究 (四) *Yǔfǎ huà yǔ yǔfǎ yánjiū (sì)* [Grammaticalization and Syntax Research] (p. 145-187). 商务印书馆 Shāngwù yìnshūguǎn [Commercial Press].
- Lambrecht, K. (2000). When subjects behave like objects: An analysis of the merging of S and O in sentence-focus constructions across languages. *Studies in Languages*, 24(3), 611-682. (doi: 10.1075/SL.24.3.06LAM)

- Landau, B., & Jackendoff, R. (1993). "What" and "where" in spatial language and spatial cognition. *Behavioral and Brain Sciences*, 16(2), 217-265. (doi: 10.1017/S0140525X00029733)
- Langacker, R. (1987). *Foundations of cognitive grammar. Vol 1: Theoretical Prerequisites*. Stanford University Press.
- Larsen, T. W. (1994). Deictic and Non-Deictic Directionals in Awakatek. *Funcion*, 15-16, 169-210.
- Lena, L. (2020). Presentational sentences: A study on the information structure of Path verbs in spoken discourse. In D. Chen & D. Bell (Éd.), *Explorations of Chinese Theoretical and Applied Linguistics* (p. 44-81). Cambridge Scholars Publishing.
- Lenz, F. (Éd.). (2003). *Deictic Conceptualisation of Space, Time, and Person*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Levin, B. (1993). *English verb classes and alternations, a preliminary investigation*. The University of Chicago Press.
- Levin, B., & Rappaport Hovav, M. (1995). The Problem of Locative Inversion. In *Unaccusativity at the syntax-lexical semantics interface* (p. 215-277). The MIT Press.
- Levinson, S. C. (1983). *Pragmatics*. Cambridge: Cambridge University Press.
- Levinson, S. C. (2004). Deixis. In L. R. Horn & G. Ward (Éd.), *The Handbook of Pragmatics* (p. 97-121). Blackwell Publishing.
- Lewandowski, W. (2007). *Toward a comparative analysis of coming and going verbs in Spanish,, German, and Polish* [Master's thesis]. Universitat Autònoma de Barcelona.
- Li, C. N., & Thompson, S. A. (1981). *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.
- Li, F. (1997). Cross-Linguistic Lexicalization Patterns: Diachronic Evidence from Verb-Complement Compounds in Chinese. *Sprachtypol. Univ. Forsch. (STUF), Berlin* 50(3), 229-252. (doi: 10.1524/stuf.1997.50.3.229)
- Lì, H. 栗会. (2008). “来/去”趋向义的对称与不对称 “Lái/qù” qūxiàng yì de duìchèn yǔ bú duìchèn [The symmetry and asymmetry phenomenon of “lai” and “qu”] [Master's thesis].

- 广西师范大学 Guǎngxī Shīfàn Dàxué [Guangxi Normal University].
- Lǐ, M. 李明. (2004). 趋向动词“来/去”的用法及其语法化 Qūxiàng dòngcí “lái/qù” de yòngfǎ jí qí yǔfǎ huà [The use of directional verbs “lái and qù” and their grammaticalization]. In 语言学论丛 Yǔyán xué lùncóng [Linguistics Series] (Vol. 29, p. 291-313). 北京: 商务印书馆 Běijīng: Shāngwù Yìnshūguǎn [Beijing: Commercial Press].
- Liáng, Y. 梁银峰. (2007). 汉语趋向动词的语法化 Hànyǔ qūxiàng dòngcí de yǔfǎ huà [The grammaticalization of Chinese directional verbs]. 学林出版社 Xuélín chūbǎnshè [Academia Press].
- Lin, J. (2019). *Encoding Motion Events in Mandarin Chinese* (Vol. 11). John Benjamins Publishing Company.
- Lín, J. 林静夏. (2011). *The encoding of motion events in Chinese: Multi-morpheme motion constructions* [PhD dissertation]. University of Stanford.
- Lín, T. 林焘. (1957). 现代汉语补足语里的轻音现象所反映出来的语法和语义问题 Xiàndài Hànyǔ bǔzú yǔ lǐ de qīngyīn xiànxàng suǒ fǎnyìng chulai de yǔfǎ hé yǔyì wèntí [Grammatical and Semantic Issues Reflected by the Light Phenomenon in Modern Chinese Complementary Language]. 北京大学学报 Běijīng Dàxué Xuébào [Beijing University Journal], 2, 47-67.
- Linell, P. (1998). *Approaching Dialogue: Talk, interaction and contexts in dialogical perspectives*. John Benjamins Publishing Company.
- Linell, P. (2005). *Essentials of dialogism: Aspects and elements of a dialogical approach to language, communication and cognition*. <http://www.tema.liu.se/tema-k/personal/perli/index.html>
- Liú, D. 刘丹青. (2017). 汉语动补式和连动式的库藏裂变 Hànyǔ dòngbǔshì hé liándòngshì de kùcáng lièbiàn [Split Between Verb-complement Constructions and Serial Verb Constructions in Chinese Syntactic Inventory]. 语言教学与研

- 究 *Yǔyán Jiàoxué yǔ Yánjiū* [*Language Teaching and Linguistic Studies*], 2, 1-16.
- Liú, F. (1998). A clitic analysis of locative particles [汉语方位词的分析 *Hànyǔ fāngwèi cí de fēnxī*]. *Journal of Chinese Linguistics*, 26(1), 48-70.
- Liú, Y. 刘岩. (2013). 现代汉语运动事件表达模式研究 *Xiàndài Hànyǔ yùndòng shìjiàn biǎodá móshì yánjiū* [*A Study on the Expression of Motion Event in Mandarin Chinese*] [PhD dissertation]. 南开大学 *Nánkāi Dàxué* [Nankai University].
- Liú, Y. 刘月华, Pān, W. 潘文娱, & Gù, W. 故韡. (2019). 实用现代汉语语法 (增订本) *Shíyòng xiàndài Hànyǔ yǔfǎ (Zēngdìng běn)* [*Practical Modern Chinese Grammar*]. 商务印书馆 *Shāngwù yìnshūguǎn* [Commercial Press].
- Liú, Y. 刘月华 (主编) (Éd.). (1998). 趋向补语通释 *Qùxiàng bǔyǔ tōngshì* [*Directional complements: A compendium*]. 北京语言大学出版社 *Běijīng Yǔyán Dàxué Chūbǎnshè* [Beijing Language and Culture University Press].
- Lù, J. 陆俭明. (1985). 关于“去+VP”和“VP+去”句式 *Guānyú “qù + VP” hé “VP + qù” jùshì* [On the constructions “qu+VP” and “VP+qu”]. *语言教学与研究 Yǔyán Jiàoxué yǔ Yánjiū* [*Language Teaching and Linguistic Studies*], 04, 18-33.
- Lù, J. 陆俭明. (2002). 动词后趋向补语和宾语的位置问题 *Dòngcí hòu qūxiàng bǔyǔ hé bīnyǔ de wèizhì wèntí* [Concerning the verbal complement of direction and the position of object]. *世界汉语教学 Shìjiè Hànyǔ Jiàoxué* [*Chinese Teaching in the World*], 1, 5-17.
- Lù, J. 陆俭明. (2013). 现代汉语语法研究教程 *Xiàndài Hànyǔ yǔfǎ yánjiū jiàochéng* [*A Course in Modern Chinese Grammar*] (4^e éd.). 北京大学出版社 *Běijīng Dàxué Chūbǎnshè* [Beijing University Press].
- Lǚ, S. 吕叔湘. (1946). 从主语宾语分别谈国语句子的分析 *Cóng zhǔyǔ bīnyǔ fēnbié tán guóyǔ jùzi de fēnxī* [From the difference between subject and object to the analysis of Chinese sentences]. In S. 叶圣陶 *Yè* (Éd.), *开明书店二十周年纪念文集*

- Kāimíng Shūdiàn èrshí Zhōunián Jìniàn Wénjí [Proceedings of the 20th Anniversary of Kaiming Bookstore]* (p. 1-56). Commercial Press.
- Lǚ, S. 吕叔湘. (2019a). “动趋式+宾语”的语序 “Dòngqū shì + bīnyǔ” de yǔxù [The order of Verb-directional and the Object]. In S. 吕叔湘 Lǚ (Éd.), *语文杂纪 Yǔwén zájì* (p. 197-198). 生活·读书·新知三联书店 Shēnghuó.Dúshū.Xīnzhī sānlián shūdiàn [SDX Joint Publishing Company].
- Lǚ, S. 吕叔湘 (主编) (Éd.). (2019b). 现代汉语八百词 (增订本) *Xiàndài hànyǔ bābǎi cí (Zēngdìng běn) [Eight hundred words of the contemporary Chinese]*. 商务印书馆 Shāngwù yìnshūguǎn [Commercial Press].
- Lǚ, X. 鲁晓琨. (2006). 焦点标记“来” Jiāodiǎn biāoji “lái” [‘Lai’ as a focus marker]. *世界汉语教学 Shìjiè Hànyǔ Jiàoxué [Chinese Teaching in the World]*, 2, 20-31.
- Lù, Z. 陆志韦 (Éd.). (1964). 汉语的构词法 (修订本) *Hànyǔ de gòucí fǎ (xiūdìng běn) [Word Formation in Chinese (revised edition)]*. 科学出版社 Kēxué Chūbǎnshè [Science Press].
- Lyons, J. (1977). *Semantics, Vol. 2*. Cambridge: Cambridge University Press.
- Majid, A. (2012). A guide to stimulus-based elicitation for semantic categories. In N. Thieberger (Éd.), *The Oxford Handbook of linguistic Fieldwork* (p. 54-71). Oxford: Oxford University Press.
- Máo, Y. 毛宇. (2000). 对“动词+来/去”动补结构带宾语句式及动词的考察 Duì “dòngcí + lái/ qù” dòngbǔ jiégòu dài bīnyǔ jùshì jí dòngcí de kǎochá [A Study on the Structural Pattern of Predication—Compliment with Object And the Directional Verbs]. *西南民族学院学报 Xīnán Mínzú Xuéyuàn Xuébào [Journal of Southwest University for Nationalities]*, 21(7), 90-92.
- Matsumoto, Y. (2003). Typologies of lexicalization patterns and event integration: Clarifications and reformulations. In S. Chiba & al (Éd.), *Empirical and theoretical investigations into*

- language: A Festschrift for Masaru Kajita* (p. 403-418). Kaitakusha.
- Matsumoto, Y. (2017). Eigo ni okeru idō-jishō-hyōgen no taipu to keiro-hyōgen. [Types of motion-event expressions and expressions of path in English]. In Y. Matsumoto (Éd.), *Idōhyōgen no ruikeiron [The typology of motion expressions]* (p. 25-38). Kurosio Publishers.
- Matsumoto, Y. (2018). Motion event descriptions in Japanese from typological perspectives. In P. Pardeshi & T. Kageyama (Éd.), *Handbook of Japanese contrastive linguistics* (p. 273-289). De Gruyter Mouton.
- Matsumoto, Y. (2021). *Motion event descriptions across languages*.
- Matsumoto, Y., Akita, K., & Takahashi, K. (2017). The functional nature of deictic verbs and the coding patterns of Deixis: An experimental study in English, Japanese, and Thai. In I. Ibarretxe-Antuñano (Éd.), *Motion and Space across Languages: Theory and applications* (p. 95-122). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Matsumoto, Y., Akita, K., & Takahashi, K. (forthcoming). *The interactional nature of deictic verbs in English, Japanese, and Thai: Why Deixis must be treated separately from Path*.
- Matsumoto, Y., & Kawachi, K. (2020). Motion event descriptions in broader perspective. In Y. Matsumoto & K. Kawachi (Éd.), *Broader perspectives on Motion Event Descriptions* (p. 1-22). John Benjamins Publishing Company.
- Mayer, M. (1969). *Frog, Where Are You?* Dial Books for Young Readers.
- Mazon, A. (1963). *Grammaire de la langue russe*. Paris: Institut d'Études Slaves.
- Meier, S. C. (2020). *Topics in the grammar of Mono-Alu (Oceanic)* [PhD dissertation]. Newcastle, Australia: University of Newcastle doctoral dissertation.

- Miller, G. A., & Johnson-Laird, P. N. (1976). *Language and perception*. Cambridge/Massachusetts: The Belknap Press of Harvard University Press.
- Morel, M.-A., & Danon-Boileau, L. (1992). *La deixis: Colloque en Sorbonne (8-9 juin 1990)*. Paris: Presses universitaires de France.
- Morita, T. (2011). Intratypological Variations in Motion Events in Japanese and French. Manner and Deixis as Parameters for Cross-Linguistic Comparison. *CogniTextes. Revue de l'Association française de linguistique cognitive*, 6. (doi: 10.4000/cognitextes.498)
- Moyse-Faurie, C. (2007, novembre 9). *The Polynesian directionals: Origin and functions*. Paper presented at the Trajectoire Meeting, Lyon, France.
- Moyse-Faurie, C. (2016, décembre 14). *The Polynesian directionals: Origin and functions*. Fédération de Typologie - deixis dynamique, Paris, France.
- Nakazawa, T. (1990). A pragmatic account of the distribution of come and go in English, Japanese and Korean. In H. Hajime (Éd.), *Japanese/Korean Linguistics* (p. 97-110). CSLI Publications.
- Nakazawa, T. (2007). A Typology of the Ground of Deictic Motion Verbs as Path-Conflating Verbs: The Speaker, the Addressee, and Beyond. *Poznań Studies in Contemporary Linguistics*, 43(2), 59-82. (doi: 10.2478/v10010-007-0014-3)
- Nakazawa, T. (2009). A Typology of the Path of Deictic Motion Verbs as Path-Conflating Verbs: The Entailment of Arrival and the Deictic Center. *Poznań Studies in Contemporary Linguistics*, 45(3), 385-403. (doi: 10.2478/v10010-009-0022-6)
- Nakazawa, T. (2006). Motion Event and Deictic Motion Verbs as Path-Conflating Verbs. In S. Müller (Éd.), *Proceedings of the 13th International Conference on Head-Driven Phrase Structure Grammar* (p. 284-304). Stanford, CA: CSLI Publications.

- <http://www.stanford.edu/group/cslipublications/cslipublications/HPSG/2006/hpsg2006.pdf#page=284>
- Narasimhan, B., Kopecka, A., Bowerman, M., Gullberg, M., & Majid, A. (2012). Putting and taking events: A crosslinguistic perspective. In A. Kopecka & B. Narasimhan (Éd.), *Events of Putting and Taking: A crosslinguistic perspective* (p. 1-18). John Benjamins Publishing Company.
- Newman, J. (2002). The Linguistics of Sitting, Standing and Lying. In *Tsl.51*. John Benjamins Publishing Company. <https://benjamins.com/catalog/tsl.51>
- O'Connor, L. (2004). Going getting tired: Associated motion through space and time in Lowland Chontal. In M. Achard & S. Kemmer (Éd.), *Language, culture and mind* (p. 181-199). Stanford: CSLI Publications.
- Oshima, D. Y. (2006). GO and COME Revisited: What Serves as a Reference Point? *Berkeley Linguistics Society and the Linguistic Society of America*, 32(1), 287-298.
- Packard, J. L. (2000). *The morphology of Chinese: A linguistic and cognitive approach*. Cambridge: Cambridge University Press.
- Parajuli, K. (2021). *Motion Events in Nepali* [PhD dissertation]. Université Lumière Lyon 2.
- Pate, D. (2016). Deictic motion verbs in Pashto: To whom shall we come? *Bulletin of the School of Oriental and African Studies*, 79(1), 103-128.
- Persohn, B. (2018). Basic motion verbs in Nyakyusa: Lexical semantics and associated motion. *Studies in African Linguistics*, 47(1 & 2), 101-127.
- Peyraube, A. (1980). *Les constructions locatives en chinois moderne [in Chinese: 现代汉语处所方位结构]*. Langages croisés.
- Peyraube, A. (2003). On the history of place words and localizers in Chinese: A cognitive approach. In Y. Audrey Li & A. Simpson (Éd.), *Functional Structure(s), Form and Interpretation* (p. 180-198). Routledge.
- Peyraube, A. (2006). Motion events in Chinese: A diachronic study of directional complements. In M. Hickmann & S. Robert (Éd.),

- Space in Languages: Linguistic Systems and Cognitive Categories [Typological Studies in Language 66]* (p. 121-135). Amsterdam/Philadelphia: John Benjamins Publishing Company. <https://benjamins.com/catalog/tsl.66.08pey>
- Pryor, B., & Farr, C. (1989). Botin Deictics: Go and Come. *Language and Linguistics in Melanesia*, 20(1-2), 115-145.
- Ramsay, D. S. (1985). Fluctuations in unimanual hand preference in infants following the onset of duplicated syllable babbling. *Developmental Psychology*, 21(2), 318-324. (doi: 10.1037/0012-1649.21.2.318)
- Ramsey, S. R. (1987). *The Languages of China*. Princeton: Princeton University Press.
- Rauh, G. (Éd.). (1983). *Essays on Deixis*. Tübingen: Gunter Narr Verlag.
- Regier, T., & Zheng, M. (2007). Attention to Endpoints: A Cross-Linguistic Constraint on Spatial Meaning. *Cognitive Science*, 31, 705-719.
- Renaudier, M. (2012). *Dérivation et valence en sereer. Variété de Mar Lodj (Sénégal)* [PhD dissertation]. Lyon: Université Lumière Lyon 2 doctoral dissertation.
- Ricca, D. (1991). "Go" and "Come" in the Romance and Germanic Languages: From Aktionsart to Deixis. *Archivio Glottologico Italiano*, 76(2), 159-192.
- Ricca, D. (1992). Le couple de verbes déictiques "andare"/"venire" en italien: Conditions d'emploi et variabilités. In M.-A. Morel & L. Danon-Boileau (Éd.), *La deixis: Colloque en Sorbonne (8-9 juin 1990)* (p. 277-286). Paris: Presses universitaires de France. <http://search.proquest.com/llba/docview/85591094/9973477EF0984C90PQ/2>
- Ricca, D. (1993). *I verbi deittici di movimento in Europa: Una ricerca interlinguistica*. Firenze: La Nuova Italia.
- Roberts, J. R. (1987). *Amele*. Croom Helm.
- Robertson, J. S. (1980). *The structure of pronoun incorporation in the Mayan verbal complex*. New York: Garland.
- Sakel, J. (2004). *A Grammar of Mosestén (Mouton Grammar Library 33)*. De Gruyter Mouton.

- Schmidtke-Bode, K. (2009). *A Typology of Purpose Clauses*. In *Tsl.88*. John Benjamins Publishing Company. <https://benjamins.com/catalog/tsl.88>
- Senft, G. (2000). "Come" and "go" in Kilivila. In B. Palmer & P. Geraghty (Éd.), *Proceedings of the Second International Conference on Oceanic Linguistics: Vol. 2, Historical and Descriptive Studies* (p. 105-136). Canberra: Pacific Linguistics. http://pubman.mpdl.mpg.de/pubman/item/escidoc:64704/component/escidoc:468518/senft_2000_comeandgo.pdf
- Shěn, J. 沈家煊. (1995). “有界”与“无界” “Yǒu jiè” yǔ “wújiè” [“bounded” and “unbounded”]. *中国语文 Zhōngguó Yǔwén [Studies of the Chinese Language]*, 5, 367-380.
- Shi, W., & Wu, Y. (2014). Which way to move: The evolution of motion expressions in Chinese. *Linguistics*, 52(5), 1237-1292. (doi: 10.1515/ling-2014-0024)
- Shǐ, W. 史文磊. (2011). 汉语运动事件词化类型的历时转移 Hànyǔ yùndòng shìjiàn cíhuà lèixíng de lìshí zhuǎnyí [The pattern shift of the motion event integration in Chinese: A typological study based on morpho-syntactic features]. *中国语文 Zhōngguó Yǔwén [Studies of the Chinese Language]*, 6.
- Shǐ, W. 史文磊. (2014). 汉语运动事件词化类型的历时考察 Hànyǔ yùndòng shìjiàn cíhuà lèixíng de lìshí kǎochā [Evolution of Lexicalization Pattern of Motion Events: A Case Study from Chinese]. 商务印书馆 Shāngwù yìnshūguǎn [Commercial Press].
- Shǐ, W. 史文磊. (2015). 漢語運動事件指向表達的歷時演變及相關問題 Hànyǔ yùndòng shìjiàn zhǐxiàng biǎodá de lìshí yǎnbiàn jí xiāngguān wèntí [Morphosyntactic expressions of Deictic in the history of Chinese language]. 《中國語言學集刊》 *Zhōngguó Yǔyánxué Jíkān [Bulletin of Chinese Linguistics]*.
- Shibatani, M. (2007). Grammaticalization of Motion Verbs. In B. Frellesvig, M. Shibatani, & J. C. Smith (Éd.), *Current Issues in the History and Structure of Japanese* (p. 107-134). Kuroshio Publisher.

- Sinha, A. K. (1972). On the Deictic Use of "Coming" and "Going" in Hindi. *Paper from the 8th Regional Meeting, CLS*, 351-358.
- Sinha, C., & Kuteva, T. (1995). Distributed Spatial Semantics. *Nordic Journal of Linguistics*, 18(2), 167-199.
- Slobin, D. I. (2004). The Many Ways to Search for a Frog: Linguistic Typology and the Expression of Motion Events. In S. Strömquist & L. Verhoeven (Éd.), *Relating Events in Narrative Vol. 2. Typological and Contextual Perspectives* (p. 219-257). Mahwah, NJ: Lawrence Erlbaum Associates.
- Slobin, D. I. (2005). *Coding of Motion Events in Texts*. Berkeley Coding Manual.
- Slobin, D. I. (2006). What makes manner of motion salient? Explorations in linguistic typology, discourse, and cognition. In M. Hickmann & S. Robert (Éd.), *Space in Languages: Linguistic Systems and Cognitive Categories [Typological Studies in Language 66]* (p. 59-81). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Song, J. (2019). *L'expression de la finalité en chinois moderne entre série verbale et subordination, avec référence au français* [PhD dissertation]. Institut National des Langues et Civilisations Orientales-INALCO.
- Song, J.-K. (2015). *Étude Typologique Des Expression Du Déplacement Causé En Chinois Mandarin* [Master's thesis]. Université Lumière Lyon2.
- Song, J.-K. (2022). Source-Goal asymmetry in Standard Chinese: A comparative study of spontaneous and caused motion events. In L. Sarda & B. Fagard (Éd.), *Neglected Aspects of Motion-Event Description. Deixis, asymmetries, constructions* (p. 149-172). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Song, J.-K., Bunkham, N., & Mouton, L. (2019, décembre 13). *The status of Dynamic Deixis in the expression of motion events: Theoretical perspective and crosslinguistic evidence* [Oral presentation]. Atelier Typologie Sémantique, Lyon, France.

- Sòng, Y. 宋玉柱. (1987). 存现句及其句法功能 Cúnxiàn jù jí qí jùfǎ gōngnéng [Presentative sentences and their syntactic function]. 逻辑与语言学习 *Luójí yǔ yǔyán xuéxí* [Logic and language study], 1, 33-35.
- Stefanowitsch, A. (2018). The goal bias revisited: A collostructional approach. *Yearbook of the German Cognitive Linguistics Association*, 6(1), 143-166. (doi: 10.1515/gcla-2018-0007)
- Stefanowitsch, A., & Rohde, A. (2004). The goal bias in the encoding of motion events. In G. Radden & K.-U. Panther (Éd.), *Studies in Linguistic Motivation* (p. 249-268). Berlin/New York: Mouton de Gruyter.
- Stosic, D. (2019). Manner as a cluster concept—What does lexical coding of manner of motion tell us about manner? In M. Aurnague & D. Stosic (Éd.), *The Semantics of Dynamic Space in French: Descriptive, experimental and formal studies on motion expression* (p. 141-177). John Benjamins Publishing Company. <https://benjamins.com/catalog/hcp.66.04sto>
- Stosic, D. (2020). Defining the concept of manner: An attempt to order chaos. *Testi e linguaggi*, 14, 127-150.
- Stoynova, N. (2016). Pokazateli "dviženija s cel'ju" i sobytijnaja struktura: Suffiks -nda v nanajskom jazyke [Markers of "motion-cum-purpose" and event structure: -Nda suffix in Nanai. *Voprosy Jazykoznanija* (4), 86-111.
- Svorou, S. (1994). *The Grammar of Space*. John Benjamins Publishing Company. <https://benjamins.com/catalog/tsl.25>
- Tai, J. H.-Y. (1975). On Two Functions of Place Adverbials in Mandarin Chinese. *Journal of Chinese Linguistics*, 3(2/3), 154-179.
- Tai, J. H.-Y. (1989). Towards a Cognition-based Functional Grammar of Chinese. In J. H.-Y. Tai & F. Hsueh (Éd.), *Functionalism and Chinese Grammar* (p. 187-226). Monograph Series of the Journal of the Chinese Language Teachers Association.
- Talmy, L. (1972a). *Semantic structures in English and Atsugewi* [Doctoral Dissertation]. University of California at Berkeley.

- Talmy, L. (1972b). *The Basis for a Crosslinguistic Typology of Motion/Location, Part I. Working Papers on Language Universals, No. 9.*
- Talmy, L. (1975). Semantics and Syntax of Motion. In J. P. Kimball (Éd.), *Syntax and Semantics 4* (p. 181-238). Academic Press.
- Talmy, L. (1985). Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen (Éd.), *Language Typology and Syntactic Description. Vol. III: Grammatical Categories and the Lexicon* (p. 57-149). Cambridge: Cambridge University Press.
- Talmy, L. (1991). Path to Realization: A Typology of Event Conflation. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society*, 480-519.
- Talmy, L. (2000). *Toward a Cognitive Semantics. Vol. II: Typology and Process in Concept Structuring*. Cambridge MA: MIT Press.
- Tang, Z., & Lamarre, C. (2007). A contrastive study of the linguistic encoding of motion events in Standard Chinese and in the Guanzhong dialect of Mandarin (Shaanxi). *Bulletin of Chinese Linguistics*, 2(1), 135-168.
- Tesnière, L. (1959). *Eléments de syntaxe structurale*. Paris: Klincksieck.
- Tián, Y. 田宇贺. (2001). 名词性成分在“V + 趋+来”结构中的位置制约因素 Míngcí xìng chéngfèn zài “V + qū + lái” jiégòu zhōng de wèizhì zhìyuē yīnsù [Constraints on the position of the noun component in the “V + tend + come” structure]. 广西社会科学 *Guǎngxī Shèhuì Kēxué [GuangXi social sciences]*, 4, 141-143.
- Tóng, X. 童小娥. (2009). 从事件的角度看补语“上来”和“下来”的对称与不对称 Cóng shìjiàn de jiǎodù kàn bǔyǔ “shànglái” hé “xiàlái” de duìchèn yǔ bù duìchèn [The symmetry and asymmetry of the complements “shanglai” and “xialai” viewed from the perspective of event]. 世界汉语教学 *Shìjiè Hànyǔ Jiàoxué [Chinese Teaching in the World]*, 04, 495-507.
- Tunbridge, D. (1988). Affixes of Motion and Direction in Adnyamathanha. In P. Austin (Éd.), *Complex sentence constructions in Australian languages (Typological Studies in*

- Language* 15) (p. 267-283). John Benjamins Publishing Company.
- Vittrant, A. (2015). Expressing motion. The contribution of Southeast Asian languages with reference to East Asian languages. In N. J. Enfield & B. Comrie (Éd.), *Languages of Mainland Southeast Asia: The state of the art (Pacific Linguistics 649)* (p. 586-632). Berlin: De Gruyter Mouton.
- Voisin, S. (2010). Les morphèmes -i et -si en wolof. *Sciences et Techniques du Langage, Revue du Centre de Linguistique Appliquée de Dakar* 10, 21-34.
- Voisin, S. (2013). Expressions de trajectoire dans quelques langues atlantiques (groupe nord). *Faits de Langues. Sémantiques des relations spatiales* 42, 131-152.
- Vuillermet, M., & Kopecka, A. (2019). Trajectoire: A methodological tool for eliciting Path of motion. In A. Lahaussois & M. Vuillermet (Éd.), *Methodological Tools for Linguistic Description and Typology, Language Documentation & Conservation Special Publication No. 16* (p. 97-124). University of Hawai'i Press.
- Wälchli, B. (2001). A typology of displacement (with special reference to Latvian). *Sprachtypologie und Universalienforschung (STUF)*, 54(3), 298-323. (doi: 10.1524/stuf.2001.54.3.298)
- Wáng, G. 王国栓. (2005). “来 + VP” “VP + 来” 两格式中的“来” “Lái + VP” “VP + lái” liǎng géshì zhōng de “lái” [The “lai” (来) in Formats “lai (来) + VP” and “VP + lai (来)”]. *南开语言学刊 Nánkāi Yǔyánxué kān [NanKai Linguistics]*, 1, 165-172.
- Wáng, L. 王丽彩. (2005). ”来“、“去” 去 “充当的趋向补语和宾语的次序问题 “Lái”、“Qù” chōngdàng de qūxiàng bǔyǔ hé bīnyǔ de cìxù wèntí [Problems of “lai” and “qu” as directional complements and their order with objects]. *广西社会科学 Guǎngxī Shèhuì Kēxué [GuangXi social sciences]*, 4, 155-156.
- Watkins, L. J. (1984). *A grammar of Kiowa*. University of Nebraska Press.

- Weissenborn, J., & Klein, W. (Éd.). (1982). *Here and There: Cross-linguistic Studies on Deixis and Demonstration*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Wén, X. 文旭. (2007). 运动动词“来/去”的语用意义及其指示条件 Yùndòng dòngcí “lái/qù” de yǔyòng yìyì jí qí zhǐshì tiáojiàn [Pragmatic meaning and deictic conditions of the motion verbs lai and qu]. 外语教学与研究 Wàiyǔ Jiàoxué yǔ Yánjiū [Foreign Language Teaching and Research], 39(2), 91-96.
- Wiedenhof, J. (2015). Names for the Chinese Language. In R. Sybesma (Éd.), *Encyclopedia of Chinese Language and Linguistics*. Brill.
- Wilkins, D. P. (1989). *Mparntwe Arrernte (Aranda). Studies in the structure and semantics of grammar* [PhD dissertation]. Canberra: Australian National University doctoral dissertation.
- Wilkins, D. P. (1991). The semantics, pragmatics, and diachronic development of “associated motion” in Mparntwe Arrernte. *Buffalo Papers in Linguistics*, 91(1), 207-257.
- Wilkins, D. P., & Hill, D. (1995). When “go” means “come”: Questioning the basicness of basic motion verbs. *Cognitive Linguistics*, 6(2-3), 209-260. (doi: 10.1515/cogl.1995.6.2-3.209)
- Winston, M. (1988). *Deictic verbs: Use and acquisition* [PhD dissertation, University of Connecticut]. <http://digitalcommons.uconn.edu/dissertations/AAI8904640/>
- Xiǎo, X. 肖秀妹. (1992). “动+来+名”和“动+名+来”两种句式的比较 “Dòng + lái + míng” hé “Dòng + míng + lái” liǎng zhǒng jùshì de bǐjiào [Comparison of the two types of sentences: “V+lai+N” and “V+N+lai”]. 语言教学与研究 Yǔyán Jiàoxué yǔ Yánjiū [Language Teaching and Linguistic Studies], 1, 59-62.
- Xīn, C. 辛承姬. (1998a). “去 N”和“到 N 去” “Qù N” hé “dào N qù” [“Qu+N” and “Dao+N+Qu”]. 华中师范大学学报 Huázhōng shīfàn dàxué xuébào [Journal of Central China Normal University], 37(1), 8-15.

- Xīn, C. 辛承姬. (1998b). 连动结构中的“来” Liándòng jiégòu zhōng de “lái” [“lai” in serial verb constructions]. *语言研究 Yǔyán Yánjiū [Studies in Language and Linguistics]*, 2, 53-58.
- Xu, D. (2008). Asymmetry in the Expression of Space in Chinese—The Chinese Language Meets Typology. In D. Xu (Éd.), *Space in Languages of China* (p. 175-198). Dordrecht: Springer. (doi: 10.1007/978-1-4020-8321-1_8)
- Xu, D. 徐丹. (1996). *Initiation à la syntaxe chinoise [汉语句法引论 Hànyǔ jùfǎ yǐnlùn]*. Paris: l’Asiathèque.
- Yang, X. (2015). Constructional Changes of Chinese Lai / Qu in Serial Verb Constructions. *Open Journal of Modern Linguistics*, 05(03), 255-261. (doi: 10.4236/ojml.2015.53022)
- Yu, N. (1998). *The Contemporary Theory of Metaphor: A Perspective from Chinese*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Yu, N. (2012). The metaphorical orientation of time in Chinese. *Journal of Pragmatics*, 1335-1354. (doi: 10.1016/j.pragma.2012.06.002)
- Yule, G. (1996). *Pragmatics*. Oxford: Oxford University Press.
- Zavala Maldonado, R. (2000). Olutec motion verbs: Grammaticalization under Mayan contact. In A. K. Simpson (Éd.), *Annual Meeting of the Berkeley Linguistics Society* (Vol. 26, p. 139-151).
- Zavala, R. (1994). *Clause integration with verbs of motion in Mayan languages* [M.A. thesis]. University of Oregon.
- Zhāng, B. 张伯江, & Fāng, M. 方梅. (1996). 常规焦点考察之一: 宾语和趋向成分的语序 Chángguī jiāodiǎn kǎochá zhī yī: Bīnyǔ hé qūxiàng chéngfèn de yǔxù [Normal focus study I: the word order between the verb, the directional complement, and the object]. In B. 张伯江 Zhāng & M. 方梅 Fāng (Éd.), *汉语功能语法研究 Hànyǔ gōngnéng yǔfǎ yánjiū [Functional studies of Chinese grammar]* (p. 91-111). 江西教育出版社 Jiāngxī jiàoyù chūbǎnshè [Jiangxi Publishing Education Press].

- Zhōu, C. 周迟明. (1959). 来和去 Lái hé qù [Lai and Qu]. 山东大学学报 *Shāndōng Dàxué Xuébào [Journal of Shandong University]*, 2, 23-48.
- Zhū, D. 朱德熙. (1982). 语法讲义 *Yǔfǎ jiǎngyì [Grammar course]*. 商务印书馆 *Shāngwù yìnshūguǎn [Commercial Press]*.
- Zlatev, J., & Yangklang, P. (2004). A Third Way to Travel: The Place of Thai in Motion-Event Typology. In S. Strömquist & L. Verhoeven (Éd.), *Relating Events in Narrative Vol. 2. Typological and Contextual Perspectives* (p. 159-190). Mahwah, NJ: Lawrence Erlbaum Associates.
- Zuǒ, S. 左双菊. (2007). 位移动词“来/去”带宾能力的历时、共时考察 *Wèiyí dòngcí “lái/qù” dài bīn nénglì de lìshí, gòngshí kǎochá [The Diachronic and Synchronic Inquiry into the Capacity for the Movement Verbs “Lai/Qu” Carrying Objects]* [Doctoral Dissertation]. 华中师范大学 *Huázhōng Shīfàn Dàxué [Central China Normal University]*.

Corpus

Stimulus sets

Bowerman, Melissa, Gullberg, Marianne, Majid, Asifa & Bhuvana, Narasimhan. 2004. Put project: the cross-linguistic encoding of placement events. In Asifa Majid (ed.) *Field Manual Volume 9*, 10-24. Nijmegen: Max Planck Institute for Psycholinguistics.

Ishibashi, Miyuki, Kopecka, Anetta & Vuillermet, Marine. 2006. *Trajectoire: Matériel visuel pour élicitation des données linguistiques*, Laboratoire Dynamique du Langage. (CNRS / Université Lyon2) – Fédération de Recherche en Typologie et Universaux Linguistiques, CNRS, France.

TV series

Married for ten years (2002) [title in pinyin: *jié hūn shí nián*] (55 description*10 episode), TV series directed by Gao Xixi, in 2002, broadcast the first time in 2003, 20 episodes, 45 minutes approximately for each episode, about 15 hours in total).

《结婚十年》二十集电视连续剧，编剧：许波 导演：高希希 主演：徐帆、陈建斌

Zhang Damin's happy life (1998) [title in pinyin: *pín zuǐ zhāng dà mǐn de xìng fú shēng huó*] (10 episodes, to be calculated)", TV series directed by Shen Haofang, in 1998, broadcast in 2000, 20 episodes, 45 minutes approximately for each episode, about 15 hours in total).

《贫嘴张大民的幸福生活》二十集电视连续剧，编剧：刘恒 导演：沈好放 主演：梁冠华、朱媛媛

RESUME EN FRANÇAIS

La deixis, qui désigne le fait de pointer ou d'indiquer par la langue, est l'un des éléments fondamentaux utilisé par les locuteurs de toutes les langues pour expliciter leurs énoncés. Ainsi, en tant qu'élément fondamental de la communication humaine, la deixis a toujours fasciné les chercheurs en sciences du langage et de nombreuses études ont été publiées sur ce sujet. Cette thèse, qui consiste en une description typologique de la deixis dynamique dans l'expression du déplacement en chinois standard et qui s'inscrit dans le cadre du projet « DEIXIS DYNAMIQUE » (Fédération de Typologie et Universaux Linguistiques, CNRS, 2015-2018), représente une modeste contribution à la recherche dans ce domaine. Le terme « deixis dynamique » renvoie ici à la direction selon un axe situé par rapport à un point de visée (ou centre déictique) qui est par excellence localisé sur le locuteur.

Les langues sino-tibétaines ont rarement fait l'objet de descriptions typologiques approfondies de la deixis et rares sont les études qui se basent sur de larges échantillons de données. Même si de nombreuses études se sont focalisées sur les verbes de mouvement 来 *lái* 'venir' et 去 *qù* 'aller', la plupart d'entre elles ont adopté l'approche sémasiologique qui vise à explorer les différents sens et fonctions de ces morphèmes, tels que leur sens métaphorique et leurs usages dans des locutions.

La présente étude vise à étudier les morphèmes exprimant la notion de deixis dynamique en se basant sur la perspective

onomasiologique. En adoptant l'approche fonctionnelle-typologique dont le but est d'examiner la relation entre forme et sens et/ou fonction, et la variation interlinguistique dans différents domaines d'expression, l'objectif principal de cette thèse est de proposer une description de la deixis dynamique en chinois standard. Plus précisément, ce travail cherche à répondre à deux questions de recherche principales :

(1) Comment la deixis dynamique est-elle exprimée par les locuteurs du chinois standard ? Quelles sont les similarités et les différences dans son expression dans des types de données différentes, descriptives et dialogiques ? Comment sont utilisées les diverses ressources linguistiques disponibles en chinois tels que les verbes, les satellites et les marqueurs de mouvement associés qui expriment la deixis dynamique ?

(2) Comment la deixis dynamique et la trajectoire sont-elles liées l'une à l'autre, et quelles sont les caractéristiques formelles et fonctionnelles propres à chacun de ces éléments sémantiques et les caractéristiques qui les distinguent ?

Afin de répondre à ces questions, nous réalisons la présente étude en adoptant plusieurs approches théoriques et empiriques. Cette thèse s'inscrit dans le domaine conceptuel de l'évènement spatial (Talmy 1985, 2000). En particulier, pour mener à bien cette étude, nous combinons trois cadres, à savoir la typologie de Wälchli (2001) sur l'encodage du déplacement, la sémantique spatiale distribuée de Sinha & Kuteva (1995), et l'asymétrie source-but d'Ikegami (1979, 1987).

Organisation de la thèse

Cette thèse est organisée en deux parties. La première partie, qui est divisée en trois chapitres, présente le cadre théorique et le cadre méthodologique. En particulier, dans la première partie, nous introduisons la notion de deixis dynamique (chapitre 1), quelques caractéristiques du chinois standard en lien avec l'évènement spatial (chapitre 2), et la méthodologie adoptée pour conduire cette étude (chapitre 3). La deuxième partie, qui comprend trois chapitres, présente les analyses de données et les résultats. Dans la deuxième partie, nous examinons l'expression de la deixis dynamique en comparant son expression avec celle de la trajectoire essentiellement sous trois angles, à savoir les stratégies de codage (chapitre 4), les schémas de distribution (chapitre 5) et les (a)symétries spatiales (chapitre 6). Cette étude comprend par ailleurs deux annexes. L'annexe A est constituée principalement des descriptions schématiques des vidéos clips des stimuli *Trajectoire* et *Put & Take*. L'annexe B montre les exemples sélectionnés à partir des corpus et qui illustrent l'emploi des verbes lexicalisant la trajectoire (+ la deixis dynamique), la manière et la cause. Nous présentons chaque chapitre ci-dessous.

Chapitre 1 Aperçu des études théoriques et empiriques sur la deixis

Le chapitre 1 esquisse le contexte théorique dans lequel s'inscrit l'étude de la deixis dans cette thèse. L'objectif de ce chapitre est (1) d'examiner les travaux publiés jusqu'ici sur les différents types de deixis dans les champs de la sémantique et de la pragmatique ; (2) de présenter les études sur la deixis menées dans le cadre des travaux dédiés à l'évènement spatial ; et (3) de remettre en question le statut de la deixis dynamique en se focalisant sur sa relation avec la trajectoire.

Dans le cadre des études sur la sémantique et la pragmatique, la deixis est considérée comme une notion dépendante du contexte.

Les travaux précédents ont permis d'identifier trois axes déictiques, ce que Fillmore (1997) appelle les « principaux types grammaticalisés », de la deixis : (1) l'espace qui constitue un repère spatial (*hic* 'ici') permettant à la fois d'indiquer l'endroit où se trouve l'énonciateur et la proximité ou l'éloignement par rapport au locuteur ; (2) le temps qui constitue un repère temporel (*nunc* 'maintenant') indiquant le moment de l'énonciation, le moment présent, le moment passé ou le moment à venir ; et (3) la personne qui constitue un repère subjectif, à savoir, la « première personne » (*ego* 'je') par rapport à laquelle se déterminent la « deuxième personne » (le destinataire de l'énoncé) et la « troisième personne » (qui ne participe pas au dialogue).

Dans le cadre de l'évènement spatial, la deixis (dynamique) peut être exprimée en chionis à l'aide de verbes, de directionnels et de marqueurs de mouvement associés. En outre, nous introduisons la typologie de Talmy (1985, 2000) et certaines révisions majeures concernant la classification typologique des langues du monde (Wälchli 2001 ; Matsumoto 2003 ; Slobin 2004 ; Croft, Barðdal, Hollmann, Sotirova, & Taoka 2010 ; Fortis, Grinevald, Kopecka, & Vittrant 2011 ; entre autres).

En ce qui concerne la question problématique du statut de la deixis, nous examinons le statut de la deixis dynamique comme composant de la trajectoire, comme postulé par Talmy (2000), et nous demandons si les deux éléments sémantiques que sont la trajectoire et la deixis doivent être traités séparément, comme l'ont suggéré d'autres études (Koga et al. 2008 ; Lamarre 2008 ; Morita 2011 ; Matsumoto et al. 2017).

Chapitre 2 Les ressources linguistiques en chinois standard encodant les composants conceptuels de l'évènement spatial

Le chapitre 2 donne une vue d'ensemble des ressources linguistiques disponibles en chinois standard qui permettent d'encoder les différents composants sémantiques de l'évènement spatial. Nous présentons l'encodage de la figure, du fond et du co-évènement, tout en nous focalisant sur l'encodage de la deixis dynamique et de la trajectoire.

Comme l'indique le cadre théorique de Talmy (2000) sur l'évènement spatial, la figure et le fond sont des composants internes de base dans un évènement du déplacement. Dans un déplacement translationnel, la figure désigne l'objet (ou l'entité) en déplacement, et le fond est l'objet de référence par rapport auquel la figure se déplace. Le co-évènement, en tant que composant externe, est en relation avec l'évènement du déplacement (par exemple, la manière ou la cause). En chinois standard, la figure est exprimée par des syntagmes nominaux et peut se référer à une entité animée dans les évènements du déplacement spontané et à une entité animée ou inanimée dans les évènements du déplacement causé. Le fond est également exprimé par des syntagmes nominaux et peut faire référence à une entité (in)animée indiquant l'emplacement de la figure dans les évènements de déplacement spontané et causé. Le co-évènement est souvent exprimé par des verbes qui indiquent la manière et la cause. La trajectoire, elle, est exprimée au moyen de l'encodage verbal (verbes), l'encodage adverbial (satellites), et l'encodage adnominal (syntagmes prépositionnels). La deixis dynamique est exprimée quant à elle au moyen de l'encodage verbal (verbes déictiques) et l'encodage adverbial (satellites déictiques et des marqueurs du mouvement associé).

Chapitre 3 Méthodologie et composition des corpus

Le chapitre 3 présente les approches méthodologiques adoptées dans cette étude : l'approche basée sur les stimuli et l'approche basée sur les feuilletons télévisés. Plus précisément, les corpus sont composés de données descriptives élicitées à partir de stimuli visuels et de données dialogiques extraites de feuilletons télévisés. En outre, ce chapitre présente également le système de codage et celui des gloses utilisés pour traiter et présenter les données.

Pour mener à bien ce projet de recherche, nous avons assemblé des corpus de données orales qui, comme il a été mentionné plus haut, incluent des données descriptives et des données dialogiques. Pour collecter les données descriptives, nous avons eu recours à deux outils d'élicitation visuels : (1) les clips vidéo « *Trajectoire* » (Ishibashi, Kopecka & Vuillermet (2006) mettant en scène le déplacement spontané et les clips vidéo « *Put & Take* » (Bowerman, Gullberg, Majid & Narasimhan 2004) mettant en scène le déplacement causé. Pour collecter ces données, nous avons effectué deux enquêtes de terrain en France (Université Lumière Lyon2, Université Jean-Moulin 3 et Institut Alliance Française de Lyon, 2014 - 2015) et en Chine (Université du Hebei et Université de Pékin, 2016 –2017) respectivement auprès de 24 locuteurs natifs du chinois. Cette enquête nous a permis de constituer les corpus de travail qui comprennent 800 descriptions du déplacement causé et 714 descriptions du déplacement spontané.

Pour constituer le corpus des données dialogiques, nous avons utilisé deux feuilletons chinois intitulés « *Married for ten years* » (2002) [titre en pinyin: *Jiéhūn Shínián*] et « *Loquacious Zhang Damin's Happy Life* » (1998) [titre en pinyin: *Pínzǔ Zhāng Dàmín de Xìngfú Shēnghuó*]. Les données du premier feuilleton utilisées dans cette recherche (1025 phrases dans les 10 premiers épisodes) ont été fournies par Madame Christine Lamarre. Quant aux données du deuxième feuilleton « *Loquacious Zhang Damin's Happy Life* », nous

les avons extraites des feuillets au cours la thèse (2018-2019). Celles-ci comprennent 967 phrases dans les 10 premiers épisodes.

La transcription et le codage des données ont été effectués dans Excel. Les données ont été transcrites à la fois en caractères chinois et en pinyin (le système de romanisation) et ont été codées en pinyin à l'aide du Manuel de codage de Berkeley Slobin (2005).

Chapitre 4 Encodages de la trajectoire et de la deixis dynamique dans les données descriptives et dialogiques

Le chapitre 4 examine l'encodage de la deixis dynamique et de la trajectoire dans les données du chinois standard en s'appuyant sur la typologie de Wälchli (2001), qui distingue, l'encodage verbal, l'encodage adnominal et l'encodage adverbial.

Tout d'abord, nous avons trouvé dans les données quatre stratégies d'encodage dans l'expression de la deixis dynamique : (1) l'encodage verbal, (2) l'encodage adverbial, (3) l'encodage verbal + adverbial, (4) l'encodage adnominal + adverbial, et sept stratégies d'encodage dans l'expression de la trajectoire : (1) l'encodage verbal, (2) l'encodage adverbial, (3) l'encodage adnominal, (4) l'encodage verbal + adverbial, (5) l'encodage adnominal + adverbial, (6) l'encodage adnominal + verbal, (7) l'encodage adnominal + verbal + adverbial.

L'analyse des stratégies d'encodage utilisées pour exprimer la deixis dynamique et la trajectoire en chinois standard montre que l'encodage de la deixis dynamique favorise des stratégies d'encodage dites simples, c'est-à-dire l'encodage adverbial dans les données descriptives vs. l'encodage adverbial et l'encodage verbal dans les données dialogiques. En revanche, l'encodage de la trajectoire privilégie une combinaison de différents stratégies, c'est-à-dire l'encodage adnominal + adverbial dans les données descriptives vs. l'encodage verbal + adverbial dans les données dialogiques.

Les résultats révèlent que l'encodage de la deixis dynamique et celui de la trajectoire ne confirment que partiellement la typologie de Talmy (2000) dans laquelle les satellites verbaux en chinois seraient fréquemment utilisés pour encoder la trajectoire (rappelons que Talmy considère la deixis comme un composant de la trajectoire). En plus des satellites, nos données montrent également que (1) pour encoder la trajectoire, les locuteurs utilisent également d'autres ressources morphosyntaxiques discutés dans la littérature telles que les verbes, les syntagmes prépositionnels et les locatifs (ou noms relationnels) (Chu 2004 ; Lamarre 2008, 2013 ; Fàn 2013 ; Liú 2013 ; entre autres), et (2) pour encoder la deixis dynamiques, ils utilisent les verbes déictiques, les satellites déictiques et les marqueurs de mouvement associés (Lamarre 2008a, 2020). Cependant, il est important de souligner que, comme le montre la présente étude, l'encodage de la deixis dynamique et de la trajectoire ne se limite pas à une seule ressource morphosyntaxique, mais est également opéré par une combinaison de différentes ressources morphosyntaxiques. De plus, les résultats confirment l'observation de Lamarre (2008a) selon laquelle les verbes sont prédominants dans les dialogues. Néanmoins, les occurrences de verbes utilisés dans les données descriptives orales (uniquement dans les données *Trajectoire* relatives au déplacement spontané) (1,6%) révèlent une tendance différente par rapport à l'utilisation fréquente de verbes dans les données descriptives écrites (environ 50%) dans Lamarre (2008a). Cette différence suggère que non seulement les types de données (descriptives ou dialogiques) jouent un rôle important dans la sélection des stratégies d'encodage, mais que la modalité, orale vs. écrite doit également être prise en considération.

Chapitre 5 Schémas de distribution de la trajectoire et de la deixis dynamique

Le chapitre 5 poursuit l'examen de la distribution de la deixis dynamique et de la trajectoire à l'intérieur d'une proposition en

appliquant l'approche de *sémantique spatiale distribuée* proposée par Sinha & Kuteva (1995). Plus précisément, les analyses portent sur la distribution de l'information sémantique liée aux différentes directions de la deixis dynamique (direction centripète, direction centrifuge, et direction centripète + centrifuge) et aux différentes phases de la trajectoire (source, médian, but, source + médian, médian + but, source + but, et source + médian + but).

En général, les schémas de distribution sont moins fréquents mais plus diversifiés dans l'expression de la deixis dynamique que dans l'expression de la trajectoire. En ce qui concerne les différentes directions de la deixis dynamique, la direction centripète et la direction centrifuge révèlent l'utilisation du schéma parallèle (la même information est exprimée par le même morphème dans des positions différentes dans le syntagme) et redondant (la même information est exprimée de manière redondante par différents morphèmes dans la proposition) ; la direction centripète + centrifuge montre l'utilisation du schéma différencié (chaque morphème apporte une partie différente de la signification spatiale en termes de laquelle la situation référentielle est conceptualisée). En ce qui concerne les différentes parties de la trajectoire, source, médian et but, celles-ci révèlent l'emploi du schéma redondant ; tandis que source + médian, médian + but, source + but et source + médian + but révèlent l'utilisation du schéma différencié. De manière générale, les schémas redondants et différenciés sont utilisés plus fréquemment dans les données descriptives que dans les données dialogiques.

L'analyse de l'expression de la deixis dynamique et de la trajectoire montre entre ces deux composants sémantiques à la fois des similarités et des différences. Tout d'abord, la deixis dynamique et la trajectoire peuvent tous les deux être exprimés au moyen d'une sélection de ressources morphosyntaxiques appartenant à différentes classes de formes, montrant une distribution redondante et différenciée. Par ailleurs, la deixis dynamique présente également une distribution parallèle mais celle-ci est absente dans l'expression

de la trajectoire. Deuxièmement, la deixis dynamique et la trajectoire peuvent être exprimés simultanément dans deux slots morphosyntaxiques. De plus, la trajectoire peut également être encodée par deux jusqu'à quatre morphèmes différents. Enfin, bien que l'approche de la sémantique spatiale distribuée de Sinha & Kuteva (1995) puisse être appliquée à la fois à la deixis dynamique et à la trajectoire, les schémas de distribution sont moins fréquents dans l'expression de la deixis dynamique que dans l'expression de la trajectoire. Les différences présentées ci-dessus confortent au niveau sémantique l'hypothèse que ces deux composants sémantiques devraient être considérés comme étant distincts.

Chapitre 6 (A)symétries dans l'expression de la trajectoire et de la deixis dynamique

Le chapitre 6 étudie les (a)symétries spatiales dans l'expression de la deixis dynamique et de la trajectoire. Plus particulièrement, diverses (a)symétries sont examinées à différents niveaux, notamment la fréquence dans le discours, la morphosyntaxe et les expressions (a)symétriques par rapport au fond.

Dans l'expression de la deixis dynamique, nous avons observé que celle-ci était exprimée de manière prédominante dans les données dialogiques (95,1% dans les données *MFTY* et 87,9% dans les données *LZHL*) contrairement aux données descriptives (36,3% dans les données *Trajectoire* et 22,0% dans les données *Put & Take*). En ce qui concerne les (a)symétries dans l'expression des directions centripètes et centrifuges, les résultats suivants ont émergé.

Aux niveaux morphosyntaxique et discursif, l'utilisation des marqueurs centripètes et centrifuges ont révélé à la fois une symétrie et une asymétrie selon les ressources morphosyntaxiques utilisés. Les satellites déictiques sont présents dans les données descriptives et les données dialogiques et l'expression de la direction centripète est plus fréquente que celle de la direction centrifuge. Les verbes déictiques et les marqueurs de mouvement

associés se produisent exclusivement dans les données dialogiques. En ce qui concerne l'utilisation des verbes déictiques, la direction centripète et centrifuge montre une (quasi-)symétrie ; cependant, l'utilisation des marqueurs de mouvement associés montre que l'expression de la direction centrifuge est plus fréquente que celle de la direction centripète.

En ce qui concerne l'expression des directions centripète et centrifuge en relation avec le fond, nous avons examiné uniquement l'utilisation de verbes déictiques, et ce dans les données dialogiques. Les résultats montrent que le fond a tendance à être encodé de manière implicite lorsqu'il est combiné avec les directions centripète (plus de 90 %) et centrifuge (plus de 69%).

Concernant les (a)symétries source-but, au niveau du discours, et en termes de fréquence, notre résultat montrent que le but apparaît plus fréquemment que la source dans les deux types de données, descriptives et dialogiques. Ainsi, les données du chinois standard confirment le principe de l'asymétrie source-but que l'on retrouve dans d'autres langues (Ikegami 1987 ; Bourdin 1997 ; entre autres).

Au niveau morphosyntaxique, les données descriptives et les données dialogiques présentent respectivement une asymétrie et une symétrie. Dans les données descriptives, le but est fréquemment exprimé par un seul élément (c -à-d., soit SAT ou PP (AFTER V)) dans les données *Trajectoire* (déplacement spontané) et par deux éléments (c -à-d., soit PP (AFTER V) + LOC ou SAT + LOC) dans les données *Put & Take* (déplacement causé) alors que la source est exprimée fréquemment par une combinaison de trois ressources linguistiques (c -à-d., PP + LOC + SAT). Cela confirme l'observation faite dans des études antérieures selon laquelle l'expression de but tend à être moins complexe du point de vue morphosyntaxique que l'expression de source (Bourdin 1997 ; Ishibashi 2012). En revanche, les données dialogiques révèlent une symétrie où la source et le but ont tous deux tendance à être exprimé au moyen d'un seul élément (c -à-d., v).

En examinant l'expression de la source et du but en relation avec le fond, nous avons constaté que les fonds source et les fonds but sont fréquemment exprimés de façon explicite dans les données descriptives, alors que dans les données dialogiques, ils ont tendance à être implicite.

Les diverses (a)symétries spatiales trouvées dans l'expression de la deixis dynamique diffèrent de celles trouvées dans l'expression de la trajectoire et ce, à différents niveaux, fournissant un argument de plus en faveur de l'idée selon laquelle les deux composants sémantiques devraient être traités distinctement.

La présente thèse a examiné de manière systématique l'expression de la deixis dynamique par rapport à l'expression de la trajectoire en adoptant l'approche onomasiologique. Le choix empirique de cette étude diffère de la majorité des études précédentes consacrées au chinois standard, mais aussi à d'autres langues, qui ont privilégié l'approche sémasiologique en se focalisant d'abord sur la forme (par exemple, COME et GO), puis en examinant le sens qui lui est associé et les extensions sémantiques. Dans le domaine de l'évènement spatial, le choix de l'approche onomasiologique est d'une grande importance puisque l'évènement spatial est constitué de plusieurs composants sémantiques et, pour exprimer un même concept, différentes langues ou différents locuteurs d'une langue peuvent recourir à ressources linguistiques différentes. Par conséquent, en prenant comme point de départ le concept de deixis dynamique et en explorant les différentes formes utilisées pour l'encoder, nous pouvons avoir une meilleure compréhension de la diversité des stratégies utilisées pour exprimer cette notion.

De plus, à la lumière des travaux de Lamarre (2008a, 2013) qui a examiné le chinois standard en comparant des données descriptives écrites (feuilleton) et des données dialogiques parlées (roman), cette recherche apporte une contribution aux travaux précédents en étudiant des données descriptives parlées (élicitation basée sur un stimulus). Une analyse comparative des données



appartenant à différents genres (descriptive vs. dialogique), différentes modalités (écrite vs. parlée), et différents types d'évènements (déplacement spontané vs. déplacement causé) nous permet de mieux comprendre les similarités et les différences dans l'expression de la deixis dynamique au sein d'une même langue.

En conclusion, ce travail de recherche, qui représente une première étude systématique de l'expression de la deixis dynamique en chinois standard à la lumière des stratégies d'encodage, des schémas de distribution et des (a)symétries spatiales, apportent une contribution non seulement à la recherche typologique de ce phénomène dans les langues du monde, mais aussi aux connaissances de ce domaine dans le champ de la linguistique sinétique. Il permettra par ailleurs d'apporter une nouvelle contribution à la théorisation de ce domaine concernant le rôle de l'ancrage déictique dans la communication humaine.