

Syntactic Change in Xining Mandarin

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Abstract

This dissertation discusses the Xining Mandarin dialect (spoken in Qinghai province, northwest China), a variety in which head-final syntax has emerged on the model of local Mongolic languages and Tibetan. The underlying socio-historical scenario is explored in detail and analysed as a case of ‘fort creolization’ (Bickerton 1988). An overview is then provided of how head-final categories emerged in the dialect, namely through reanalysing Chinese form-meaning units to fulfil functions found in the substrate languages, with comparatively little reordering of grammatical devices inherent to Chinese or outright borrowing of substrate forms. The relevant changes are discussed in relation to Heine and Kuteva’s (2005) model of contact-induced grammaticalization and findings from creole studies.

Detailed discussion of the dialect’s clausal syntax focuses on aspect marking, tense/mood marking, non-lexical functions of SAY and object scrambling. With regard to the aspectual system, an account is proposed of ZHE, which is typologically unusual in showing imperfective/perfective polysemy. Tense and modality is then considered with regard to the sentential particle *lia*, and its future marking function is seen to be conditioned by the aspectual class of the sentence, providing evidence of aspectually sensitive tenses (de Swart 1998) in Chinese. In terms of non-lexical functions of SAY, a range of clause-final uses are discussed, including as a complementizer and volitional mood marker, whilst discourse marking uses of SAY are interpreted in light of Traugott’s (1995, 2010) notion of (inter)subjectification.

Finally, object fronting in the dialect is shown to possess the properties of Japanese style scrambling, despite the absence of this type of movement across other Chinese dialects. Its existence in the Xining dialect, where phrase-structure change has occurred from head-initial to head-final, is argued to provide broad support for the correlation between head-final syntax and scrambling formalized by the Generalized Holmberg Constraint (Wallenberg 2009).

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Table of Contents

Abstract.....	iii
Acknowledgements	iv
Table of Contents	vi
List of Tables	xi
List of Figures.....	xii
Abbreviations	xiii
Chapter 1 Introduction	1
Chapter 2 Socio-linguistic Background	3
2.1 Introduction	3
2.2 Linguistic overview of Xining Mandarin	3
2.3 Socio-linguistic and geographical context.....	4
2.4 History of the contact scenario in the Qinghai-Gansu region.....	6
2.4.1 The ancestor language of the Xining dialect: lower Yangtze Chinese	11
2.5 First phase of language contact: fort creolization	16
2.5.1 Introduction.....	16
2.5.2 Abrupt language shift hypothesis.....	17
2.5.3 Critique of the shift hypothesis	19
2.5.4 Trade fort pidgins and the Xining dialect	21
2.5.4.1 Introduction	21
2.5.4.2 The Monguor.....	25
2.5.4.3 The socio-geographical context of the Monguor and Chinese communities in the Ming period.....	26
2.5.4.4 Monguor and Chinese demographics in the Ming period	29
2.5.4.5 Monguor-Chinese interactions in the Ming period	30
2.5.4.5.1 Trade.....	31
2.5.4.5.2 Monguor-Chinese intermarriage.....	33
2.5.4.5.3 On the Monguor elite class	35
2.5.4.6 Language shift during the Qing dynasty	37
2.5.5 Section summary.....	39
2.6 Second phase of language contact: the influence of Standard Mandarin in modern times	41
2.6.1 Modern day language shift.....	43
2.7 Background to this study.....	45
Chapter 3 Head-final Syntax in the Xining Dialect.....	49
3.1 Introduction	49
3.2 Overview	49
3.3 Reordering	52
3.3.1 Verb-object → object-verb (and back again).....	52
3.3.2 Aux (necessative)-VP → VP-Aux (necessative)	59

3.3.3	O-V-ZHE to V-O-ZHE	60
3.4	New head-final orders through functional transfer	62
3.4.1	SAY complementizer	63
3.4.2	SAY hearsay/quotative marker	64
3.4.3	Object marker <i>ha</i>	65
3.4.4	Future tense/modal <i>lia</i>	67
3.5	New head-final orders through borrowing	68
3.5.1	Ablative postposition	69
3.5.2	Possibility modal	69
3.6	Comitative/instrumental postposition (an indeterminate case)	70
3.7	Contact-induced grammaticalization in Xining Mandarin?	71
3.7.1	Background	71
3.7.2	SAY complementizer and SAY evidential	74
3.7.3	Object marker <i>ha</i>	75
3.7.4	Future <i>lia</i>	76
3.7.5	Interim summary	76
3.8	Creole studies and the Xining dialect	76
3.9	Morphosyntactic convergence and gap-filling	86
3.10	Chapter summary	89
Chapter 4	Imperfective and Perfective Aspect Marking by ZHE	91
4.1	Introduction	91
4.2	Background: ZHE in Modern Standard Mandarin	91
4.3	ZHE in the Xining dialect: a general imperfective marker	95
4.3.1	Internal stage focus	96
4.3.1.1	Stative verbs	97
4.3.1.2	Generic sentences	98
4.3.1.3	Modals	98
4.3.1.4	Habituals	98
4.3.1.5	Progressive marking	99
4.3.2	Preliminary stage focus	99
4.3.3	Resultant state marking	100
4.3.4	Interim summary	102
4.3.5	Aspectual selection by ZHE	103
4.3.6	Imperfective ZHE and language contact	107
4.4	Perfective marking by ZHE	110
4.4.1	Aspectual selection by perfective ZHE	113
4.4.2	The origin of perfective ZHE in the Xining dialect	117
4.5	On the form of ZHE	122
4.6	Chapter summary	124
Chapter 5	Tense and Mood Marking by the particle <i>lia</i>	126
5.1	Introduction	126
5.2	Previous studies on <i>lia</i>	126
5.3	Theoretical background	128
5.4	Aspectual selection by <i>lia</i>	130

5.5	Future marking with <i>lia</i>	130
5.5.1	Aspectual selection by future <i>lia</i>	135
5.5.2	Achievement and accomplishment predicates.....	136
5.5.3	Activity predicates.....	137
5.5.4	Statives.....	140
5.5.5	Future <i>lia</i> and <i>bu</i> negation.....	142
5.6	Modal <i>lia</i>	143
5.6.1	Aspectual selection by modal <i>lia</i>	147
5.6.2	Stative verbs.....	148
5.6.3	Stative modal auxiliaries.....	149
5.6.4	Progressives.....	150
5.6.5	Resultant states.....	151
5.6.6	Locatives.....	152
5.6.7	Habitual frequency adverbials.....	152
5.6.8	Generic predicates.....	152
5.7	Discussion	153
5.7.1	Relative future tense uses.....	153
5.7.2	<i>Lia</i> is not an irrealis marker or a prospective aspect marker.....	153
5.8	Contact origin: Mongolic non-past suffix -NA	156
5.9	Conclusion	163
Chapter 6	Non-lexical Uses of SAY	164
6.1	Introduction	164
6.2	Reported speech in Xining Mandarin	165
6.3	SAY complementizer	166
6.3.1	Background to the SAY verb to complementizer change.....	166
6.3.2	SAY complementizers in non-Mandarin Chinese dialects.....	170
6.3.2.1	Taiwanese Southern Min.....	171
6.3.2.2	Cantonese.....	172
6.3.2.3	Xiang (Longhui dialect).....	173
6.3.3	SAY complementizers among Mandarin dialects.....	174
6.3.3.1	Beijing Mandarin.....	174
6.3.3.2	Taiwan Mandarin.....	179
6.3.4	SAY complementizers in Xining Mandarin.....	181
6.3.4.1	Head-final complementizer <i>fozho</i>	181
6.3.4.2	Head-final <i>fo</i> complementizer.....	185
6.3.4.3	Particle complementizer <i>fo</i>	186
6.3.4.4	Complex SAY-SAY complementizer.....	187
6.3.4.5	The embedded status of the complement of head-final complementizer <i>fozho</i> in cross-linguistic perspective.....	189
6.3.4.6	The Final-over-Final constraint.....	193
6.3.4.7	SAY complementizer in the Xining dialect and the role of language contact	
	197	
6.3.5	Conclusion: complementizer uses of SAY in the Xining dialect.....	204
6.4	Evidential and discourse functions of SAY	204
6.4.1	Background.....	204

6.4.2	Reported speech and hearsay marking in Xining Mandarin	207
6.4.3	Reportative/hearsay evidentials in neighbouring languages	209
6.4.4	SAY as a discourse marker	211
6.4.4.1	Background	211
6.4.4.2	Discourse marker uses of Xining Mandarin fozho, fo	214
6.4.4.2.1	Previous studies on discourse marker fo	214
6.4.4.2.2	Information-seeking	217
6.4.4.2.3	Confirmation seeking	219
6.4.4.2.4	Agreement-seeking	220
6.4.4.2.5	Face-saving device / softener	221
6.4.4.2.6	Intensifier	222
6.4.4.2.7	On the composite marker fozho	223
6.4.4.2.8	Section summary	224
6.5	Volitional modality	225
6.5.1	Background	225
6.5.2	Volitional modality and Xining Mandarin SAY	226
6.5.3	The role of language contact in the development of intention fozho	228
6.6	SAY as a conjunction	230
6.7	Topic/condition clause marking by SAY	236
6.8	Chapter summary	239
Chapter 7	Scrambling	240
7.1	Introduction	240
7.2	SOV word order	240
7.2.1	Proper names/pronouns	242
7.2.2	Indefinite objects	243
7.2.3	Clausal complements	243
7.2.4	wh-phrase objects	244
7.2.5	Shi... de cleft construction	244
7.2.6	Interim summary	244
7.3	Topicalization	245
7.3.1	Standard Mandarin topicalization vs. Xining Mandarin object fronting	246
7.4	Japanese style scrambling	252
7.4.1	Radical reconstruction	254
7.4.2	Adjuncts	258
7.4.3	Multiple scrambling	260
7.4.4	Scope ambiguity	262
7.4.5	Scrambling of wh-phrases	264
7.4.6	Scrambling creates an A-binder	265
7.5	Landing site for object scrambling	268
7.6	The Generalized Holmberg Constraint	273
Chapter 8	Conclusion	279
Appendix A	282
Appendix B	284

References..... 286

List of Tables

Table 2-1 Ming guanhua initials and Xining initials (quoted from Dede 1999a: 72).....	12
Table 2-2 Ming guanhua finals and Xining finals (quoted from Dede 1999a: 73).....	13
Table 2-3 Lexical items shared in Xining and Anhui Mandarin	14
Table 3-1 Grammatical replication in the Xining dialect	76
Table 3-2 Gap-filling in the Xining dialect.....	88
Table 4-1 Patterning of imperfective viewpoints with situation types	105
Table 4-2 Uses of ZHE across Mandarin dialects (reproduced from Qu 2006: 41)	119
Table 5-1 Vendler’s four verb classes (reproduced from Chen and Shirai 2010: 2)	135
Table 5-2 Lia-marked predicates with future time reference.....	136
Table 5-3 Lia-marked predicates with non-future time reference.	148
Table 7-1 Properties of Standard Mandarin topicalization and Xining Mandarin scrambling	252
Table 7-2 Differences between Japanese style scrambling (JSS), German scrambling (GS) and Slavic scrambling (SS)	253
Table 7-3 Properties of JSS, Standard Mandarin topicalization and Xining Mandarin scrambling. M = medium scrambling, L = long scrambling.	253
Table B-1 Matrix verbs selecting fozho-marked complements.....	284
Table B-2 Lexical and non-lexical uses of the SAY verb	285
Table B-3 Discourse marker uses of SAY.....	285

List of Figures

Figure 2-1 Map showing the location of the Qinghai-Gansu region and Xining city	5
Figure 2-2 Map showing the primary origin of the Han settlers of the Qinghai-Gansu region...	10
Figure 2-3 A border market in Gansu/Qinghai in the 1930s	32
Figure 2-4 Historical development of the ablative pattern (reproduced from Dede 1999a: 11)	43
Figure 2-5 Map showing the location of Haibei prefecture, and Menyuan and Haiyan counties.	46
Figure 3-1 Main types of contact-induced linguistic transfer (Heine and Kuteva 2008: 59) ..	50
Figure 3-2 Mechanisms used in the emergence of head-final categories in the Xining dialect	51
Figure 3-3 Word orders for imperfective ZHE in the Xining dialect	61
Figure 3-4 Continuum of contact varieties based on degree and type of functional transfer ..	77
Figure 3-5 Stage 2, untargeted morphological expansion	79
Figure 3-6 Stage 2, targeted morphological expansion (by continued L2 acquisition)	85
Figure 4-1 Classification of aspectual oppositions (Comrie 1976: 25)	95
Figure 4-2. IPFV marking in Xining Mandarin	95
Figure 6-1 Functional extensions of speech verbs (cf. Güldemann 2008: 522 and Chappell 2008:49).....	164
Figure 6-2 Possible and impossible configurations under the Final-over-Final constraint (reproduced from Biberauer et al. 2014: 171)	193
Figure 6-3 Reanalysis from serial verb construction to SAY complementizer	202

Abbreviations

Abbreviations used in this dissertation, including those from cited authors, are as follows:

1 st	first person singular
2 nd	second person singular
3 rd	third person singular
2H	inference or hearsay
1PL	first person plural
2PL	second person plural
3PL	third person plural
1SG	first person singular
2SG	second person singular
3SG	third person singular
ALETH	alethic
ABS	absolute
ACC	accusative
ADV	adverb
ASP	aspect
AUX	auxiliary
BEN	benefactive
CAUS	causative
CL	classifier
CMP	complementizer
CNJ	conjunction
COM	comitative
COMPL	completive
COND	conditional
CONJ	conjunct
CONJN	conjunction
CONN	connective
COP	copula
CRS	currently relevant state
CVB	converb
DAT	dative

DECL	declarative
DEM	demonstrative
DET	determiner
DIR	directional
DIST	distal
DUR	durative
EGO	egophoric
EPIS	epistemic
ERG	ergative
F	feminine
FOC	focus
FP	final particle
FUT	future
GEN	genitive
GN	generic
HORT	hortative
HSY	hearsay
IMP	imperative
INDEF	indefinite
IPFV/ IMPERF	imperfective
IRJ	interjection
KV	linking converb
LOC	locative
LOG	logophoric pronoun
M	masculine
MOD	modal
MIR	mirative
MW	measure word
NAME	name
NEG	negator
NEGO	non-egophoric
NMLZ	nominalizer
NOM	nominative
NOMZ	nominalization
NPT	non-past

NPFV	non-perfective
NR	nominalized clause marker
OBJ	object marker
OBL	oblique
ONM	onomatopoeic
OM	object marker
P	participial suffix
P.PRF	perfective participle
PASS	passive
PERF/PFT	perfect
PFV	perfective
PL	plural
Po	postposition
POSS	possessive
PROG	progressive
PROX	proximal
PRES/PRS	present
PRT	particle
PRAE	praeparativum
PSN	person's name
PST	past
PURP	purpose
Q	question
QUOT	quotative
QV	quotative verb
REP	reportative
S	singular
SR	subordinate clause marker
SUB	subordinator
SUBJ	subjective
TOP	topic
TRS	transitive suffix
VOL	volitional

Chapter 1 Introduction

Despite an abundance of well-described cases of syntactic change from SVO to SOV, the reverse change – from a head-initial to a head-final grammar – is much rarer and less well studied, generally acknowledged as only occurring through language contact (e.g. Ross 1988, Gell-Mann and Ruhlen 2011, van Gelderen 2011: 359-60). The present study seeks to provide a window on the emergence of head-final syntax by considering a regional variety of Chinese, Xining Mandarin, which presents a striking case of not just the emergence of OV order, but of an entirely head-final clause structure. What may superficially seem to be word order change from a Chinese head-initial grammar to a head-final grammar turns out to have involved little reordering of Chinese grammatical categories. Rather, head-final categories have been created chiefly through substrate transfer involving the assignment of grammatical functions to Chinese lexical items or by alteration of already clause-final Chinese grammatical devices.

To gain insights into how this has occurred, the socio-historical scenario underlying the Xining dialect will be reconstructed on a macro and local level. The discussion thus begins (in Chapter 2) by arguing that the dialect originated as a case of ‘fort creolization’ (Bickerton 1988), showing that a contact scenario usually associated with European colonization of West Africa and the Pacific has been closely paralleled in Northwest China. It is suggested that this finding for the Xining dialect is of interest not only for its own sake but can also shed light on how regional dialectal variation has arisen elsewhere in China with the expansion of the Chinese frontier. Then an overview of the dialect’s head-final syntax is presented, with an account of the linguistic (and sociolinguistic) mechanisms responsible for their emergence (Chapter 3).

The dissertation then contains several micro-level analyses of aspects of the dialect’s clausal syntax, and identifies the respective mechanisms of contact-induced change. Chapters 4-5 are partly descriptive, contributing to our knowledge of less-well documented aspects of the dialect, and partly explanatory/theoretical, addressing puzzles concerning the distribution of tense and aspect marking in such a way as to demonstrate the usefulness for typological studies of a unified semantic theory of aspect (e.g. de Swart 1998). Chapter 6 expands the catalogue of known non-lexical uses of SAY in the dialect, and shows the uniqueness of these functions in the Xining dialect in comparison to varieties in other parts of China. Thereafter, in Chapter 7, a particular type of object fronting (‘Japanese style scrambling’) is identified

which is not attested elsewhere among Chinese dialects, illuminating the relation between scrambling and head-final clausal syntax. Finally, Chapter 8 concludes.

Chapter 2 Socio-linguistic Background

2.1 Introduction

In this chapter the socio-linguistic history of the dialect is reconstructed from the available historical sources and a proposal is made concerning the evolutionary trajectory of the dialect. The Xining dialect is analysed as a case of ‘fort creolization’ (Bickerton 1988), such that the dialect emerged through a gradual progression from trade jargon to a pidgin to a stable and then an expanded pidgin. In this respect, the account provided diverges from the assumption found in the literature, made on linguistic grounds, which was that substrate features were introduced abruptly and were nativized at the outset of the contact scenario as a result of language shift by large portions of the local population (e.g. Dede 1999a, 1999b). In addition to providing insights into the origins of the Xining dialect, it is suggested that the fort creolization account also sheds light on the spread of the Chinese language elsewhere across the Chinese frontier in pre-modern times, where Chinese expansion into non-Han areas has led to similar fort-based contact scenarios being created.

The forthcoming sections are ordered as follows. First, a brief overview is provided of the dialect (Section 2.2), the socio-linguistic and geographical context (Section 2.3), and the macro level picture of how the contact scenario came about (Section 2.4). Then the nature of language contact on the local-level is discussed in detail to show how substratum interference occurred in the Xining dialect through fort creolization (Section 2.5). The influence of Standard Mandarin in modern times is considered in Section 2.6, and then some background information is provided on the present study (Section 2.7).

2.2 Linguistic overview of Xining Mandarin

Xining Mandarin is a Central Plains Mandarin dialect (Kurpaska 2010), named after the capital city of Qinghai province. Morphosyntactically, Xining Mandarin has strikingly converged upon the typological profile of the local languages. Like these languages, the dialect possesses basic SOV word order (e.g. Cheng 1980, Yang 2009) – despite SVO order also being used (cf. Section 3.3.1). Xining Mandarin also has auxiliary verbs which occur clause-finally following the verb, even though, as Chappell (2001) notes, in Chinese auxiliaries precede the verb. In addition, in the nominal domain, postpositions exist where prepositions are used in Chinese dialects outside of the Qinghai-Gansu region. For example, an ablative and an instrumental/comitative postposition are found, categories which are

marked prepositionally elsewhere among Chinese dialects (cf. Section 2.6, Chapter 3). Also, Xining Mandarin possesses non-Sinitic features like clause-final (future) tense marking and a SAY complementizer which follows rather than precedes the complement clause (cf. Chapter 5 and 6). However, despite undergoing such intensive morphosyntactic restructuring, phonologically the dialect shows comparatively little in the way of contact-induced change, and in this respect is clearly a variety of Mandarin (cf. Kawasumi 2014, Wang and Dede 2016: 20). Similarly, the lexicon contains few loan words from local languages (cf. Zhang and Zhu 1987, Dede 1999b: 58-9). In line with Thomason's (2001: 75-6) predictions, in Section 2.5 this will be seen to be a consequence of the social dynamics in the region, with the Chinese having been socio-politically dominant since the outset of the contact scenario.

2.3 Socio-linguistic and geographical context

Qinghai province is located in the northwest of China, on the northeastern edge of the Tibetan plateau (shaded in brown on the map below), with an average altitude of over 3000 metres. The province is named after Qinghai ('blue-green sea') lake, the name of which is translated from Mongolian *Kokonor*. Although the largest province-level administrative division in China, with an area of 720,000 km², the majority of the population inhabit the northeastern corner to the east of Qinghai lake where the altitude is lower and the climate permits agriculture. To the west of the province is the Qaidum basin, an arid region of deserts and salt lakes. The modern provincial boundaries for Qinghai and Gansu are as shown:

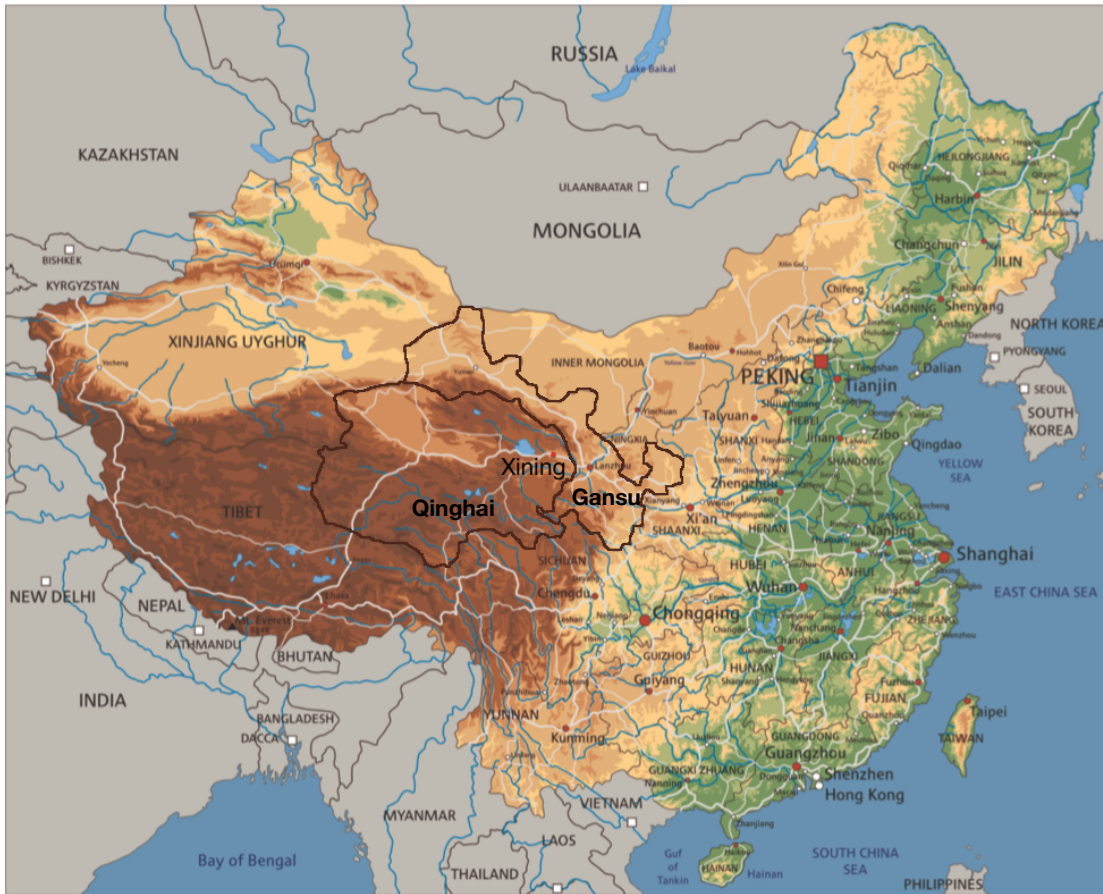


Figure 2-1 Map showing the location of the Qinghai-Gansu region and Xining city

Demographically, with a population of 2,208,708, Xining city accounts for almost 40 percent of Qinghai's total population of 5,626,722.¹ Across the province as a whole, the Han Chinese constitute a slight majority, making up 53 percent of the total population of Qinghai, followed by the Tibetans who comprise 24 percent and the Hui 15 percent. In total, there are approximately 15 distinct languages in the area (cf. Janhunen 2007), which include Amdo Tibetan and Salar as the primary Bodic and Turkic languages, and the regional variety of Mandarin ('Qinghai Mandarin', classified into subdialects below) as the primary Sinitic language. The region's Mongolic languages include Deed Mongol (an Oriad dialect of Mongolian), and also the languages of the people classified as the *Tuzu* by the Chinese government (often known as the Monguor in western publications), who chiefly speak the Mangghuer and Mongghul languages (Slater 2003). In view of the multi-directional contact-induced convergence taking place among the region's languages, the area has been termed a 'Sprachbund' or 'Language area': the 'Northwest China Sprachbund' (Dwyer 1995), the 'Qinghai-Gansu Sprachbund' (Slater 2003) or the 'Amdo Sprachbund' (Janhunen 2007).

¹ Figures in this paragraph are from the 2010 census (QSIN 2012a).

The following sections outline two largely independent stages of language contact which have been significant in impacting the dialect, both corresponding to periods of large scale Han immigration into the region (cf. Dede 2003 and Slater 2003: 6-9).

2.4 History of the contact scenario in the Qinghai-Gansu region

Historically, the Qinghai-Gansu area was the northwestern frontier of successive Chinese empires (empires of the 'Han' people, who take their name from the 'Han' dynasty of 206 BC - 220 AD). The region has long been a contact zone for different ethnic groups, with the Han Chinese entering from the east/southeast, Mongolic peoples to the north/northeast and Tibet to the southwest. This was also an area of strategic economic importance, containing a number of major silk road routes, not only through Gansu province (the *Hexi* or Gansu corridor), but also through Qinghai and its capital Xining (Tong 2008). Unsurprisingly, political control of the region was fiercely contested: for a time Xining formed part of the Tibetan empire (7th-9th century), as well as being controlled by the Mongols during the Yuan dynasty (1271-1368), until the Chinese secured control of northeastern Qinghai under the Ming dynasty (1368-1644). The present section argues, in line with several other studies, that the present-day Xining dialect dates to a contact scenario that took shape during the Ming period as a result of Han immigration into the region, chiefly from the wider Nanjing area in eastern China.

In the pre-Ming period there were repeated Han military expeditions to the area leading to military-agricultural communities (*tuntian*) being established, such that a Chinese-speaking population existed in the region over two thousand years ago. As Dede (2003) notes, like in the later Ming period, being an agrarian people, the Han immigrants settled in the river valleys in northeastern Qinghai, not expanding west into the arid, higher altitude regions. Even from as early as the Han to Jin period (3rd century BC - 3rd century AD), archeological evidence exists of the Sinicization of local clans, which shows that there were periods of Chinese power in the region and suggests that there was probably also learning of Chinese by the indigenous peoples in this early period (cf. Tong 2008: 192). But the Han presence likely endured only while the empire was strong enough to support it; when the empire weakened or came under attack elsewhere, these Han settlers were forced to withdraw, or were assimilated into the population of the power dominant at the time. Following each retreat of the Han people, the Chinese language can be expected to have mostly disappeared from the region with them. Thus Schram (2006: 125) remarks of the Xining area in the pre-Ming period:

It is probable, from what we know of the general character of Chinese history, that when [the Han Chinese] colonies disappeared and the country was reoccupied by nomads, some of the Chinese were killed, some fled back to areas with a more numerous agricultural population and strong walled cities, and some were absorbed by the nomads and became barbarians.

Similarly, Dede (2003) suggests that during this pre-Ming period, the Han people did not succeed in establishing a presence in the area that was sufficiently enduring or large enough to permit the development of a Chinese dialect distinctive to the region.

Further reasons given by Dede (2003) for dating the modern dialect to no earlier than the early Ming period are that beginning from the Ming until this day there has been ethno-linguistic continuity in the region, and relative (though certainly not absolute) administrative and social stability in the region. Both of these factors were conducive to the development of a regional dialect. With regard to the former, a constant Han Chinese presence has existed alongside speakers of Mongolic, Turkic and Tibetan languages who were already in the area pre-Ming. Tibetans did not disappear from the area following the demise of the Tibetan empire (7th - 9th century); Mongolic speakers likely began to arrive in the area in significant numbers no earlier than the mid 13th century (cf. Slater 2003: 7), and the Turkic Salar people arrived shortly after this during the 14th century (cf. Dwyer 2007: 3-8). In terms of the stability of the region, from the Ming period the Chinese have for the most part been politically and economically dominant, despite periods of warfare and resistance which took place particularly from the 18th century onwards, with events such as the Islamic revolt occurring in the mid-19th century (cf. Roche 2011: 231). After the arrival of the Ming armies in Xining in the 1370s, most of the local tribes submitted peacefully to the Ming dynasty, with a hereditary *Tusi* 'tribal chieftan' system established by the Ming emperor to administrate the indigenous peoples on behalf of the Ming court. The subjugated Monguor clans in particular remained loyal to the Ming and later Qing government (cf. discussion below). Thus unlike in the pre-Ming period with its ebb and flow of Chinese power in the region, from the Ming period onwards Chinese was established as the prestige language in the Xining area.

With regard to the origin of the Chinese-speaking settlers, many scholars have identified that the Ming immigrants primarily came from the lower Yangtze region (e.g. a.o. C.-C. Zhang 1992, S. C. Wang 2009a, Yan 2012). Among the most important sources of evidence are the *jiapu* 'family genealogies' and *beiji* 'tablet inscriptions' concerning those Han who identify

themselves as natives of Qinghai (as opposed to recent immigrants) (cf. C.-C. Zhang 1992: 72). These records report that their ancestors came to the area during the early Ming period, many of them from the lower Yangtze area (and notably from Nanjing, the early Ming capital). In line with the genealogical records, there is also a widespread belief among the residents of Qinghai that their ancestors came to the region from Nanjing, many as a punishment during the reign of the Hongwu emperor in the early Ming period (1386-1398). S. C. Wang (2009a: 478) reports that related accounts are found in the official county records for a number of counties (e.g. county records for Pingan, Huangyuan, Datong, Huzhu, Hualong and Menyuan). For instance, records for Menyuan and Hualong counties note that some of the local Hui population came from a particular alley in Nanjing (*Zhuji xiang*), along with a large number of Han people, having been banished to Qinghai for offenses against the imperial family (S. C. Wang 2009: 348).

The evidence for a Nanjing origin, however, does not mean that the majority of immigrants came from the city of Nanjing itself. Many of the immigrants almost certainly came from the wider area around the capital (cf. Schram 2006: 125), and yet this does not make the Nanjing tradition incorrect. In the Ming period, ‘Nanjing’ is known to have referred not only to the modern city Nanjing: Ming ‘Nanjing’ was a very large area under the jurisdiction of Nanjing city (C.-C. Zhang 1992). Ming ‘Nanjing’ – known as Yingtian prior to 1420 (D.-Q. Liu 1995: 3) – was also referred to as *Nanzhili* or *Nanzhili sheng*, administrative terms denoting a province directly governed by Nanjing (cf. D.-Q. Liu 1995: 3, Zeng 2013). According to *Zhongguo lishi ditu ji* ‘The Historical Atlas of China’ (1996: 46-7), *Nanzhili* reached as far east as the coast, having jurisdiction over Shanghai and Chongming island in the mouth of the Yangtze river (C.-C. Zhang 1992: 75). Reaching west, it spanned the width of neighbouring modern Anhui province and extended beyond to Yingshan in Hubei province; to the north it included Xuzhou (north of Jiangsu province), and to the south, it included Suzhou (south of Jiangsu province) and Wuyuan in northeastern Jiangxi province. From east to west, this area was over 300 miles wide, and over 350 miles from north to south. So the fact that the Nanjing tradition is widespread in Qinghai can be explained partly by the fact that the ancestors of the native Han people came from Nanjing province (spanning modern Anhui, Jiangsu, Jiangxi and Hubei provinces), rather than Nanjing city alone.

Other historical evidence also indicates the presence of Jiang-Huai culture and varieties of Chinese in the Qinghai-Gansu region. During the reign of the Kangxi emperor (1661-1722), a government official named *Songqifeng* commented on the Nanjing culture in the region reflected in the fact that they had planted rice paddies (a Southern rather than Northern

practice) along the Yellow river (Yan 2012: 41). *Songqifeng* also records that the local Han residents in Gansu, who had arrived in the earlier Ming period from *Moling* in Nanjing, still spoke with an Wu accent, which was difficult for him to understand. Moreover, their hairstyle and clothing was that of the Wu region (Yan 2012: 41). Also, Yan (2012: 41) mentions that 20th century archaeological excavations have uncovered distinctively Wu shoes and clothing in the area. With regard to the proportion of immigrants originating from this region, according to Yan (2012), who analysed records showing the origin of the military officers dispatched to Qinghai-Gansu, as many as 80% of the immigrants came from the lower Yangtze area (roughly, the area described above as *Nanzhili*).² Whether the proportion was actually as high as 80% or not, it is reasonable to conclude based on the evidence above that immigrants from this region were a strong majority. Accordingly, a schematic representation of the origin of the Han settlers can be given as follows (population figures are discussed in Section 2.5).

² The remainder came from all across the country, and there does not seem to be a single location that accounts for this minority.



Figure 2-2 Map showing the primary origin of the Han settlers of the Qinghai-Gansu region

In summary, the evidence discussed suggests that, even though Chinese was spoken in the region much earlier, the modern Xining dialect can be dated to Han Chinese immigration into the region during the Ming period, and that the majority of Ming immigrants came from the wider Nanjing area (*Nanzhili*). This was concluded on the basis of the genealogical records, the widespread tradition among the native Han residents of Qinghai, the records concerning the origin of soldiers dispatched to the region, and archaeological evidence showing the presence of Lower Yangtze culture in the area. As such, the view taken here is in line with Schram (2006: 125), who states, ‘History and tradition seem to tally [...] in recognizing these military colonists [from Jiangsu] as the pioneers of the present Chinese population of the Hsining [Xining] region’. In the next section, linguistic evidence for this view will be considered.

2.4.1 The ancestor language of the Xining dialect: lower Yangtze Chinese

If the majority of Ming immigrants to Qinghai came from the lower Yangtze region and from Nanjing (*Nanzhili*) in particular, then the languages of this region can be regarded as the primary ancestors from which Qinghai Mandarin originated. The varieties concerned were chiefly Jiang-Huai Mandarin (*Jianghuai guanhua*) and Wu. The former is spoken in Jiangsu province (for the most part, north of the Yangtze), as well as central Anhui and in Nanjing (Norman 1988: 191, Chappell 2001). According to Zeng (2015), the Mandarin dialect spoken in Jiangsu and Anhui province during the Ming period was a blend of Jiang-Huai Mandarin and Central Plains Mandarin. Jiang-Huai Mandarin itself was formed through contact between the native Wu language and Northern Mandarin brought to the area through southward immigration over several dynasties (Qu 2006: 42, after D.-Q. Liu 1995: 3-4). In line with its geographic position in between Northern Mandarin and Southern Chinese dialects, Jiang-Huai Mandarin is a variety of Mandarin which shows relatively more properties of the Southern (non-Mandarin) Chinese dialects than Northern Mandarin (Ibid.). The primary Southern Chinese dialect concerned was Wu, spoken in Jiangsu province south of the Yangtze, though around Nanjing city Mandarin was used (cf. Norman 1988: 199, Kurpaska 2010: 161).

A minority of Han immigrants came from various other parts of the country and brought with them their varieties, which included regional varieties of Mandarin. As noted above, on Yan's (2012) calculations, this non-Nanjing group constituted as little as 20% of the immigrating population. As such, their language varieties are not likely to have played a significant role in the formation of the Xining dialect. Aside from being a minority speaking a diversity of regional varieties of Chinese rather than a single shared variety, the prestige language in the emerging Han settlements during the Ming and much of the Qing (1644-1912) period was the variety of *guanhua* (Mandarin) modelled on the dialect of the lower Yangtze region in eastern China, and in particular on Nanjing, the early Ming capital (Coblin 2000). Given that speakers from this region were in the majority, and that their variety was the prestige variety, it is reasonable to assume that this was the variety that native non-Han inhabitants would have endeavoured to acquire. It was not until the 19th century that, with the growing influence of the northern capital Peking, the preferred standard variety of Mandarin became northern *guanhua* (Coblin 2000). By this time, the interethnic contact situation giving rise to the regional variety of Mandarin in Qinghai province had already been in place for several hundred years.

In support of the Nanjing (*Nanzhili*) origin of the majority of the immigrants, linguistic similarities are evident between lower Yangtze Chinese and the Xining dialect. Despite being geographically distant from the Lower Yangtze region, the Xining dialect shares a number of properties with both Jianghuai Mandarin (C.-C. Zhang 1992) and the Wu dialect of Chinese (S. C. Wang 2009a) across phonological, lexical and grammatical domains. First, consider the phonological similarities. That the Xining dialect is closely related to Lower Yangtze Ming *guanhua* can initially be seen from Dede's (1999b: 72) comparison of the phonological system of the Xining dialect with the phonology of Ming *guanhua*, which is 'a Jiang-Huai-based koine' modelled on the speech of Nanjing (Coblin 1997: 262, 285).³

Ming	Xining	Example	Ming	Xining	Example
p-	p-	本	s-	s-, ɸ	思, 徐
p'-	p'-	怕	tʂ-	tʂ-	真
m-	m-	马	tʂ'-	tʂ'-	城
f-	f-	方	ʂ-	ʂ-, f	杀, 水
v-	v-~∅	万	ʐ-	ʐ-	人
t-	t-	当	k-	k-, -tɕ	感, 近
t'-	t'-	他	k'-	k'-, tɕ	开, 其
n-	n-	能	ŋ-	∅	爱
l-	l-	俩	x-	x-	海
ts-	ts-, -tɕ	早, 进	(ɣ)w-	v-~∅, x-	完, 湖
ts'-	ts'-, -tɕ'	菜, 亲	∅	∅	烟

Table 2-1 Ming *guanhua* initials and Xining initials (quoted from Dede 1999a: 72)

The main difference between present day Xining phonology and that of Ming *guanhua* is that the Xining dialect possesses the palatal initials ɸ-, tɕ-, tɕ'- (Dede 1999b: 72). Likewise, the finals in the Xining dialect, whilst not identical, also closely resemble those of Ming *guanhua*:

³ Dede (1999b: 72) compiled the tables cited here on the basis of Coblin's (1997) Ming *guanhua* phonology and Zhang and Zhu's (1987) data on the Xining dialect. The former was produced with reference to a transcription of the *guanhua* sound system by Jesuit missionary Nikolaas Trigault (1577-1628).

Ming	Xining	Example	Ming	Xining	Example
i	i	把	yʔ	ND	ND
ia	ia	家	ɸ	v	书
ua	ua	花	ɸʔ	v	出
ai	ɛ	代	ɛ	ɛ	车
iai	ɪ	解	iɛ	j	妻
uai	ue	快	yɛ	yu	癩
au	ɔ	闹	uei	ui	灰
iau	iɔ	小	eu	u	臭
an	ã	班	ieu	iu	酒
uan	uã	关	en	ẽ	恩
aŋ	õ	方	ien	iã	犖
iaŋ	iɔ	将	uen	uã	船
uaŋ	uõ	王	yen	yã	劝
aʔ	a	法	eŋ	ẽ	等
iaʔ	ia	甲	eʔ	i	得
uaʔ	ua	滑	ieʔ	i	节
i	i,j	肥, 其	ueʔ	ui	国
in	iõ	心	yɛʔ	yu	绝
iŋ	iõ	请	əʔ	yu	月
ɿ	ɿ	思	iaʔ	j	笔
ʅ	ɿ	知	ʂ	ɛ	儿
u	v	苦	oʔ	v	读
ui	i, ui	睡, 对	ioʔ	y	蓄
un	uã	顿	ɔ	u	多
uŋ	uã	中	uɔ	ND	卧
iuŋ	uã	浓	uɔn	uã	短
uʔ	v	服	ɔʔ	u	割
ɤ	y	去	ioʔ	yə	略
yn	yẽ	用			

Table 2-2 Ming *guanhua* finals and Xining finals (quoted from Dede 1999a: 73)

With regard to finals, the primary differences are that the Xining dialect (like most other Mandarin dialects) has lost the glottal stop finals of Ming *guanhua* (known as *rusheng*), and instead of dental and velar nasal finals has nasalized vowels (Dede 1999b: 73-4). The stop finals are found in many Southern Chinese dialects, such as Wu, Min and Yue, but not in many varieties of Mandarin (Sun 2006: 30). In addition, as Dede (1999: 49) notes, there is a regular correlation between Standard Mandarin words beginning with *shu* (IPA: ʂu) and words beginning with the labio-dental fricative f- in the Xining dialect e.g. *shu* ‘book’ is

[ʃu⁴⁴] in Standard Mandarin, but [fv⁴⁴] in the Xining dialect, and *shui* ‘water’ is [fr⁴²] in the Xining dialect. This may also be due to the origin of the immigrants, since as C.-C. Zhang (1992: 75) notes, in parts of Anhui province we find a similar correlation: *shui* ‘water’ is pronounced [fei], *shu* ‘book’ is [fu], and *shuan* ‘tie up’ is [fã].

With regard to the lexicon, C.-C. Zhang (1992: 75) identifies commonalities such as the following between the Xining dialect and that spoken in Anhui province in the lower Yangtze region:

English	Standard Mandarin	Anhui Mandarin	Xining Mandarin
Sun	<i>taiyang</i>	<i>ritou</i>	<i>ritou</i>
Cook (n.)	<i>chushi</i>	<i>dashifu</i>	<i>dashifu</i>
Father	<i>fuqin</i>	<i>dada</i>	<i>dada</i>
Paternal aunt	<i>gu</i>	<i>Niangniang</i>	<i>niangniang</i>
Beautiful	<i>mei</i>	<i>jun</i>	<i>jun</i>

Table 2-3 Lexical items shared in Xining and Anhui Mandarin

Meanwhile, S.-C. Wang (2009a) identifies various lexical items as common in Wu and in the Xining dialect but seldom used or not found in other Northern Mandarin dialects. These include the Xining dialect’s use of [nɛ⁵³] with the meaning of child, as in the expression *naiga* [nɛ⁵³ka¹³], where [nɛ⁵³] is followed by the diminutive to denote the smallest child in one’s family. In addition, S.-C. Wang points to kinship terms, where a number of terms in the Xining dialect share with Wu the use of the prefix *a* (e.g. mother: *a⁵⁵ma⁵⁵* (Wu), *a⁴⁴ma⁴⁴* (Xining)), which S.-C. Wang states is comparatively rare in Central Plains or even Jiang-Huai Mandarin. Whilst not conclusive in themselves, especially since among the local non-Han languages an *a* prefix is similarly used in kinship terms, when considered in relation to the other historical and linguistic evidence these lexical similarities find a plausible explanation in the account given above.

In terms of grammatical markers, linguistic evidence for the Nanjing (*Nanzhili*) origin of the immigrants to Qinghai comes from the properties found for the morpheme ZHE. As will be discussed in detail in Chapter 4, ZHE functions as a perfective marker as well as an imperfective marker, and yet the perfective function of ZHE is a feature of lower Yangtze Chinese not found in northern Chinese (Qu 2006). Thus to the similarities observed by S.-C. Wang (2009a) we may add that Xining ZHE behaves like its cognate in Wu in allowing ZHE to mark perfective aspect:

- (1) *ganiang, chuzuche no ha da-gei-zho,*
 girl taxi 1SG OBL hit-give-PFV
nomen yigua shanglai-le a
 1PL all up.come-PFV PRT
 ‘The girl, she called a taxi for me. We all got on.’

- (2) 依看仔 小人 就 回来 [Modern Wu: Shanghai]
Yi k'ø-tsi çizyin cyu xyei læ.
 3rd see-PFV children then return come
 ‘Having seen the children, he returned home.’ (Sun 1998: 161)

Meanwhile, with regard to the overall profile of the clausal syntax of the Chinese ancestor language of the Xining dialect, in terms of head-directionality clausal syntax did not differ significantly across Chinese varieties in the north and south of China (i.e. across Lower Yangtze Chinese and Northern Mandarin), and so does not provide evidence for any particular place of origin for the immigrants. Based on the available Chinese language-learning materials for the Ming period, which represent the colloquial language in use at the time (cf. Coblin 2000: 543), it is clear that it was head-initial with respect to, for example, the VP and modal auxiliaries. In this regard, despite various changes at a more fine-grained level, the story of the diachronic development of Ming Mandarin into modern Mandarin is one of basic continuity (cf. Coblin 2000: 546). Then as now, Mandarin made use of object fronting (surface SOV order) for information structure functions, but VO was the basic word order; in addition, then as now, as across Chinese dialects, auxiliaries preceded the verb. This was the case in the 14th century colloquial Mandarin text *Laoqida* (Wadley 1987), and also remained the case in the following centuries. The continuing head-initiality of the verb phrase and of auxiliaries can be illustrated by language learning materials in Coblin (2000: 546, my glosses), published shortly after the demise of the Ming dynasty. The following are from materials produced by the Spanish Dominican missionary Francisco Varo (1627-87), and show the verb-object order and aux-verb-object order.

(3) *Verb - object order*

Furatus ne es aliquid alienius? [Did you steal something of someone else's?]

ni t'eu leao jin tie vue kien mo?

ni tou le ren de wu jian ma?

you steal PFV person POSS object Q (Varo 1703: 76, appendix,
in Coblin 2000: 546)

(4) *Aux - verb - object order*

El que quiesiere subir a el cielo, le conviene obrar la virtud, y de no, segino no lo conseguira. [He who wishes to ascend to heaven must practice virtue, and if he does not do so, surely he will not succeed in it.]

Dan fan ren yao sheng tian, gai dang wei shan, ruo bu wei

but common person want ascend heaven, should be do good, if NEG do

shan, zi ran bu hui sheng tian

good, from nature NEG will ascend heaven (Varo 1703: 2, in Coblin
2000: 546)

Having considered the Chinese language originally brought to Qinghai, the next section explores the contact situation giving rise to the emergence of a regional variety with non-Sinitic, head-final morphosyntax.

2.5 First phase of language contact: fort creolization

2.5.1 Introduction

The macro-level picture of how the contact scenario underlying the Xining dialect emerged is quite clear based on previous studies, but this section seeks to contribute towards filling gaps in our knowledge of the origins of the dialect with regard to the socio-linguistic dynamics at the local-level. With regard to the macro-level, the Ming armies conquered Gansu in the 1370s and also established a military presence in Xining. Thus in the early Ming dynasty immigration began anew of Chinese speakers to the Western frontier. Where previous immigration had not resulted in ultimately abiding Chinese colonies, Ming immigration was built upon by subsequent waves of immigration continuing up until the present day, resulting in a continuous and growing Chinese presence in the region (though this is not to imply that temporary falls in the Chinese population did not also occur at points during the Ming/Qing period, for example due to casualties in military skirmishes). Immigrants continued to arrive, including reinforcements of soldiers, civilian officers, and those sent to the frontierland as a punishment, as well as itinerant traders. Language contact thereby arose because the Han

Chinese encountered the speakers of local languages who were already in the Xining area during the early Ming period, namely the Monguor and Tibetan tribes (cf. Dede 1999a: 9; 1999b).

With regard to what happened after that, and the sociolinguistic mechanisms by which the dialect emerged, I will argue that the emergence of the Xining dialect can be understood as a case of ‘fort creolization’ (Bickerton 1988), and likely followed the same evolutionary trajectory observed in this type of creolization elsewhere, namely progressing gradually from a trade jargon, to a stabilized and then expanded pidgin, before undergoing nativization. Before substantiating this account with a discussion of the socio-historical evidence, I will first briefly outline a previous (local-level) account of how the Xining dialect emerged, which was made primarily on linguistic grounds.

2.5.2 *Abrupt language shift hypothesis*

With regard to the sociolinguistic mechanism of change, it has been suggested that the heavy structural interference evidenced by the dialect’s non-Sinitic features arose through language shift in the sense of Thomason and Kaufman (1988) by speakers of the local non-Sinitic languages (Dede 1999a, 1999b, 2003: 345, Wang and Dede 2016). Dede (1999a: 9, 1999b: 59-60, 76) has suggested that the contact scenario began during the 14th/15th century when a large population of the local Monguor people abandoned their local language and shifted to Chinese in order to integrate with the dominant Chinese society. Wang and Dede (2016: 426) write:

In the language shift posited for the Xīning dialect, a population that was originally non-Chinese-speaking shifted to speaking Chinese (the target language), and in the process carried typological features of their original language into the target language. The shifting population must have had reasonably good access to the target language and been large enough to change the target markedly. In theory, the shift could occur in a generation or two with only a short period of community-wide bilingualism.

They suggest that the shift would have occurred as it has done in the province in modern times (cf. Section 2.6.1, below): that is, within a generation or two (e.g. with the grandparents monolingual in their native language, and the grandchildren mostly monolingual in Chinese), such that there was only a short transitional period of community-wide bilingualism in between

Thus Dede (1999a, 1999b) and Wang and Dede (2016) propose shift-induced change in which the first language (Monguor or Tibetan) was not maintained, and the Monguor and/or Tibetans came to identify themselves with the Chinese-speaking community. Rather than a ‘language maintenance’ scenario, in which the Monguor and Tibetans would have retained their identity as a socio-ethnic group whilst acquiring Chinese, in the ‘shift’ scenario proposed in these studies, they did not remain distinct but were absorbed into the Chinese-speaking community. Substrate interference through this community shift scenario is opposed in Dede (2003: 345) to substrate interference through intermarriage, in which the Chinese military colonists married local non-Han women, and a pidgin Chinese was used to communicate, which was then nativized when acquired by their children (though Dede 2003: 345 notes that both of these scenarios could have occurred simultaneously).

This proposal of wholesale language shift of a non-Chinese speaking population to Chinese in the early Ming was based chiefly on linguistic features of the Xining rather than historical/socio-cultural considerations (Dede 1999a, 1999b, Wang and Dede 2016, cf. Dede 2003). The case for Monguor substrate interference is made from the existence of an ablative postpositon *sa* in the Xining dialect (Dede 1999a), which clearly seems to have originated in Monguor (cf. Section 2.6.1). Also, as Wang and Dede (2016) show, negation in the Xining dialect also clearly reflects the syntax of Tibetan and Monguor. Many other similar cases of morphosyntactic interference could be mentioned. As Thomason (2001: 76) notes, language change induced by shift is typically characterized by strong morphosyntactic and phonological interference, with moderate lexical interference. Since strong morphosyntactic interference from the local head-final languages, Monguor and Tibetan, is what we find in the Xining dialect, these studies have proposed a shift scenario as the origin of substrate interference the Xining dialect.

With regard to the comparative lack of phonological and lexical interference in the Xining dialect, Wang and Dede (2016: 426) explain this by suggesting that lexical and phonological interference would have disappeared following the initial period of shift due to the subsequent long-term contact with Chinese. Nevertheless, there are compelling socio-historical reasons to doubt the hypothesis that wholesale language shift by large communities of substrate language speakers accounts for how the Xining dialect initially emerged in the early Ming, even though I do not rule this possibility out for a (relatively small) portion of the local population involved in interethnic marriage.

2.5.3 Critique of the shift hypothesis

Firstly, it is important to note that the substrate interference found in the Xining dialect can be reasonably explained without positing wholesale language shift, and so the linguistic data are insufficient evidence in themselves to support the shift hypothesis. What we require is socio-historical information about the local context in order to determine how substrate interference plausibly occurred, and whether or not shift was likely to have been involved. Thomason (2001: 74) notes that ‘the linguistic predictions [i.e. that interference is chiefly morphosyntactic and phonological rather than lexical] are the same for all instances of imperfect group learning of a TL, regardless of whether or not actual shift has occurred’.

Thomason (2001: 76) takes as an example the strong morphosyntactic interference from Salar (Turkic) upon the Mandarin dialect of the Salar people, in contrast to little lexical interference. The Salar people today are bilingual in their native language and in Qinghai Mandarin, and as far as I know there is no reason to suppose that community-wide language shift to Chinese occurred at any point in their history. The syntactic features in the Xunhua dialect are largely the same as in the Xining Mandarin dialect, and so the features in the Xining dialect could have arisen without widespread language shift to Chinese just as they have apparently done in the Xunhua dialect, or in fort creolization scenarios around the world (cf. Section 2.5.4.1 below). In other words, there are various ways in which radical structural interference can occur; imperfect second language learning and bilingualism involving a contact variety (i.e. a scenario of language maintenance), for example, have as much *a priori* plausibility as an explanation for the linguistic features of the Xining dialect as large-scale language shift.

Next, with regard to the nature of the proposed shift, in particular its rapidity/abruptness, it must be mentioned that it is not necessarily the case that because shift is occurring rapidly in modern times (see Section 2.6.1 below), it would have occurred in the same way at the outset of the contact scenario (if it did actually occur), because the social context differed in significant ways from that in modern times, as will become clear in the following discussion. For example, a key difference existed concerning the amount of access to Chinese that was available to the non-Han communities. In the early period, access to Chinese was poor, a point that will be seen below from the available linguistic, demographic and socio-historical evidence; whereas in modern times, access is widely available through education and the media, and because of the exponential increase in Han immigration in modern times (cf. Section 2.6). Wang and Dede (2016: 426) state that the abrupt shift hypothesis would require good access to the target (Chinese), and Dede (2006: 321) assumes that shift would likely

have occurred through close contact between Monguor and Chinese speakers. In the following socio-historical discussion, it is assumed that good access to the target would have been a prerequisite for language shift, but, as will be argued below, this access probably did not exist for the Monguor/Tibetan tribes at large in the late 14th to early 15th century (Wang and Dede 2016: 426; cf. Dede 1999a: 9), when the rapid shift is posited to have occurred.

In fact, I will suggest that population-mixing, and the resultant improved access to Chinese, probably only became a significant social factor in the late Ming and Qing period (roughly, from the 17th century onwards). However, it must be added that whilst population-mixing can reasonably be regarded as a necessary condition for shift in the present case, and so its absence makes the shift hypothesis less plausible, evidence of population-mixing does not entail that shift would have occurred. There are other important factors involved too, such as the amount of access to mother tongue speakers, which would encourage retention of those languages for intra-ethnic communication (cf. Mufwene 2015: 359), even where access to Chinese was good.

With regard to the speed of shift in the Xining area, if shift was to occur, there are good reasons to expect it to have been gradual instead of rapid. According to Mufwene (2015: 359), *rapid* shift is associated with the combination of two factors: a lack of access to one's native language, and abundant access to the target language through integration or population-mixing with the – usually – economically and politically dominant population (whose language is the target of shift). In creole genesis, shift has thus been rapid for 'exogenous colonies with a high level of societal multilingualism and population-mixing' (Ibid. 359; cf. also Holm 1993). Thus if speakers are separated from a community of speakers of their native language, shift tends to proceed faster, but where segregation has occurred in contact settings, shift was delayed, as for some European migrants who settled on exogenous colonies, and lost their native language slowly because they lived in sub-communities with other Europeans (Ibid. 359). But in endogenous settings, where creolization occurs amidst the local substrate population, shift tends to be gradual rather than abrupt, and the Xining context is an endogenous contact setting. Thus, for example, shift was slower in the emergence of Irish and Scots Englishes because they emerged in an endogenous setting where there were still plenty of opportunities for the use of ancestral languages by the shifting populations (Ibid. 359; cf. Thomason and Kaufman 1988: 132 who treat this as shift with normal rather than abrupt transmission).

The question is, therefore, were the social conditions in the early Ming such as would have been conducive to rapid shift? Below, it will be argued that in the early to mid-Ming period the general lack of integration with the Chinese colonist communities, combined with an abundance of access to mother tongue speakers of the local languages, make it unlikely that shift, and especially rapid shift, occurred for the local tribes at large in the Xining area.

2.5.4 Trade fort pidgins and the Xining dialect

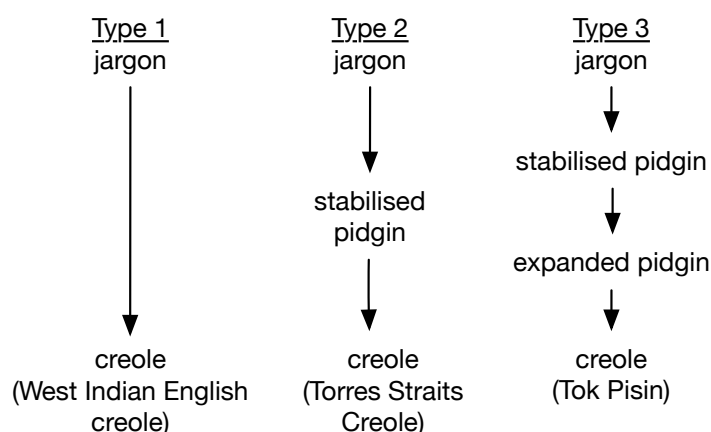
2.5.4.1 Introduction

The emergence of the Xining dialect can be illuminated by comparison to ‘fort creoles’, the result of a particular type of contact scenario which arose at European fort colonies, found mainly on the West African coast but also in the Pacific. It is proposed that, in line with key socio-cultural similarities, the evolutionary trajectory of the Xining dialect was much the same as for these varieties. Bickerton (1988) calls this scenario ‘fort creolization’ (in opposition to ‘plantation creolization’). The former, a kind of ‘endogenous’ creolization (Chaudenson 1977: 264), involved Europeans setting up forts in non-European territory where the native language of the substrate population was spoken, whilst the latter (Chaudenson’s 1977: 265 ‘exogenous’ creolization) involved slaves being relocated to distant plantations away from their own people. Fort creoles emerged along the West African coast, for instance in Ghana and Sierra Leone, as well as in the Pacific, at the forts from which the Europeans conducted their trade operations (cf. Arends 1995: 16). Examples include West African Pidgin English (also known as Guinea Coast Creole English), and various associated varieties like Guinea Bissau creole; in the Pacific, examples include Zamboangueño, a Spanish lexifier creole (Bakker et al. 2013: 21). Aside from their origin in trade jargon, another characteristic of fort creoles is that they emerged partly through mixed marriages between the European men and the local women, resulting in children who acquired as a first language the medium of communication between their parents. There were also various other classes of local people who depended economically on the fort community, and who also used the emerging contact variety, such as servants, contract laborers, and merchants, who constituted a fringe of interaction which faded into the local population at large as distance increased from the fort (Bickerton 1988: 269). In terms of the socio-political situation in these settings, the colonizers’ direct control and influence over the local population tended not to extend much beyond the forts themselves, reaching at most to the adjoining villages (e.g. cf. Huber 1999: 11).

The parallels with the Xining dialect centre chiefly on the fact that the Chinese colonizing presence in Qinghai/Gansu also involved the establishment of an increasing number of

military fortifications in a land occupied by initially non-Chinese speaking local populations (i.e. an endogenous context) with whom they interacted extensively for trade purposes (cf. Section 2.5.4.5.1). As will be discussed below, Xining was a major commercial hub at which, among other commodities, the Chinese obtained horses from the local tribes for use in the defence of the empire. In addition, interethnic marriage can also be assumed to have occurred to some extent between the Chinese colonizers and the local tribes (though it will be argued that this factor was less significant than in West Africa). With time, as for European pidgins in West Africa, the Chinese language came to be widely spoken as a native language by much of the local population. However, just as the local people around the forts in West Africa spoke the European lexifier creole alongside local languages (see below), in the Xining area too it will be argued that there was not widespread loss of the tribes' ancestral language (i.e. a shift scenario).

In terms of Mühlhäusler's (1980: 32) diagram concerning three ways in which creoles may emerge, shown below, fort creoles such as West African Pidgin English (Guinea Coast Creole English) belong to type 3; that is, there is a development from pidgin to expanded pidgin, which is then nativized (cf. Adone 1994: 5-6). Where there is sociodemographic stability, type 3 creoles develop gradually and can – as in the case of Tok Pisin (an English lexifier creole of Papua New Guinea) – serve as a lingua franca for several generations before undergoing nativization/creolization (Schreier 2008: 41; cf. Arends 1993).



The three types of creolization scenario will now be briefly outlined. Type 1 denotes 'abrupt creoles' (Thomason and Kaufman 1988: 48), so called because they form rapidly, typically because the shifting community (e.g. slaves from various backgrounds) do not share a common native language and so must use the pidgin/creole in order to communicate with each other (Thomason and Kaufman 1988: 149-50). Thus creolization occurs before the

creole has had time to stabilise or develop into an expanded pidgin. Examples that have been proposed for this category include West Indian English creole (cf. Schreier 2008: 41, 60-62) and English-lexifier creole Pitcairnese (Holm 1989: 546-551), which lacked a stable pidgin stage (Thomason and Kaufman 1988: 148, 50). Although it is in some cases controversial whether a particular creole did indeed form abruptly, the claim for type 1 creolization is that there was no opportunity for a stable pidgin stage (i.e. a non-expanded, reduced contact variety adequate only for restricted social functions) because the pidgin was required to immediately fulfil the full range of communicative functions. In such cases, abrupt creolization is taken to be accompanied by loss of the group's ethnic languages i.e. by language shift (Thomason and Kaufman 1988: 151). The type 1 trajectory is essentially what is posited by Wang and Dede (2016) when they suggest that native Monguor speakers could become monolingual Chinese speakers within 1-2 generations i.e. through 'shift without normal transmission' (cf. Dede 1999b:17-18). However, considering how creoles have formed elsewhere, it is clear that abrupt creolization is not the normal pattern found for endogenous creolization (see below), which makes the type 1 trajectory implausible for the Xining dialect (above, it was noted with respect to Irish and Scots English, for example, that shift in such circumstances has been gradual).

With regard to type 2 creoles, these are reported to include Torres Strait creole and North Australian creoles (e.g. Adone 1994: 6). As Shnukal (1983) explains, Torres Strait creole developed from the Pacific pidgin English which was a lingua franca among the South Island crews of the European vessels which sailed to the Strait in the 1840s in search of pearlshells, as well as beche de mer (sea slug) for sale in China. The pidgin was necessary because the crew members came from across the Pacific and spoke as their mother tongue various Polynesian and Melanesian languages. Creolization occurred later, during the period from 1890 to 1940, as a result of intermarriage between South Sea islanders who settled on the Strait and native women (becoming the first language of their children). With regard to the timescale involved here, it was considerably more gradual than is supposed for type 1 creolization. Shnukal identifies a roughly 50 year gap (1840-1890) between the pidgin being brought to the islands, and gaining currency as a language among the local people, and when it began to gain its first native speakers. That is, by the 1880s and 1890s the pidgin was used widely across the Strait (alongside speakers' mother tongues) (cf. *Ibid.*, 178), but nativization by the progeny of mixed marriages was key to the grammatical expansion of this stabilised pidgin. As for language shift, it was not until the early 20th century that, due to various social

factors (some context specific), many of the island communities began to shift to Torres Strait creole as their only language (Ibid., 179).

Meanwhile, in line with the *raison d'être* of Tok Pisin and West African Pidgin English (Type 3 varieties) as lingua francas used for trade, according to Mufwene (2008: 76), history shows that children (and hence, nativization) played no 'privileged role' in the development of Tok Pisin or Nigerian Pidgin English into expanded pidgins. Grammatical expansion, and extension into all social domains, was accomplished by adults (cf. Schreier 2008: 40). As such, language shift does not seem to have had opportunity to play much of a role in these cases of fort creolization, but rather, in line with its endogenous nature and the continuing access to the local culture and languages, the outcome is mostly bilingualism or multilingualism.⁴ Whilst nativization of the superstrate language and loss of the mother tongue of the local peoples could occur through intermarriage, the role of intermarriage as a means of the propagation of the contact varieties in West Africa, though important, seems to have been limited by the instrumental role played by others from among the local population who lived and worked in contact with the Europeans (e.g. Kihm 1994: 4). As Holm (1989: 264) notes, writing of the creole Portuguese which emerged from the fortified outposts on the West African coast, 'there was no reason for creole Portuguese to spread on the mainland as a mother tongue', which means that nativization did not occur. The method of transmission, according to Holm (1989: 264), for creole Portuguese was likely to have been the same as for French and English varieties in West Africa, which Holm reports were transmitted by being learned from age-mates (i.e. alongside their mother tongues). Thus Guinea-Bissau Kriyol (a Portuguese lexifier creole) is reportedly spoken as an L1 by about 600 people and as an L2 by another 600,000 alongside speakers' native languages, suggesting at most a minimal role for language shift in the emergence of the Guinea-Bissau fort creole (cf. Velupillai 2015: 51-2). Relatedly, Huber (1999: 30) notes that on the Lower Guinea coast early West African Pidgin Portuguese achieved stability without being used as a first language (it was used for communicating with the whites, whilst native languages were retained for intragroup communication). The absence of shift in such endogenous contact scenarios is understandable because even in the context of mixed marriages, the African mothers and their mixed race progeny were not separated from the local culture and language(s), but the latter were,

⁴ In any case, whether or not shift occurs simultaneously with the creolization/nativization of an expanded pidgin is of little relevance to the question of how substrate features emerge, because by the time nativization occurs the expanded pidgin, by definition, has more or less already finished undergoing grammatical expansion (e.g. cf. the case of Bislama, an English-based pidgin spoken in Vanuatu, described by Crowley 2004: 4).

according to Huber (1999: 30), reabsorbed into the African society (for a non-African example, cf. Diu Indo-Portuguese (Portuguese lexifier), Velupillai 2015: 62-3).

Returning to the Xining dialect, it is proposed that the dialect also emerged along the evolutionary trajectory that Mühlhäusler (1980) calls type 3 creolization: that is, by a gradual transition from trade jargon to stable pidgin to expanded pidgin to creole. This is in line with a gradualist model of creolization (e.g. Arends 1993, Arends and Bruyn 1994), in which the contact variety develops over a number of generations without nativization playing a causal role in the emergence of substrate features in the creole. To substantiate this claim, I will seek to demonstrate through a socio-historical discussion that the nature of the local tribes' interaction with the Chinese involved extensive trade, which would have initially necessitated a trade jargon, which would in turn (by hypothesis) have developed into a more stable and then expanded pidgin. I will argue that there was a lack of integration of the common Monguor people into the Chinese communities in the early Ming such that interactions with the Chinese, for the majority of the Monguor, would likely have been fairly sporadic in nature, whilst access to their native language community remained plentiful. For these reasons, syntactic change through nativization (or through wholesale language shift) was unlikely for the majority of Monguor, but rather it is suggested that pidgin Chinese plausibly stabilized and expanded over several generations among the local tribes, without large numbers of them abandoning their native language, and without Chinese being acquired as a mother tongue among the Monguor at large. However, a subsidiary strand in this more general plot (subsidiary partly because the numbers involved were probably relatively small), concerns the fact that nativization of pidgin Chinese likely occurred among the progeny of interethnic marriages, where a creolized Chinese would have emerged (though whether accompanied by shift is unclear). In addition, the effect of changes in Monguor-Chinese relations as the Ming period gave way to the Qing period will also be considered. In the next section, the agents of change will be introduced.

2.5.4.2 *The Monguor*

The Monguor, who are partly of Mongol descent, were the primary and dominant inhabitants of the Xining area in the early Ming, and were called 'indigenous' by the Chinese (*Tumin*, *Tujen*) (cf. Tuttle 2006: 40). Monguor 'hereditary native chieftains' (*tusi*) were appointed by the Ming court as part of their administrative machinery for the region (cf. Schram 2006:

113).⁵ Consequently, the Monguor will be the focus of discussion here. I will argue that for a number of reasons language shift is unlikely to have occurred among the Monguor during the early Ming, but evidence will be presented for wholesale shift occurring in some measure during the Qing dynasty, though by this point the contact scenario had already been in place for many generations. I draw mainly on Louis Schram's (2006 [1954, 1957, 1961]) account, which is based chiefly on annals of Xining and Gansu (*Xining fu xin zhi* and *Gansu xin zhi*) and on what he learned through living among the Monguor during the early part of the twentieth century.

The Monguor clans were already present in the Xining area at the beginning of the Ming dynasty in 1368. These submitted to the Ming dynasty at its outset and embraced agriculture, though without entirely abandoning their traditional pastoral lifestyle (Ibid. 130). Tribal leaders were appointed by the Ming emperor as *Tusi* 'tribal chieftain'. After submitting, the *Tusi* played an important role in collecting taxes and protecting the frontier of the Chinese empire from attack from hostile Mongol or Tibetan tribes in the regions beyond, being responsible for conscripting troops from amidst their clan.

2.5.4.3 *The socio-geographical context of the Monguor and Chinese communities in the Ming period*

Whilst in West African fort creolization the local populations at large were altogether beyond the control of the colonizers (essentially once they were beyond the range of gunshot from the forts; cf. Huber 1999: 11), the *Tusi* 'tribal chieftain' system in Chinese colonial expansion into areas like Qinghai-Gansu gave the Chinese an indirect form of control over the substrate population (via the authority of the tribal chieftain). However, as far as the daily lives of the common people among the local tribes were concerned, they still retained considerable independence from the Chinese, forming what Schram (2006: 520) describes as a Monguor 'enclave' on the edge of the Chinese empire. That is, with regard to the level of integration, to a large extent, a fundamental socio-geographical division seems to have initially existed

⁵ On the *Tusi*, Herman's (1997: 50) remark is informative concerning the nature of this system, and represents the case in Qinghai well:

The Native Chieftain system (*tusi zhidu*) was a unique subbureaucratic institution created during the early Ming to extend nominal Chinese state control over the non-Han peoples located just beyond Beijing's administrative reach. When Beijing conferred native chieftain status upon a tribal leader, it classified him as a civilian native chieftain (*tuguan*) or a military native chieftain (*tusi*) and placed him under the direct supervision of either the Ministry of Personnel or the Ministry of War, respectively ... Military Native Chieftains (*tusi*), on the other hand, enjoyed a higher degree of institutional and spatial autonomy from China. As a general rule, a military native chieftain's area of jurisdiction was located along or just beyond China's recognized political borders, and he was expected to command a sizable military force in order to assist in the protection of China (cited in Roche 2011: 236-7).

between the Monguor and the Chinese, such that the communities were not characterized by Monguor-Chinese population-mixing (below, it will be discussed how this scenario emerged later, chiefly during the Qing dynasty). Geographically, after surrendering to the Ming emperor, the Monguor clans were assigned to fixed territories positioned so as to guard the passes of valleys by which the Chinese colonies could be attacked. Thus Schram writes that,

While the Monguors were thus allocated to the valleys leading up to the frontier passes, the Chinese planted colonies of their own people in the vicinity of the main towns (155)

In other words, the geographical position of the Monguor was not immediately among the Chinese. The Monguor occupied a relatively dangerous position as buffer communities exposed to attack, which might mean that Chinese farmers would have preferred not to move there when they could remain in their Chinese colonies shielded by the Monguor. In addition, the Monguor were given land that was poorly irrigated in comparison to that occupied by the Han Chinese colonies, and so not as good for farming:

grasslands in the extensive side valleys were assigned to each of the T'u-ssu groups for the pasturing of their herds and for the cultivation of cereals, without irrigation...(130)

This can be assumed to have been a factor that would have discouraged the Chinese from settling among the Monguor, though in some places this may have changed with time. This lack of population-mixing probably did not change very quickly, though over time it did change in some locations. As for when population-mixing did come about, Qin (1985: 92) cites *Qinbian ji lüe* 'A brief account of the Qin frontier' (written by a Qing dynasty geographer) observing that the Han and Monguor in the Sanchuan area of modern Minhe county lived amongst each other from as early as the *late Ming* (emphasis added; i.e. from roughly the early 17th century). There is no reason, as far as I can tell, to assume that population-mixing would have come about much earlier than in Sanchuan in other locations.

Meanwhile, the Monguor clans remained intact as social institutions with a psychological and cultural unity which would have hindered large numbers of them from shifting their cultural identity or language to Chinese. This is seen in the fact that it was a tenet of their Mongolic culture, enforced by the Chinese-instituted *Tusi* system, that the ordinary Monguor could not wander off and leave their tribal leader to settle in Chinese territory (Ibid. 171-2). Schram (2006: 172) writes:

This conviction of being chained [to their lord] was deeply rooted in the social consciousness of the Monguors and was considered by them to be natural. (Ibid., 171)

The individual Monguor had the freedom of movement within the limited territory of the tribal chieftain, assigned by the Ming court, but,

If he [the individual Monguor] tried to leave his village and settle in Chinese territory, the Chinese officials would return him to the jurisdiction of his hereditary T'u-ssu. (Ibid., 274)

The reason for this was that, since the function of the *Tusi* system was largely to enable the Monguor clans to furnish troops to fight for the Chinese empire, the Chinese officials upheld the authority of the tribal chieftain as the 'owner' of the common Monguor in his clan, who constituted the chieftain's manpower for the frontier defence force (in surrendering to the Ming court, the tribal chieftain and his family line were established in their position of lordship in their clan by the authority of the Ming empire; Ibid. 171).

Another factor contributing to their social cohesion was that the Monguor were engaged in border defence against 'recurrent forays and invasions of Mongols and Tibetans' (Tuttle 2006: 41), and at times also went far beyond Qinghai on military missions, being deployed as units of fighting men (Schram 2006: 155, 682ff.). In such circumstances the Monguor concerned can be assumed to have retained their language in order to communicate with their fellow clansmen (cf. Schram 2006: 520), even though they probably learned a variety of Chinese to communicate with Chinese-speakers outside their clans. Meanwhile, with regard to the overall number of Chinese settling among the Monguor, Schram's (2006: 163-4) assessment, discussed further below, was that this was minimal pre-1723, and most numerous later in the 19th century.

In summary, therefore, the geographical separation of the Monguor and the Chinese, as well as the Mongolic clan psyche, were factors which would have worked to prevent Monguor-Chinese population-mixing in the early period of contact, as well as hindering absorption into/identification with Chinese culture among the common people. The general pattern, in the beginning at least, seems to have been that, in Schram's (2006: 520) words, 'The Monguors... lived their own lives in their own organized world, under powerful chiefs'. Yet as time passed and the Ming dynasty gave way to the Qing period social integration with the Chinese gradually increased (cf. Section 2.5.4.6 below), and with it bilingualism can be expected to have increased as knowledge of the emerging contact variety of Chinese spread among the common Monguor people (cf. Section 2.5.4.5.2).

2.5.4.4 *Monguor and Chinese demographics in the Ming period*

The demographic situation in the Xining area was initially one in which the Han Chinese colonists were greatly outnumbered by the local tribes. Thus in contrast to (on Schram's estimate) the 55,000 Monguor in the area at the start of the Ming dynasty, the Chinese colonies contained '7,200 Chinese families totalling only 15,854 persons, described [in the annals] as "officials and soldiers."' (Ibid. 125, cf. W. Jia 2012: 126). According to Schram, who does not seem to be correct on this point, by the late Ming, the Chinese population had *decreased* significantly, with very few non-military Han present:

The failure of [Ming dynasty] colonization is plainly evidenced by the census of 1573-1620, which records only 440 families of Chinese civilians in addition to the 2,560 families of officials and military colonists. These figures show that after two centuries [of Ming colonization] there was only a tiny Chinese population while the military colony or garrison had decreased by two-thirds. (Ibid., 131)

During the reign of Emperor Xuande (1426-1436), half a century or so on from the arrival of the initial deployment of Han soldiers, Xining had a garrison of 5600 individuals, of whom over 3600 worked the land, with the remainder on military duty (QTS 1999: 289). These figures thus suggest that Chinese speakers remained severely outnumbered throughout this initial period. During the reign of the Jiajing emperor (1521 to 1567), the number of soldiers in Xining Guard (Ch: *wei*, referring to the military organization) has been more recently calculated by W. Jia (2012: 126), in his PhD thesis on population sizes in the region, to be 29,916, with a non-military population of 20,300 (cf. QTS 1999: 259-60). Meanwhile, according to Schram, by the late Ming the Chinese population had decreased significantly, as shown in the above quotation. But errors are known to exist in some population figures in the annals, and W. Jia (2012: 44, 126), by contrast, estimates that by the second year of the reign of the Shunzhi Emperor (1644-1662) in the early Qing period the Chinese population in Xining Guard had risen further to 96,266. This later account is more plausible, but even on the calculations by W. Jia (2012: 126), the Chinese were still outnumbered by the local tribes. Indeed, the Tibetan population alone also rose rapidly during the Ming period, estimated to have reached 85,000 in the Xining area in the late 16th and early 17th century (W. Jia 2001: 75; cf. Chen 1997). What is clear is that throughout the late 14th/15th century Chinese speakers were greatly outnumbered by the local tribes, and Han/non-Han numerical parity was far from being reached even by the end of the Ming period. As such, the fact that Chinese speakers were so few, for so long, in comparison to the large number of non-Chinese speakers would have contributed to access to Chinese being generally poor among the Monguor clans.

The social factor of poor access can also be inferred retrospectively from the heavy structural interference in the Xining dialect (though above it was argued that this structural interference does not necessitate a shift explanation). The connection between poorer access to the superstrate and greater substrate interference has been made in much of the literature and from various theoretical perspectives (e.g. Thomason and Kaufman 1988: 38-9, Lardiere 2006, Winford 2007: 36; cf. also Bickerton's 1984 pidginization index, and also Lefebvre's 1998 proposal concerning creole genesis, which says that less access to the target language by adult learners leads to more radical substrate interference, and better access leads to less interference). It is also in line with contrasting findings in the degree of substrate interference for particular language varieties (cf. Schreier 2008: 42-3 for several examples). Meanwhile, with regard to particular linguistic features and access to the Chinese superstrate, the traditional Xining dialect is a regional variety of Chinese which developed OV basic order matching OV order in the substrate languages – in this respect not converging on Standard Chinese VO basic order.⁶ Cross-linguistically, creole studies show that substrate basic word order is usually only retained in cases where access to the target language was very poor: in line with the fact that basic word order is a meta-linguistically salient feature (Odlin 1990: 110), good access to the target normally enables successful convergence on the word order of the superstrate (Siegel 2008, 2012). Similarly, outright substrate borrowings, such as the ablative postposition and modal of possibility (cf. Chapter 3), would not be expected except where access was poor, as learners would be aware that the lexical items concerned came from their native language and not from Chinese. In the present case, issues such as the substrate population not wishing to accurately acquire the superstrate language do not seem to have been involved, as it is reported for the primary population concerned, the Monguor, that in their eyes Chinese culture and language was indeed of higher prestige than their own (cf. Slater 2006: 49, Schram 2006). Next, the nature of Monguor-Chinese interactions is considered.

2.5.4.5 Monguor-Chinese interactions in the Ming period

The following are some of the important dimensions of Monguor-Chinese relations. On the one hand, there were trade interactions. On the other hand, there were official administrative interactions with the Chinese which constituted the practical day-to-day outworking of the relation of subordination established when the Monguor tribal chieftains submitted to the

⁶ VO order is also used in the modern dialect, but this is argued below to be largely due to the influence of Standard Mandarin from the 20th century onwards, with the traditional or historic Xining dialect more strongly OV (VP word order is discussed in Section 3.3.1 below).

Ming emperor. The latter encompassed the Monguor elite class (chiefly, the *Tusi*) and the relevant Chinese officials. Finally, there was a measure of interethnic marriage, which there is circumstantial evidence to suggest occurred for the common people, and direct evidence for the Monguor elite class. Of these dynamics, it will be argued that trade probably had the most far-reaching effect in leading to the use of Chinese by the common people among the local tribes.

2.5.4.5.1 *Trade*

Economic motivation to learn Chinese was likely to have been strong among the local tribes, as it enabled profits to be made through trade with the politically dominant Ming dynasty. A well-known example of such trade, which flourished throughout the Ming period, was the local clans' exchange of horses for tea (as well as other products of the agrarian Han people, like grain and clothing) (Chen 1997: 319-24; cf. Horlemann 2012a). The tea-and-horse trade supplied horses for military use, with which the Ming empire could secure its northern border against a Mongol threat. In 1397, the present-day capital of Qinghai, Xining, and Duoba in Huangyuan county (west of Xining), were established as major centres in the region for the tea-and-horse trade (Chen 1997: 319). A sense of the large scale of this trade, and of the Ming court's desire for horses, can be gained from the fact that records show that in 1397, 13,000 plus horses were traded for over 500,000 *jin* (in modern terms, over 300,000 kg) of tea from the Ming court (Chen 1997: 319). A further indication of how profitable the tea-and-horse trade was, and of the political dominance of the Han Chinese, comes from the fact that the tea-horse trade came under strict regulation by the Ming court. Prices were fixed and a *jinpai* 'gold medal' certification system was implemented for traders in efforts to combat black market trading, which harmed the supply of horses to the Ming court. This trade continued into the subsequent Qing dynasty, with Xining remaining a thriving, cosmopolitan trade centre (cf. Horlemann, 2012a, 2012b). In terms of the overall political and social effect of this trade, it created economic dependency and solidified the subjugation of the local clans to the Ming dynasty (cf. QML 1993: 66, Chen 1993: 324). The image below, from Horlemann (2012: 164b), shows such a cosmopolitan border market in the 1930s:



Figure 2-3 A border market in Gansu/Qinghai in the 1930s

Through frequenting border markets in the early Ming dynasty, members of the local tribes would have engaged in trade with Chinese speakers, and it is proposed that they would initially have developed a rudimentary trade jargon, which with time would have become a more stable Chinese pidgin as these interactions became more common (i.e. the first steps of Mühlhäusler's (1980) type 3 creolization discussed above). It is unlikely that any historical records exist of the early contact language, but there is arguably enough socio-historical evidence to build up a plausible account of how it would have emerged, and to show that the social scenario closely parallels the development of expanded European-lexifier pidgins at trade forts colonies elsewhere, which were often also thriving commercial centres (cf. Section 2.5.4 above).

With regard to the clans which retained a nomadic lifestyle, not embracing agriculture, these would not have been expected to have undergone language shift or to even have nativized Chinese as a first language among their offspring, as they maintained a strong socio-ethnic group identity and a high degree of autonomy, trading with the Chinese at markets in and around Xining but not living settled lives adjacent to Chinese society. Mongolian, Tibetan and Monguor nomads would temporarily stay at *xiejia* 'house of repose', 'inn', which were run by Han Chinese or Hui owners, and engage in trade at the border markets, and then withdraw again (Horlemann 2012a). These inn owners also played a role as intermediaries (cf. Ibid.) which would presumably have lessened the need to learn Chinese among the nomadic tribes. As such, Chinese would only have been necessary when the nomads encountered Chinese speakers during visits to the towns. In other words, the nomadic tribes may have acquired a pidgin Chinese for restricted functions like trade, but this variety is unlikely to have been nativized among them (acquired as a first language by their children) because their ancestral language would have remained the language of daily communication. Thus among the

nomads, a Chinese pidgin plausibly emerged which was used for many generations by those who engaged in trade with the Chinese throughout the Ming and Qing period, but for the majority it is unlikely that it was ever creolized as their mother tongue.

Overall, given the very large scale of the trade that was ongoing during the Ming period, and the reported economic dependency that it created among the local tribes, this is a social dynamic which probably encompassed a sizeable portion of the local population, including the common Monguor and Tibetan people from both the agricultural and nomadic tribes. As such, it is assumed that it was very significant in driving the creation of a pidgin Chinese *lingua franca*.

2.5.4.5.2 Monguor-Chinese intermarriage

With regard to interethnic marriage, this was a scenario in which nativization/creolization could occur in the early to mid-Ming period, as well as later, as the progeny of these marriages acquired a pidgin Chinese as a native language. However, whilst trade interactions between the Monguor and Chinese probably involved large numbers of the common Monguor people (as well as from among the local nomadic and agricultural Tibetan tribes) (cf. the figures in the previous section on the scale of this trade), it will be argued that it is likely that interethnic marriage with the Chinese only involved a very small proportion of the overall Monguor/Tibetan population. In addition, given that the high degree of structural interference observed in the Xining dialect is suggestive of a low degree of access to Chinese (see Section 2.5.4.4 above), and the fact that the intimacy of the family environment (and indeed the nature of life inside a Chinese-manned military fort) would have afforded comparatively good access to Chinese, the progeny of interethnic marriages can be regarded as not playing a very significant role as agents in shaping the highly Mongolized/Tibetanized Chinese contact variety which emerged in the region. That is, in terms of relative importance, this source of substrate interference would have been a comparatively minor ‘sub-plot’ in terms of the overall origin of the substrate features in the dialect, which for the majority of the local population probably arose in conditions where access was poor, via the expansion of a pidgin Chinese which they initially used for trade and other restricted social functions. Given that the Chinese speakers were severely outnumbered (cf. Section 2.5.4.4), especially in the early Ming period, there would have been plenty of opportunity for what Bickerton (1988: 272) calls ‘dilution’ to occur of the variety of Chinese acquired by mixed-race children, such that the substrate interference contributed by the vast majority of the local population, who did not have such privileged access to Chinese, played a greater role in shaping the emerging contact

variety. In this section I will briefly summarize some of what we know about interethnic marriage in the Ming and Qing period, and discuss its occurrence in relation to Chinese men who married local women, and also those Chinese men and women who married into the Monguor clans.

Interracial marriage was promoted by Ming and Qing government policies (cf. Yodron 2010, cited in Paik 2013 note 5; also Jiang 2011: 126) to increase the assimilation of non-Han ethnic groups into Chinese culture. To illustrate, consider the following report from Hong Dichen (1936: 54, cited from Ma 2011: 48). Although not about northeast Qinghai, it provides a picture of the practice of interracial marriage (from the late Qing dynasty):

"Since the movement of Gai tu guei liou (changing the hereditary Tusi system into an appointed officer system) in the late Qing dynasty, many Han from Yunnan, Sichuan and Shaanxi migrated to the Kham (eastern part of Tibet areas). Local Tibetan residents in the Kham areas were also influenced by Han culture and maintained close relations with the Han, leading to intermarriages... Han soldiers were allowed to maintain their families in military camps and were provided grain, so many soldiers married Tibetan women. In recent years, more and more Han and Tibetans have learned languages from each other and that has resulted in more Han-Tibetan intermarriages." (emphasis added)

The reference to Han soldiers being provided grain denotes the Qing government policy just mentioned, which was intended to encourage interethnic marriage (and was not restricted to the Kham region). The description of military camps reflects the military-agricultural colonies which existed in Qinghai. It is therefore likely, as Slater (2003) suggests, that intermarriage of Han men (including soldiers) with local women occurred in Qinghai. Family members were allowed to live in these military camps with the soldiers, and family members would assist with the work of cultivating the land (QGH 1996: 289-90). Yet it is certainly also the case that many soldiers brought their families with them when they moved to Qinghai. The policy of allowing officers to take their families with them to the frontierland, and of taking account of officers' family members when issuing monetary rewards, was a means of strengthening their resolve to make such a significant move (Yan 2012).

The available sources indicate that the number of Han soldiers/officials bringing wives and family with them from their home region was high, and so we may infer that the number of interethnic marriages with local women was reasonably low. With regard to the practice in general, J.-K.-Z. Zhang (2007: 54) states, 'It is undeniable that numerous family members followed soldiers to the *Weisuo* [military garrisons]' (cited in Yan 2012: 39). With regard to Qinghai-Gansu in particular, Yan (2012: 39) cites the *Annals for Lanzhou prefecture*, which

record that ‘on the whole’ (Ch: *dadu*) non-local soldiers brought their wives with them when they came to the *Hehuang* region (i.e. northeast Qinghai, including Xining, and parts of western Gansu). Also, as mentioned above, at the opening of the Ming dynasty the census in the *Annals of Xining* records that there were ‘7,200 Chinese *families* totalling only 15,854 persons, described as “officials and soldiers.”’ (Schram 2006: 125, emphasis added). Given that a family (Ch: *hu*) must have at least two members (and that 7,200 multiplied by two is 14,400), the overwhelming majority of this initial population of 15,854 were likely to have already been married when they arrived (it is true, though, that not all of the soldiers/officials would have brought wives – some brought fathers or other family members, cf. Yan 2012: 39), though based on the record cited above stating that most did bring *wives* with them, we may reasonably assume that wives constituted the majority in terms of the family member brought to the frontier). Finally, another point which suggests that the numbers involved were not that large is that Schram does not mention the practice at all as pertains to the common Monguor people, but as will be discussed momentarily, only with regard to the elite class. This thus suggests that interethnic marriage was a minority practice that was not widespread among the Chinese soldiers/officers garrisoned in Xining.

In this respect, interethnic marriage has played a considerably less significant role in the formation of the Xining dialect than in West African fort creoles on the Guinea Coast, where the creole formed through mixed marriages was diluted and altered further through being learned by the wider local population. Concerning the Guinea Coast, according to Hancock (1986: 90), the European colonizers were all males aged 15-30 i.e. the sailors did not bring wives with them on the boats. However, we have seen that that the majority of the male colonizers of Xining likely brought their families with them. As such, whilst interethnic marriage certainly occurred (e.g. see below), the relative non-importance of interethnic marriage as a means of language contact in comparison to other means of contact (e.g. crucially, trade) can probably be regarded as a noteworthy difference between Chinese fort creolization over and against European fort creolization in the colonial era.

2.5.4.5.3 *On the Monguor elite class*

Intermarriage was not confined, however, to Han soldiers marrying local women. To some extent, Chinese women (and men) married into the Monguor clans. But this was a practice primarily found among the Monguor elite class, and mainly in the Qing dynasty (i.e. long after the trade pidgin had had time to expand grammatically into a contact variety, as discussed above). Schram (2006: 521) writes the following of the time post-1723, when the

Mongol and Tibetan uprising was suppressed (for further discussion of this quote, see Slater 2006: 46):

The intercourse of the Monguors with the Chinese became more intensive through commercial relations. The richest Monguors started sending their boys to Chinese schools, marrying Chinese girls, who abhorred the dress of the Monguor women, and refused to speak the Monguor language. More and more Monguors, under the impact of Chinese culture, were ashamed of being called barbarians and preferred to claim to be Chinese. Long since, the chiefs of the clans, the T'u-ssu, had set the example by marrying Chinese girls, to such an extent that many among them were unable to speak the language of their subjects. Nationalism in language never having existed among them, the Chinese language began to be used indiscriminately at the village meetings and at the performance of religious rites by shamans and lamas. All official documents were written in Chinese, and so nearly all Monguors understood and spoke the Chinese language but used their Monguor language when conversing among themselves.

From this remark ('nearly all Monguors understood and spoke the Chinese language but used their Monguor language when conversing among themselves') it seems that the Monguor at large did not shift to Chinese, though with regard to the elite class, there was a practice of Monguor leaders marrying Chinese women and shifting from Monguor to Chinese, and in this probably setting an example that other wealthy Monguor followed. This phenomenon might have begun quite late, though it is difficult to be sure (to the extent that this question could be answered at all, it would be through a detailed study of the history of each of the relevant clans, which space does not permit here). Thus H.-Y. Zhang (2009: 76) notes that language shift to Chinese began for the tribal chieftains of the *Qijia* clan (according to Tuttle 2006: 38, a Mongol, and later Monguor clan) with the thirteenth generation, which H.-Y. Zhang calculates as being in the mid 18th century. The reason why the tribal chieftains shifted to Chinese (and not the common people) can also be understood in terms of the better access to Chinese afforded to them by their mediating role between the Chinese empire and their own clan (e.g. as Schram notes, official documents were written in Chinese).

What these remarks also show is that when the Chinese enrolled into Monguor clans, they resisted assimilation into Monguor culture, but rather the Monguor who married them shifted to Chinese, because in line with the status of Chinese as the language of the socio-politically dominant group, 'The Monguors feel their culture to be lower than that of the Chinese' (Schram 2006: 164, in Slater 2006: 49). As Limusishiden and Stuart (2006: 60) note, 'The *tusi*, as described by Schram, ensured that their children learned Chinese, they did not wear Monguor clothes, they married Chinese, and their daughters mostly married Chinese.' This is

unlike the European *Lançados* who married local women around trade forts in West Africa, of whom it is reported that they underwent acculturation to their wives' culture (though retained their language) (Kihm 1994: 4).

To recapitulate, Schram's observations suggest that Qing dynasty language shift through intermarriage was a phenomenon mainly associated with the Monguor elite class (the *Tusi* and the rich), presumably because they had the prestige to attract Chinese wives even though the social status of the Monguor was lower than the Chinese. However, according to Schram's remark cited above, among the Monguor population at large, the situation was community-wide, steady bilingualism, with Monguor used for intragroup communication. This remains the case today, where in Thomason and Kaufman's (1988) terms the Monguor constitute a case of 'language maintenance' rather than language shift': the Monguor are 'a language community [which] maintains its coherence as a community distinct from the [Chinese] language community with which they are in contact' (Dede and Limusishiden 2012: 103). Aside from those who might have married tribal chieftains or others of the elite class, according to Schram (2006: 164), it was likely only 'stray Chinese without families' who enrolled in Monguor clans prior to the 1868-1875 Muslim uprising.

2.5.4.6 *Language shift during the Qing dynasty*

So far, I have argued that the socio-historical evidence suggests that there probably was not language shift by large numbers of Monguor or Tibetan speakers during the Ming period, and especially not during the early period, but instead bilingualism became increasingly common, with the Chinese contact variety gaining use among the local population (alongside their native languages). However, there is considerable evidence showing that the disruptive events which occurred during the Qing dynasty resulted in language shift, not only among some of the Monguor, but also among the Mongolian and Tibetan clans. In the main, the language policy of the Ming and Qing government (from the late 14th to early 20th century) in the north and west of China was one of accommodation rather than assimilation or forced sinicization of non-Chinese speaking peoples (Zhou 2003: 6-7). Moreover, the relations between Qinghai's *Tusi* in particular and the Chinese were considerably more peaceful than in the Southwest of China, where uprisings and local resistance were more common (Gong 1992: 1320). Thus the emergence of a Chinese pidgin for trade and with time a regional Chinese variety would have mostly occurred within an environment of relative 'peace, trade and cooperation' as respects the superstrate Chinese, rather than through more forceful policies applied to ethnic groups in the South (Zhou 2003: 6).

However, following the participation of the local Tibetan and Mongolian clans in the revolt led by Mongol prince Lobzang Danjin (1692-1755), which was defeated in 1724, the Qing government under Niangengyao launched recriminations, which involved violent suppression of the Tibetans and Mongolians. According to the oral tradition that is widespread among the six Tibetan tribes of *Taersi* (Kumbum) monastery, which is about 16 miles from Xining, during this period the use of Tibetan among the six tribes was much reduced as speakers sought to blend into a Han-dominant society (to avoid execution), by abandoning their traditional Tibetan dress, shifting to the Chinese language and through intermarriage (H.-Y. Zhang 2009, cf. X.-R. Jia 1993: 272). Fieldwork by H.-Y. Zhang (2009) has yielded reports to this effect from older members of these clans, such as a 74-year old from the *Shenzhong* clan who noted that nobody dared to speak Tibetan after the suppression of the revolt. Combined with the large-scale Han immigration into the region that occurred after this time, H.-Y. Zhang (2009) identifies language loss among these Tibetan tribes as beginning with these events (cf. Section 2.6.1 below).

Some of the Monguor were also embroiled in this revolt, despite the loyalty of the majority among the Monguor clans to the Chinese throughout the Ming and Qing dynasty. Schram (2006: 434, 520) notes that pre-1723, many Monguor had joined monastic communities in hope of a better life (free from taxation and corvées), and in this case the tribal chieftains could not stop them. But following the suppression of the Mongol and Tibetan uprising by Chinese general Niangengyao in 1723, the monasteries fell into Chinese hands, resulting in the Monguor concerned (who had aligned themselves with the uprising) shifting to Chinese. Schram writes,

the thirteen villages are Monguors who had left their T'u-ssu [tribal chieftains] and had become subjects of Erh-ku-lung [monastery] before 1723, and then became Chinese subjects after the revolt and renounced their identity to the extent of speaking only the Chinese language (Schram 2006: 434)

Schram (2006: 521) notes of these villages, ‘They started to speak Chinese, adopt the Chinese style of dress, marry Chinese girls, be buried according to the Chinese rites’. This is thus a report of a case of wholesale language shift from Monguor to Chinese, and it was precipitated by Niangengyao’s military campaign, which came down harshly upon the monasteries for their role in the revolt. Nevertheless, it should be highlighted that the number of Monguor involved in this thirteen village shift would have been fairly small in relation to the overall population of the Monguor clans, whose social structure by and large remained intact because of their loyalty to the Ming court (Ibid., 620).

Later, violent disruption broke out again in the 19th century, which served to increase Monguor-Chinese integration. That is, the level of integration between the Monguor and the Chinese seems to have increased greatly only after the 1868-1875 Muslim uprising, estimated to have left millions in Gansu dead:

It was probably similar stray Chinese without families who enrolled in Monguor clans during the period from 1368 to 1723. Later, in times of peace and wealth, there were probably not many Chinese who enrolled in the clans. The most numerous enrollments were after the disastrous intermittent Muslim rebellions, when many Chinese lost all their wealth, families were broken up, and individuals fled to the Monguors to begin life anew. (Schram 2006: 164)

With time, mixed communities of Monguor and Chinese developed, with three villages containing an equal number of Monguor and Chinese founded in Datong (forty miles north of Xining) in the late 18th century (Ibid. 130). It was probably as late as during the nineteenth century before Chinese-Monguor population-mixing became truly widespread; prior to this point, Schram's account suggests that it was the exception rather than the norm for Chinese to live among the Monguor clans. Thus for five hundred years from the start of the Ming dynasty the Monguor seem to have mostly withstood being 'absorbed by the Chinese nation' (Ibid. 520). As such, we have seen that the cause of Qing dynasty language shift and population mixing was, directly or indirectly, the turbulence and disruption of the period, which has been emphasized by modern scholarship concerning the Qing dynasty in general and the *Hehuang* region in particular (e.g. Nietupski 2006: 33, Roche 2011: 231ff.). In summary, direct evidence has been presented for language shift among the Monguor and Tibetans (and to some extent Mongolians) in Xining post-1723.

2.5.5 Section summary

To summarize, with regard to the dialect's emergence in the early Ming (late 14th and early 15th century), it has been argued that uninterrupted access to speakers of their native language, together with generally poor access to Chinese make it unlikely that the Monguor clans at large would have forsaken their native language in significant numbers. The only setting in which I could envisage such a shift occurring in the early Ming, given the above discussion of the socio-cultural separation between the Monguor and the Chinese communities, would be in the context of mixed marriages (whereas the studies reviewed above seemed to suggest community-wide shift). That is to say, it may have been that offspring of Monguor-Chinese marriages in the Chinese garrisons would have become monolinguals in Chinese because they lived in a compact Chinese populated fort environment (though this is not certain, because

their progeny probably were not wholly isolated from the surrounding society, still having opportunities to interact with speakers of the local languages, which would have discouraged language loss). But importantly, as discussed above, the available historical evidence suggests that the majority of soldiers brought their wives with them to the Hehuang region (e.g. according to the *Annals for Lanzhou prefecture* cited above), and so the number of Monguor involved in mixed marriages with the Chinese would have probably been small in proportion to the population of the clans at large. Shift was also noted to have occurred through intermarriage among the Monguor elite class, though it is not clear that this began in the early Ming (H.-Y. Zhang 2009 dated shift to the mid 18th century for one clan), and it also accounts for only a small portion of the overall population.

Rather than through early shift by large numbers from among the Monguor (or Tibetan) clans, it has been argued that substrate interference initially arose in a ‘fort creolization’ scenario in the 14th/15th century through the development of a pidgin for restricted social functions such as trade, mostly culminating in steady bilingualism among the local tribes in the Chinese pidgin and their native language. The Monguor (and Tibetan) tribes on the whole retained their integrity as social groups whilst a contact variety of Chinese probably came to be used more widely among them as an additional language i.e. for the most part, a stable scenario of language maintenance, in Thomason and Kaufman’s sense. With time, probably over several generations of use as a second language, the initial pidgin expanded grammatically, as later Chinese came to be used for a range of other social functions among the Monguor, as was seen from Schram’s account. Lastly, it was observed that after Chinese had already been in use by the local tribes throughout the Ming period, due to the violent events of the Qing period and an associated increase in population-mixing, shift to Chinese did occur for parts of the non-Han population, contributing further substrate interference to a regional contact variety that had already been developing over the preceding centuries.

Before moving on, it is noteworthy that the expansion of the Chinese language into territory occupied by previously non-Chinese speaking populations by means of fort colonies was not a phenomenon limited to Qinghai-Gansu, but occurred across the Chinese frontier. Military expansion followed by large scale Han immigration was an important means by which the Chinese language spread to non-Han peoples not just in Qinghai but in the Southwest and elsewhere (e.g. Bradley 2001; von Glahn 1987 on the Sichuan frontier). As such, despite regional differences in socio-cultural dynamics, it is suggested that the ‘fort creolization’ model could make a valuable contribution to our understanding of the spread of the Chinese

language and the emergence of dialectal variation in pre-modern times. In the next section, language contact in modern times is discussed.

2.6 Second phase of language contact: the influence of Standard Mandarin in modern times

The second, more recent stage of language contact affecting the dialect involves the strong influence of Standard Mandarin (*Putonghua*). This influence is evident not only upon the Xining Mandarin dialect, but across the languages in the region. For instance, in the Baonan (Mongolic) language spoken in Gansu province, approximately half of the vocabulary is Chinese in origin (Dwyer 1992: 11, after Li 1989). On the one hand, the influence of *Putonghua* is due to the policy of mass Han immigration into the area initiated by the post-1949 Beijing central government for the purpose of industrializing and modernizing the nation. The state-sponsored resettlement saw immigrants arriving from all over the country, but a majority probably came from northern parts of China (Dede 1999a: 17, note 17). The sheer number of immigrants is a factor leading to the emergence of what Dede (1999a) calls the ‘New Xining dialect’, modelled on Standard Mandarin. In this modern phase of language contact, Standard Mandarin is the prestige language. The ‘Old Xining dialect’ created over the preceding centuries through substrate interference is often viewed as a marker of backwardness, and all the more so because Xining – and Qinghai in general – is a poor and relatively underdeveloped region in comparison to the affluence of Eastern China (cf. Dede 2003: 341-2). The scale of this wave of immigration can be seen in the fact that from the 1940s until the present, the Han population has multiplied dramatically. There were 344,000 Han in Qinghai in 1947 (Ma 2011: 49, after Ma Hetian 1947: 215), but the 2010 census records the population of the province as 5,626,722, of which 53% are Han (QSIN 2012b).

The society in which the 20th century immigrants arrived was in many ways culturally – and linguistically – foreign to them, notwithstanding the existing Han Chinese population which had arrived over the previous centuries. Immigrants interviewed by Rohlf (2016: 121), reported that they initially had problems understanding the local Mandarin dialect (unsurprisingly, given its non-Sinitic morphosyntax). In September 1956, an article in the *Qinghai Daily News* sought to encourage the new arrivals adjusting to life in the borderland. Liu Xucheng, a laborer in a construction firm, reported the problems he encountered as follows:

'Qinghai is just so backward... Although Xining is a provincial capital, it doesn't measure up to our county towns back home... some of the things people say I can't understand, and it is hard to buy some things, too.' (cited from Rohlf 2016: 3)

The effects of 20th century contact-induced change resulting from this wave of immigration can be illustrated with a concrete example. Dede (1999a) conducted a quantitative investigation of a change in progress for one syntactic variable, an ablative postposition associated with the Old Xining dialect which is disappearing in favour of a prepositional form on the model of Standard Mandarin. The ablative postposition, shown in (5), can be dated to the first phase of language contact that arose in Qinghai as a result of large-scale immigration into the region by the Han Chinese people during the early Ming dynasty (discussed above) (Dede 1999a, 2003).

- (5) *jia zuotian Beijing tɕia lai le*
 3SG yesterday Beijing ABL come ASP
 'Yesterday he came from Beijing.' (Dede 1999a: 2, my gloss and transliteration)

Dede argues that as a consequence of this period of contact with the local languages, and particularly with Monguor (Mongolic) which possesses the ablative postposition *sa*, Sinitic prepositional syntax gave way to the postpositional structure. Initially, this transition involved a hybrid stage where both a preposition and the ablative postposition were used together ((6), below).

- (6) *jia yelaigoer cong neidi li tɕia lai le*
 3SG yesterday from interior LOC ABL come ASP
 'He came back from the interior yesterday.' (Dede 1999a: 2 my gloss and transliteration)

With time, the purely postpositional structure shown in (5) became the standard pattern in the dialect. However, in modern times the growing influence of Standard Mandarin (*Putonghua*) is leading to the loss of this historic postpositional pattern. Thus the two principal stages of language contact (an early stage involving contact with non-Sinitic, head-final languages, and a recent stage characterized by the influence of Standard Mandarin) are represented in the following diagram, as they pertain to the ablative postposition, along with the intermediate hybrid stages (Dede 1999a: 11):

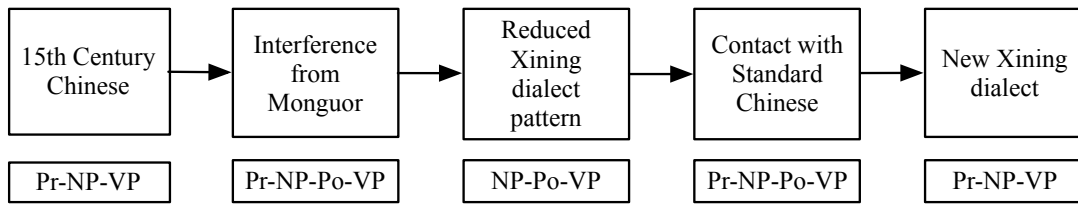


Figure 2-4 Historical development of the ablative pattern (reproduced from Dede 1999a: 11)

The two phase model is, I think, a helpful way of understanding change in Xining Mandarin across the range of features which differ in the old Xining dialect and the new Xining dialect, which at its most extreme is simply Standard Mandarin spoken in the regional accent (*Qingpuhua*, a blend of *Qinghaihua* ‘Qinghai dialect’ and *Putonghua* ‘Standard Mandarin’).

2.6.1 Modern day language shift

Following language shift during the Qing dynasty, shift occurred again during the communist era. In terms of language policy, the period from 1958-1977 is termed the ‘Chinese monopolistic stage’ by Zhou (2003), during which minority languages were seen as an obstacle to the ideal of a united, homogeneous society. As such, during the cultural revolution under Mao Zedong, this language policy was part of the so-called attack on the Four Olds (old ideas, old culture, old customs, and old habits).

With regard to Qinghai, modern day language shift connected to this policy is well illustrated by the *Jiaxifan*, Tibetans located in the Yellow river basin area (*Huangshui he liuyu*) who no longer speak Tibetan but speak Chinese instead, and who to a large extent have assimilated into Chinese culture (S.-C. Wang 2007). Culturally, the *Jiaxifan* are now a distinct entity (distinct from farmer Tibetans elsewhere in Qinghai), exhibiting an amalgamation of aspects of the cultures of the surrounding peoples. S.-C. Wang (2007: 27) reports that prior to the establishment of the People’s Republic of China in 1949, many such Tibetans in the eastern part of the province spoke Tibetan, but now they cannot. Similarly, Li (2013: 131) also places the shift within the last century.

Regarding the etymology of the term *jiaxifan*, *xifan* is Chinese, and was used in Song dynasty Chinese documents to refer to the area controlled by the Tsong kha tribal confederation (Horlemann 2005: 31). *Xifan* is derived from the Chinese word *xi* ‘west’ (since the Tsong kha Tibetan clans were located to the West of the Han Chinese), and the latter syllable *fan* is from the earlier Chinese term *Tufan*, which appears in documents as early as the Tang dynasty and

denotes the ancient Tibetan dynasty (Tibet as a whole) (Horlemann 2005: 31; S.-C. Wang 2007: 25 for discussion). Meanwhile, concerning the origin of the term *jia*, the majority view, from S.-C. Wang (2007), is that *jia* derives from the similar-sounding Tibetan word *rgra*, meaning 'Han Chinese nationality/language', such that *jiaxifan* means 'Chinese Tibetans', 'Sinicized Tibetans'.

In terms of the degree of modern language shift, consider the situation reported for the six Tibetan clans of Kumbum (Ch: *Taersi*) monastery, which epitomize the *Jiaxifan* phenomenon.⁷ Tibetan has been to a large extent displaced by Xining Mandarin as the language used by the Kumbum clans, and in some places, this shift is almost total. H.-Y. Zhang's (2009: 75) study of *Sanhe* village (Pingan county) and *Shangsi* village (Huangzhong county), based on the results from 94 questionnaires, found that all respondents there use Qinghai Mandarin as the exclusive language of communication in the home, with other villagers and with people of other ethnicities.⁸ In general, however, H.-Y. Zhang (2009: 76) reports variation in language use according to location. In the *Chuanshui* area (Pingan county), Qinghai Mandarin is more or less the only language used in the home and to communicate with other ethnic minorities. Meanwhile, in the *Qianshan* area (Huangzhong county) a small minority (with older family members who speak Tibetan) use Tibetan in these scenarios, whilst the majority use Qinghai Mandarin. Finally, in the *naoshan* area (Pingan county), H.-Y. Zhang reports relatively more usage of Tibetan than in the former two areas, but notes that speakers are bilingual, also using Qinghai Mandarin.

Nevertheless, it is important to add that although language shift has occurred in the modern period as well as in the 18th century (cf. Section 2.5.4.6), there are important differences between these shifts in terms of their effects on the Xining dialect. In modern times access to the target language, Chinese, is much more widely available to the non-Han peoples, with much larger numbers of Han Chinese immigrants in the area than arrived throughout the earlier period. In addition, Standard Mandarin (*Putonghua*) is being widely promoted with great efficiency through formal instruction in schools and in the media. As such, modern day shift is not a source of (another layer of) structural interference in the same way as the earlier

⁷ The names of the six clans are *Xina*, *Shenzhong*, *Longben*, *Qijia*, *Mina*, *Xueba*. For a detailed breakdown of the location of these clans, which are now spread across Huangzhong, Pingan and Datong counties, see H.-Y. Zhang (2009: 71-2).

⁸ H.-Y. Zhang (2009: 75) qualifies these results by adding that in these villages, older family members (e.g. grandparents) who can still speak Tibetan may use some Tibetan in the home, which indicates a passive knowledge of Tibetan among the younger family members. Also, these older Tibetan speakers may use Tibetan when communicating with other older Tibetan villagers.

Qing dynasty shift would have been with respect to the contact variety which had emerged over the preceding Ming period. This is because the non-Han children growing up in modern times as monolingual speakers of Chinese have adequate access to Chinese, enabling successful convergence upon Standard Mandarin syntax. As such, despite shift in the modern period, the basic two phase model of contact for the Xining dialect, proposed by Slater (2003) and Dede (2003), retains validity: the pre-modern period contributed substrate interference, and the modern period is characterized by the loss of those features and increasing convergence upon the model of Standard Mandarin. In the next section, some information is provided about the data used in the present study, situating the Xining dialect in relation to other Mandarin dialects in Qinghai.

2.7 Background to this study

Qinghai Mandarin dialects are usually classified into three dialect groups on the basis of C.-C. Zhang's (1984) phonological study. C.-C. Zhang's schema incorporates the Qinghai dialects spoken in the northeast of the province along the Yellow river and its tributaries (which include the Huangshui river). The Xining dialect is the largest in terms of number of speakers, and is spoken in Xining municipality, Huzhu Monguor Autonomous county, Huangzhong County, Datong Hui and Monguor Autonomous County, Huangyuan County, Menyuan Hui and Tibetan Autonomous County, Pingan, Hualong and the seat of Guide county. This dialect is termed Huangshui Chinese by Dede (2007), because the areas concerned are mostly aligned with the upper Huangshui river (the largest tributary of the Yellow river). Secondly, there is the Minhe and Ledu dialect, and thirdly the Xunhua group, named after Xunhua Salar Autonomous County.

The data for the present study come from speakers from Haiyan county and Menyuan county, which are the easternmost counties of Haibei Tibetan autonomous region (shown in yellow in the map below) and are located to the northeast of Qinghai lake.

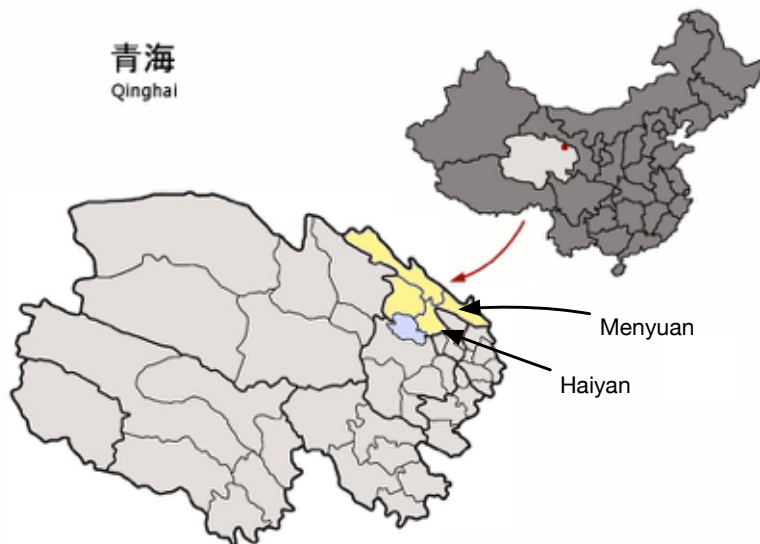


Figure 2-5 Map showing the location of Haibei prefecture, and Menyuan and Haiyan counties.⁹

Haiyan borders Huangyuan county and Datong county, which are part of the Xining municipality. It can be assumed that the majority if not all of the present-day Han population of Haiyan county is composed of recent (i.e. 20th-21st century) immigrants, such that historically it has not had a sufficiently large, settled population of Chinese speakers who could have formed a dialect of their own distinct from that of Xining. Thus it is recorded in the county records that throughout the Ming and Qing period, Haiyan was a pastureland roamed at different times by Tibetan and Mongolian tribes (*Haiyan xianzhi* 1999: 5, 16-17). Indeed, Rockhill (1891:118ff.) notes of his late 19th century travels that leaving Huangyuan county and journeying west towards Qinghai lake was to enter a land of nomads, leaving the Chinese behind, and the same likely applied to Haiyan county which reaches around the north of the lake.

In this study I assume that Haiyan county is part of the Xining dialect group, along with Menyuan county. Haiyan county is not explicitly included in C.-C. Zhang's (1984) classification of Mandarin dialects in the northeast of Qinghai, although he does state that the Xining dialect is spoken in the counties listed above and other locations (*deng* 'and so forth'). Moreover, in the Haiyan county records, the Haiyan Mandarin dialect is classified as belonging to the Xining dialect group (*Haiyan xianzhi* 1999: 517). With regard to C.-C.

⁹ Adapted from *Wikimedia Commons*. The original map, produced by Croquant, was accessed at: [https://commons.wikimedia.org/wiki/File%3ALocation_of_Menyuan_within_Qinghai_\(China\).png](https://commons.wikimedia.org/wiki/File%3ALocation_of_Menyuan_within_Qinghai_(China).png) [30th June 2016]

Zhang's (1984) criteria of having four monosyllabic tones instead of only three, and the pronunciation of the first person pronoun (as [nɔ⁵³] instead of [və⁵³] (Ledu) or [ŋɤ⁵³] (Xunhua)) (cf. Dede 2003: 332), then notwithstanding other minor phonological differences Haiyan county belongs in the Xining group. For example, four different tones are evident across i) the first person singular pronoun *no* [nɔ⁴⁴] ii) the verb *gai* [kɛ²¹³] 'build' iii) the third person singular pronoun *jia* [tɕia²⁴] and iv) the verb *ko* [kɔ⁵⁵] 'take an exam'. With regard to the first person pronoun, in the Haiyan dialect this is pronounced nɔ⁴⁴, as in Huangyuan (Lu 2011), which is included in the Xining dialect (despite the difference in tone), and so the consonant and vowel are the same as in Xining city, but distinct from those in the Ledu and Xunhua dialect.¹⁰ According to the Haibei prefecture records (*Haibei zhouzhi* 1999: 851), the dialect spoken in Haiyan county resembles that of the adjacent Huangyuan county (i.e. *Haibei zhouzhi* records that in Haiyan they speak *Huangyuan hua* 'Huangyuan dialect'; the phonology of the latter has been described in detail by Lu 2011). However, the morphosyntactic features discussed in this dissertation are largely the same across northeastern Qinghai province (across the three dialect groups), in particular with respect to head-finality.

The natural discourse data in this study was collected during nine months of fieldwork in 2014 and 2015. Besides ordinary conversation, a picture narrative task (San Roque et al. 2012) contributed a small part of the natural speech data (names have been changed for anonymity). Where frequency data is provided, the nature of the data analysed is specified next to the relevant tables. In addition, the discourse data was supplemented by elicited data, which was collected through weekly one-to-one sessions with native speakers of the Xining dialect: two primary informants provided the data concerned, though others were consulted as the opportunity arose. The first was from Menyuan, and was an educated female of Tibetan ethnicity in her mid-sixties, and the other was from Haiyan, an ethnically Mongolian male in his twenties. These informants had only a little passive knowledge of the mother tongue of their ethnic group, having participated in the modern day language shift to Chinese described above. The examples presented are from the natural discourse data, except where noted otherwise or in the final chapter on scrambling. With regard to the transliteration system used, because a full IPA transcription would provide more detail than is required for the present study, I have transliterated the examples using pinyin, but have adapted this for some

¹⁰ C.-C. Zhang (1984) also notes other phonological properties of the Xining dialect, such as having a [v] final after retroflex initials in certain contexts (cf. Dede 2003: 332), and the Haiyan dialect possesses, for example, a [v] final in *shu* 'book', which is pronounced *fu* [fv].

common function words which differ significantly from their pronunciation in the standard language e.g. the first person pronoun, discussed above. For forms directly relevant to the present discussion, I have also provided an IPA transcription.

Having considered in this chapter the contact scenario underlying the Xining dialect, and the data used in the present study, in the next chapter the linguistic mechanisms responsible for the emergence of head-final syntax in the dialect are discussed.

Chapter 3 Head-final Syntax in the Xining Dialect

3.1 Introduction

As mentioned in Chapter 2, in terms of its morphosyntax, the most striking difference between the Xining Mandarin dialect and Chinese dialects elsewhere is the extent to which it is head-final. This chapter provides an overview of the syntactic changes involved and examines the mechanisms by which head-final syntax arose (touching on head-initial variants in some cases too). Primary among these mechanisms was ‘grammatical replication’ (Heine and Kuteva 2005) rather than outright borrowing of form-meaning units. In terms of Heine and Kuteva’s (2008) taxonomy, grammatical replication in the dialect is seen to have primarily involved other Chinese linguistic material being recruited to fulfil grammatical functions found in the substrate – rather than actual reordering of Chinese form-meaning units from head-initial to head-final. The role of ‘contact-induced grammaticalization’ (Heine and Kuteva 2005) is also evaluated with respect to the Xining dialect, as well as mechanisms of first and second language acquisition and second language use (cf. Siegel 2008). Finally, morphosyntactic convergence in the Sprachbund is discussed in relation to gap-filling, a motivation that has often been hypothesized to drive contact-induced change, and the changes are argued to fill syntactic gaps in the Xining dialect (the absence of head-final categories in the superstrate which are found in the substrate) rather than functional gaps.

3.2 Overview

In this chapter nine representative head-final features from the Xining dialect will be classified according to the mechanism of change involved. They are drawn from the bottom to the top of the clausal structure: from the VP level to sentence-final particles, as well as from the nominal domain, and have been chosen because they are discussed in sufficient detail in the literature and/or in the following chapters for it to be uncontroversial that they are contact-induced.

Following Heine and Kuteva (2005), I distinguish ‘grammatical replication’ from ‘borrowing’. ‘Grammatical replication’ concerns the ‘transfer of grammatical meaning’ (Heine and Kuteva 2005: 2) such that replica language linguistic material acquires a new pattern of grammatical marking on the model of functions in another language, crucially without borrowing any phonetic material from that language. This type of change has traditionally been discussed using terms such as ‘grammatical calquing’ (e.g. Ross 2007), ‘loan translation’ (Weinrich 1953: 40) and ‘indirect morphosyntactic diffusion’ (Heath 1978, Aikhenvald 2002: 4), or more

recently in terms of 'pattern replication' (PAT) as opposed to 'matter replication' (MAT), where only the latter involves borrowing of phonetic material (Matras and Sakel 2007).

According to Heine and Kuteva (2008: 59), the relation between grammatical replication and other types of contact-induced change, including contact-induced grammaticalization, is as shown in Figure 3-1. Replication is in opposition to borrowing, and contact-induced grammaticalization (discussed in Section 3.7) is a type of grammatical replication.

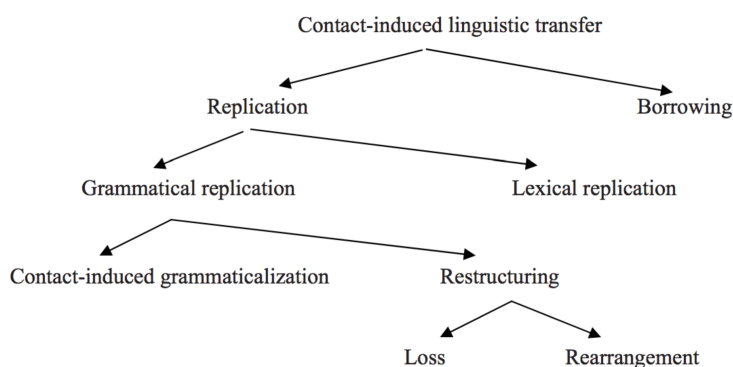


Figure 3-1 Main types of contact-induced linguistic transfer (Heine and Kuteva 2008: 59)

As shown, grammatical replication can also be manifested through restructuring that involves a change in word order (i.e. reordering) to match the word order of the model language (cf. Heine and Kuteva 2005: 111-17). However, according to Heine and Kuteva (2005: 112), apparent word order changes can in many cases be regarded as ‘by-products of grammaticalization’, and so fall under the ‘contact-induced grammaticalization’ node (e.g. cf. the postposition *ha* in Section 3.4.3). There is also another possibility not represented in this diagram, which is that word order change may arise through abrupt calquing of a model language form without traditional usage-based grammaticalization processes being involved.¹¹ Heine and Kuteva (2005: 100-3) recognize the existence of such a mechanism (calling it ‘polysemy copying’), but argue that it is a rare phenomenon because they believe that contact-induced grammaticalization accounts for the majority of cases of grammatical replication not involving restructuring. However, because I will argue here that a number of cases of grammatical replication in Xining Mandarin are not best described as ‘contact induced grammaticalization’ in Heine and Kuteva’s (2005) sense, I will use the term

¹¹ The absence of this mechanism means that Figure 3-1 is not a complete descriptive taxonomy.

‘functional transfer’ (Siegel 2012), and draw on insights from creole studies to analyse the changes in the Xining dialect.

The changes to be discussed in this chapter, and the mechanisms that will be claimed to be involved, are as follows:

	<i>Reordering</i>	<i>Functional transfer</i>
<i>Grammatical replication</i>	i. VO → OV (and subsequent OV → VO) ii. Aux-VP → VP-Aux iii. V-IPFV-O → V-O-IPFV	i. Future tense marking with sentential particle <i>lia</i> ii. Object marker <i>ha</i> iii. SAY complementizer <i>fozho, fo</i> iv. SAY verb to reportative/hearsay evidential <i>fozho, fo</i>
<i>Borrowing</i>	i. Modal of possibility <i>chuang</i> ii. Ablative postposition <i>sa</i>	
<i>Indeterminate</i>	Comitative/instrumental postposition <i>lia</i>	

Figure 3-2 Mechanisms used in the emergence of head-final categories in the Xining dialect

The distinction made here between reordering and the emergence of head-final devices through functional transfer reflects that made by Heine (2008: 46-7): the cases involving functional transfer differ from reordering in that the relevant category exponent in Chinese has not undergone a change in position. For example, the head-final SAY complementizer in the dialect was not created through reordering such that a head-initial SAY complementizer inherent to Chinese came to follow rather than precede the complement clause, but rather by reanalysis of linguistic material distinct from the complementizer category (a speech verb) as a head-final C.

For the sake of providing an overview, detailed discussion of the changes and their emergence through language contact is largely delayed until the subsequent chapters (unless described in detail elsewhere). The forthcoming sections are ordered as follows. In the next section (Section 3.3) genuine reordering is considered. Section 3.4 considers functional transfer, and then borrowings are discussed in Section 3.5, followed by an indeterminate case in Section 3.6. After thus introducing the data, Section 3.7 considers the applicability of the notion of contact-induced grammaticalization, and Section 3.8 analyses the cases of grammatical

replication in terms of insights from creole studies. Then, the role of gap-filling is considered (Section 3.9), before concluding the chapter (Section 3.10).

3.3 Reordering

Heine (2008) argues that contact-induced word order change does not normally involve the introduction of entirely alien word orders. Instead, what commonly occurs is that a lesser-used, pragmatically marked but nevertheless pre-existent word order in the replica language becomes conventionalized as an unmarked or basic word order. In this section this mechanism will be observed in the change from VO to OV in the Xining dialect's VP, whilst contrary to Heine's (2008) prediction, the auxiliary system and imperfective marking show cases of the introduction of a word order entirely alien to Chinese. In addition, head-initial orders will also be discussed with regard to the VP and the aspect marker ZHE, with more discussion devoted to the VP than the other changes because of the fundamental importance of clarifying the status of the dialect with respect to the basic order of verb and object.

3.3.1 *Verb-object* → *object-verb (and back again)*

It has long been recognized that basic SOV word order exists in the Xining dialect and is an outcome of contact with the local Altaic and Bodic languages (e.g. Cheng 1980, X.-R. Jia 1990, Yang 2009, D.-Q. Liu 2015). Thus even with bare objects lacking the object marker *ha* (cf. Section 3.4.3), OV is available:

- (7) *Wo naicha he le*
 1SG milk.tea drink ASP
 'I drank milk tea.' (X.-R. Jia 1990: 37, my gloss and translation)
- (8) *Na hehuang shi li*
 That Yellow.river be PRT
 'That is the Yellow river.' (X.-R. Jia 1990: 40, my gloss and translation)
- (9) *dianhua da-zho fo-gei, ni amen xiangfa*
 telephone hit-IPFV say-CAUS 2SG how idea
le...
 PRT
 'Call him and say (to him), "What are you thinking...?"

With X.-R. Jia (1990), I assume that OV in such cases is not derived by object preposing but is a genuine basic word order. The rationale for this view is that whereas OV order derived by preposing in Standard Mandarin is restricted by information structure factors (cf. Chapter 7

for discussion), and in many cases requires focus markers such as *lian* or *dou*, OV in Xining Mandarin is felicitous without any special marking and does not require any particular information structure conditions. OV is possible in out of the blue contexts, and according to X.-R. Jia (1990) is not perceived by native speakers as an order involving inversion. Moreover, in contrast to the scenario in Standard Mandarin, OV order is also comparatively unrestricted by object type (cf. Chapter 7, and discussion below).

We therefore assume the following scenario: basic word order in Chinese prior to contact with the local head-final languages was verb-object,¹² and contact played a role in the emergence of unmarked, basic OV order in the Xining dialect. Against this background, two points are worth highlighting. Firstly, object fronting was considerably more common in Ming Mandarin than in later varieties up to the present day, and so the VO to OV change is less dramatic than it might superficially appear, involving the development into a *basic* order of an order that previously existed as a *marked* order (i.e. rather than the introduction of an entirely alien order). And secondly, despite the emergence of OV order, VO order is also now in active use in the dialect. I will therefore argue in this section that we find two basic word orders in the dialect, with the co-existence of basic VO and OV in the modern dialect due in large part to a gradual reverse word order change back to VO in modern times.

With regard to object fronting in Ming Mandarin, this can be seen in the use of OV in texts like *Laoqida*, a Yuan dynasty Chinese language textbook for Korean students, created for the purpose of teaching colloquial Mandarin, which shows various lexical similarities to the Xining dialect (Du 1989). This text went through several redactions, and the redaction known as *Laoqida Yanjie* can be taken as representative of 14th/15th century Mandarin (cf. Sun 1996: 8-10). The analysis of *Laoqida* by Wadley (1987) indicates that although Mandarin basic word order was SVO in the Ming period, object preposing was more widely evident than in later redactions, and more so than in Modern Mandarin. Wadley (1987: 114) presents the following example of preposing in *Laoqida*, where a late 18th century redaction, *Chongkan Laoqida*, does not use preposing, and which would not usually be preposed in Modern Standard Mandarin.¹³

- (10) *Zenme Han'er yanyu shuodehao* [14th/15th century Mandarin]
 How Chinese language speak.well
 'How can you speak Chinese so well?' (*Laoqida*, Wadley 1987: 114)

¹² Indeed, Paul (2015: 35ff) argues that throughout its history, Chinese has always had SVO basic order.

¹³ Glosses for examples from Wadley (1987) are my own as they were not provided by Wadley.

(11) *zenme neng shuo women de guanhua?* [18th century Mandarin]
 How can say 1PL POSS Mandarin
 'How can you speak our Mandarin?' (*Chongkan Laoqida*, Wadley 1987: 114)

(12) *ni zenme nemme hui shuo Zhongguohua* [Modern Standard Mandarin]
 2SG how so.much can say Chinese
 'How can you speak Chinese so well?' (Wadley 1987: 114)

Similarly, sometimes OV orders in *Laoqida* occur which Wadley observes would be strange in Modern Standard Mandarin:

(13) *dage ni zhe yang mai me* [14th/15th century Mandarin]
 elder.brother 2SG this sheep sell Q
 'Elder brother, are you selling these sheep?' (*Laoqida*, Wadley 1987: 115)

Likewise, despite the post-verbal element *yige* (*yi* 'one' + classifier *ge*) in *Laoqida* example (14) we find the object preposed, whereas the SVO order in *Chongkan Laoqida* is closer to what we would find in Standard Mandarin (Wadley 1987: 114).

(14) *zhurenjia biechu kuai zhadao* [14th/15th century Mandarin]
 innkeeper somewhere sharp fodder-knife
jie yige lai
 borrow one.CL come
 'Innkeeper, go borrow a sharp fodder-knife from somewhere.' (*Laoqida*, Wadley 1987: 114)

(15) *zhurenjia ni ke wang biechu* [18th century Mandarin]
 innkeeper 2SG can towards other.place
jie yi ba kuai zhadao lai
 borrow one CL sharp fodder-knife come
 'Innkeeper, go borrow a sharp fodder-knife from somewhere.' (*Chongkan Laoqida*, Wadley 1987: 114)

Thus in colloquial Ming Mandarin there was greater use of surface OV order derived through object preposing, despite basic VO order. With regard to how OV basic order emerged in the Xining dialect, in view of the socio-historical discussion in Chapter 2, the introduction of OV

is likely to have involved the Monguor/Tibetan peoples attempting to acquire Chinese (with its basic VO order), yet – facilitated by poor access to Chinese – nevertheless producing OV orders due to interference from their native language i.e. learner production errors. The latter are known to occur for basic word order during the early stages of second language acquisition (Odlin 1990, Kellerman 1995, Camacho 1999), and can be explained in various ways, such as in terms of learners falling back on the processing procedures found in their dominant language (Winford 2008). Nevertheless, the establishment of OV as a feature of the emerging regional variety would likely have been facilitated by the greater use of object preposing in the target language.

However, although largely ignored in the literature (Ren 2004 being an important exception), VO basic word order is also frequently used in the Xining dialect (in line with the influence of Standard Mandarin in modern times and the resultant pressure to abandon traditional head-final features in favour of head-initial variants; cf. Chapter 2). Thus although OV order has been observed to be a basic order that is mostly free from restrictions on its usage, VO order is similarly unrestricted. For example, with regard to direct objects, bare nouns, *wh*-objects and complement clauses can all be found post-verbally. These are illustrated in (16) - (19):

Bare noun

- (16) *no zhidao Xining*
 1SG know Xining
 'I know Xining.'

- (17) *nomen baisheng-li he jiu zho*
 1PL baisheng-LOC drink alcohol IPFV
 'We are drinking in Baisheng.'

wh-object

- (18) *yeer, zhe liang tian ni zuo sa zhi zho*
 grandfather this two day 2SG do what IPFV PRT
 'Grandfather, what have you been doing these days?'

Clausal object

- (19) *no hai [yiwei [jiamen fang ha tui-dao-zhe fo CP] VP]*
 1SG still think 3PL room OBJ withdraw-COMPL-IPFV CMP
 'I still thought they had checked out of the room.'

Moreover, it is of typological interest to note that VO order is available across the full set of phrasal categories. For example, with regard to the interaction of VP word order and the modal of necessity *yao*, VO-Aux is possible, just as OV-Aux is possible (illustrated in the following section):

- (20) *na ge gawa mai fu de yao lia*
 that CL boy buy book NMLZ need PRT
 ‘That boy needs to buy books.’ (Elicited)

Similarly, VO is possible with clause-final tense marking by the particle *lia* (analysed in Chapter 5 as marking future tense with aspectually quantized predicates):

- (21) *jia xie yi bai zi lia*
 3SG write one hundred character PRT
 ‘He will write a hundred characters.’ (Elicited)

Likewise, VO is possible in embedded clauses marked by a head-final complementizer; that is, VO-CMP is possible as well as OV-CMP (cf. also Section 6.3.4.6 in Chapter 6).

- (22) *na no ha qu ha hai mai ge fuxi*
 then 1SG TOP go COND still buy CL revision
ziliao fozho xiang-zho zho
 resource CMP want-IPFV PRT
 ‘I think that if I go, I will still buy a revision resource.’

In addition, as discussed in Section 3.3.3 below, VO order is available in combination with aspect markers both post-verbally (i.e. V-ASP-O) and following the VP (i.e. VO-ASP).

With regard to the frequency of VO and OV in corpus data, VO orders are too frequently used to be explained away as code-switching to Standard Mandarin. Rather, they suggest that in modern times we are witnessing a resurgence of VO order in the dialect, following the change to basic OV order as a result of the early contact scenario described in the previous chapter. In support of this view, there is evidence for VO having largely displaced OV order in some constructions. For example, indefinite quantified objects in the corpus data are overwhelmingly (though not exclusively) found post-verbally, as in Standard Mandarin, rather than pre-verbally (as in a typical OV language), such that this is clearly now their default position (also see e.g. (22) and (27)).

- (23) *diyī tian jia nǒ ha gěi le yī guān la jiāng*
 first day day 3SG 1SG OBJ give PFV one jar hot sauce
 'On the first day he gave me a jar of hot sauce...'

In this respect, indefinite quantified objects are thus unlike bare nominal direct objects which more readily occur with both word orders in natural speech data (e.g. cf. the OV order for the object *fāng* 'room' in the embedded clause in (19), and *jiu* 'alcohol' with VO order in (17)). Nevertheless, it is known that indefinite quantified objects are not ungrammatical preverbally – this order is just infrequently used:

- (24) *Wáng lǎoshī jia ha yī běn fū gěi-zhè*
 NAME teacher 3SG OBJ one CL book give-ASP

'Teacher Wang is giving a book to him.' (Elicited)

Ren (2004: 344) notes that preverbal positioning of indefinite objects is usually for emphasis, and so it can be regarded as generally being a marked order. As such, there is evidence that VO and OV have to some extent specialized for object type, with VO the basic word order for indefinite objects. Similarly, duration and frequency adverbials functioning as 'pseudo-object' complements in pragmatically neutral sentences are also generally restricted to occurring post-verbally as in Standard Mandarin¹⁴ – instead of occurring pre-verbally as in OV languages like Mongolian. However, in some cases OV order is simply ungrammatical, as in Xining Mandarin (25):¹⁵

- (25) *nǎ nǐ (*yíguā) tāng yíguā bei*
 then 2SG a.while lie a.while PRT
 'Lie down for a while.'

- (26) *xóyer jīl soo-sen* [Mongolian]
 two year sit-P.PRF
 'He lived (there) for two years.' (Janhunen 2012: 204)

¹⁴ I do not consider negative contexts here, which make preverbal positioning of duration and frequency adverbials possible in Standard Mandarin and Xining Mandarin.

¹⁵ However, duration adverbials not functioning as direct object complements can occur preverbally in Xining Mandarin:

- (1) *Jia liang nián Xining zuo-zhè*
 3SG two year Xining sit-ASP
 'He lives in Xining for two years.' (Elicited)

Similar to the scenario for indefinite objects, although Ren (2004: 343) cites examples of duration and frequency complements occurring preverbally, she notes that this is mostly to give them special emphasis or focus. Thus with these three types of object, OV is on the whole a marked word order – a kind of fronting for focus – rather than a basic word order.

A parallel example of specialization, this time for OV order, is that even though direct objects are commonly found post-verbally and pre-verbally, indirect objects are essentially restricted to occurring preverbally, usually marked by the object marker *ha* (also see Ren 2004: 341-2 for other cases where only OV is possible).

(27) *na ni no ha bu mai-shang yi bao zho*
then 2SG 1SG OBJ NEG buy-COMPL one bag PRT

‘You didn’t buy a bag for me (i.e. you should have done so).’

In conclusion, therefore, I have argued that both OV and VO co-exist as alternative pragmatically neutral word orders in the dialect – a view which naturally emerges from accepting the existence of unmarked OV order (in agreement with Jia 1990, among others), and the frequency of VO in the corpus data. These orders compete with one another for usage, as in the case of bare nominal direct objects, for example, which frequently occur with both word orders. Nevertheless, we have also seen that some functional specialization is evident such that the orders are not equally available for all types of object. It is likely that this word order variation is the result of a modern day OV to VO change underway in the dialect, in line with the evidence of other head-final categories (e.g. ablative and locative marking discussed by Dede 1999a, 1999b) giving way to head-initial variants under the influence of Standard Mandarin. As in those cases, and as has been observed for word order change in European languages like Old English (e.g. Pintzuk 2002), both the old and new variants (here, OV and VO) co-exist during the ongoing word order change. Looking to the future, if the promulgation of Standard Mandarin continues as successfully as in recent years (and there is currently no reason to doubt that it will), then VO would be expected to eventually fully displace the historic OV order and become the only basic word order for all types of object.¹⁶

¹⁶ Ultimate empirical support for a modern day OV to VO change in the dialect (or any other diachronic change) would require diachronic data to reveal to what extent the new pattern is more prevalent in the dialect now than in the past, and diachronic data on the dialect is not available. However, I think it is reasonable to assume that there was less use of VO in the past (i.e. in the pre-modern period following the early contact-induced emergence of OV order) than there is now (even if VO was not fully eliminated by the early contact scenario) because the influence of Standard Mandarin is much more prevalent in the region now than it has been in pre-modern times, in part due to exponential 20th century Han immigration. Consequently, pressure on the Xining

3.3.2 *Aux (necessative)-VP → VP-Aux (necessative)*

With regard to the modal of necessity, a modal auxiliary that was head-initial (Aux-VP) became head-final, occurring after a nominalizing particle (cognate with Mandarin *de*) which attaches to the right of the VP (VP-NMLZ-Aux) (cf. S.-C. Wang 2012, Dede in press). The head-final orders in (28) and (29) correspond to the Standard Mandarin head-initial order Aux-VP illustrated in (30):

(28) *zai ni na ge ha haishi shoushi de yao lia*
PRT 2SG that CL OBL still tidy NMLZ must PRT
'You still need to tidy that up.'

(29) *zhe ge lia jian shi zai fo de*
this CL two CL matter again say NMLZ
bu yao
NEG need
'It is not necessary to mention these two things again.'

(30) *ni xuyao ba na ge shoushi yixia* [Standard Mandarin]
2SG need BA that CL tidy a little
'You still need to tidy that up.'

For reasons of space, I will not discuss the head-initial variant (modal *yao* pre-verbally), which is familiar from Standard Mandarin. The structural change, resulting in a clause-final modal, can be summarized as follows (and resembles the structure for another head-final modal discussed in Section 3.5.2):

Subj-*yao*-VP → Subj-VP-NMLZ-*yao*

In order for this reordering from head-initial to head-final to occur for the modal *yao*, the non-Han learners of Chinese must have correctly understood its meaning (that it was *yao* and not some other device that was the modal of necessity), indicating that this change did not originate in a perception error (e.g. reanalysis) like some other changes discussed below (cf.

dialect to adopt Standard Mandarin head-initial word orders is greater now than ever before (for related discussion cf. Chapter 2, and Section 3.3.3 of the present chapter). Nevertheless, informal observations during my fieldwork can provide some support for the proposed word order change, in as much as OV seemed to be used somewhat more by rural speakers than by speakers with a closer connection to Xining city itself (where change would be expected to progress the fastest), and more by younger speakers than by older speakers (though in some cases speakers in their 60s born in Xining city also used mainly VO). In the absence of diachronic data, future research could thus potentially still clarify the situation scientifically using sociolinguistic methods.

Detges and Waltereit 2002). That is, since a head-final modal of necessity did not exist in the target language, the change from head-initial to head-final can be traced to production errors, when in their own speech the non-Han learners fell back upon the head-final syntax of their native language. This involved the introduction of a word order entirely alien to Chinese dialects (cf. Chappell 2001), a mechanism of change which according to Heine (2008) is rare in comparison to that discussed above for the VP. Next, an order is considered which differs from that affecting the VP and auxiliaries in not being attributable wholly to either substrate or superstrate interference.

3.3.3 *O-V-ZHE to V-O-ZHE*

In this section I consider word order permutations available for (monotransitive) VPs marked by the imperfective aspect marker ZHE, and in particular the order V-O-ZHE. The head-final word order V-O-ZHE at first glance may seem counterintuitive as an effect of morphosyntactic convergence, because this order does not actually exist in the local head-final languages (which are rigidly verb-final and so have O-V-ZHE), or in Chinese (where V-ZHE-O is found). The main focus of this chapter is on morphosyntactic convergence on the head-final morphosyntax of the substrate languages. However, as considered with regard to VO word order above, in modern times a different kind of contact scenario exists from that responsible for head-final syntax, characterized by the adoption of head-initial syntax like that in Standard Mandarin. The word order V-O-ZHE is interesting because, unlike the other changes discussed here, it is a head-final order that can only be explained with reference to substrate interference from the local head-final languages *and* the influence of Standard Mandarin. It is a case of restructuring that constitutes a compromise or intermediate stage between the order in Chinese (V-IPFV-O) and that in the local head-final languages (O-V-IPFV) (cf. Fan 2011).

The following word orders for a transitive VP marked by ZHE are attested in Xining Mandarin:¹⁷

- (31) *zai na ge tangyao chi-zho ha tu-zhe* (Old Xining dialect)
 again that CL soup.medicine eat-IPFV PRT vomit-IPFV
 'Eating Chinese medicine and vomiting again.' (O-V-ZHE)

¹⁷ The phonological variation for imperfective ZHE is discussed in Chapter 4.

- (32) *jia xue Qinghai hua zhi fo* (Transitional order)
 3SG study Qinghai dialect IPFV QUOT
 ‘He is studying the Qinghai dialect.’ (V-O-ZHE)
- (33) *jia li cun-zho lia wan duo* (New Xining dialect)
 House LOC store-IPFV two ten.thousand many
 ‘Store more than twenty thousand in the house.’ (V-ZHE-O)

Adopting Dede’s (2003) terminology, ‘Old Xining dialect’ refers to the dialect created through historic substrate interference, and ‘New Xining dialect’ to the dialect with Qinghai phonological features but Standard Mandarin syntax (cf. Chapter 2). The first order O-V-IPFV, with its verb-final VP, can be assumed to be a product of the substrate interference leading to change from VO to OV. Meanwhile, the third order V-IPFV-O is the modern Standard Mandarin order, and the order found in Chinese throughout its history. In colloquial Yuan/Ming texts like *Laoqida*, ZHE as an imperfective aspect marker occurs immediately after the verb (e.g. cf. Chen 1988), as in modern Standard Mandarin, and so this can be assumed to have been the order in the Chinese language of the Han settlers when they immigrated to Qinghai. The intermediate order V-O-IPFV constitutes a transitional order which adopts VO order due to the influence of Standard Mandarin, but retains the VP-final position of imperfective ZHE found in the Old dialect.

An idealized representation of the stages of word order change can be assumed to be as follows, with the original V-IPFV-O order changing to O-V-IPFV under the influence of the local head-final languages, and finally to V-IPFV-O under the pressure of modern Standard Mandarin.

1. V-ZHE-O (*Chinese language of early Han settlers*)
2. O-V- ZHE (Old Xining dialect)
3. V-O-ZHE (transitional order from Old to New Xining dialect)
4. V- ZHE-O (New Xining dialect)

Figure 3-3 Word orders for imperfective ZHE in the Xining dialect

This is an idealized depiction for the reasons discussed in Dede (1999a: 11) with regard to stages of change for ablative marking (cf. Section 2.6 in Chapter 2) i.e. the influence of Standard Mandarin has existed throughout the history of the region, and so the three orders might have co-existed in the past in the Xining dialect like they do today. But as Dede notes,

because of the modern media and its use in education, Standard Mandarin influence on the dialect is very much greater in modern times than it ever was before.

Intermediate stages of change for the head-final features discussed in the rest of this chapter have in some cases involved hybrid forms combining in the same sentence the native Chinese head-initial form with the head-final device modelled on the substrate form (cf. Section 2.6 of Chapter 2), but not word orders absent in the model language. Here, the effect of contact-influence from a head-initial language (Standard Mandarin) has operated in a stepwise fashion rather than all at once, and so led to an intermediate word order being created that is not found in the Old Xining dialect, in Standard Mandarin, or in the substrate languages Monguor and Amdo Tibetan (on Monguor, cf. Slater 2003, and on Amdo, cf. Sung and Rgyal 2005). Indeed, the order created is cross-linguistically rare, a typological generalization which has been argued to be due to a linguistic structural universal, the Final-over-Final constraint (cf. Biberauer et al. 2014, Biberauer, to appear). Its existence in the Xining dialect can be explained in terms of a process of linguistic accommodation, with speakers incorporating VO word order from the New Xining dialect but retaining the post-VP placement of imperfective ZHE from the Old Xining dialect. Yet once the transition is complete from the head-final clausal syntax of the Old Xining dialect to the fully head-initial syntax of the New Xining dialect (cf. Dede 1999a), this order would be expected to disappear, and so here too it is an unstable order, in line with its rarity cross-linguistically.

3.4 New head-final orders through functional transfer

Despite the instances of reordering just discussed, new head-final word orders have more commonly arisen in the Xining dialect through functional transfer. The following are relatively straightforward cases where head-final categories have emerged through grammatical replication, in which there is no outright borrowing of form-meaning units from the model language, and where Chinese exponents for the categories concerned – where these existed in the first place – have not been simply reordered to occur head-finally:

- (i) SAY complementizer *fozho*
- (ii) SAY hearsay/quotative evidential *fozho*
- (iii) Future tense *lia*
- (iv) Postposition *ha*

Many other cases of grammatical replication certainly exist, such as the SAY volitional modal, discourse marker, topic marker and conjunction (Chapter 6), the expansion of the imperfective aspectual category (cf. Chapter 4), and the use of *gei* post-verbally as a causative

(Li 1993), such that it is clear that this has been the primary mechanism of grammatical change rather than borrowing (cf. below). But to keep this discussion to a manageable length I will focus on the four features listed above, which are representative of two types of functional transfer identified by Siegel (2012): ‘morphological augmentation’ involving the recruitment of lexical items to grammatical functions, and ‘morphological alteration’ by transferring substrate functions to superstrate grammatical markers. These will be introduced briefly, followed by the comitative/instrumental postposition *lia*, which I have classified as ultimately indeterminate between replication and borrowing, but which also illustrates the emergence of head-final syntax. After that, the mechanisms by which the devices emerged will be discussed.

3.4.1 *SAY complementizer*

The emergence of a head-final SAY complementizer in Xining Mandarin is an instance of convergence upon the morphosyntax of the local head-final languages, since these also contain SAY complementizers which attach to the end of subordinate clauses, whilst these are not found in Chinese (cf. Chapter 6). However, this is not actually reordering, because it did not involve a pre-existing Chinese SAY complementizer in Chinese changing its position in the clause. (34) is from a famous Ming dynasty novel (*Bai niangzi yong zhen Leifengta*), and shows the Chinese SAY complementizer *dao* (Hwang 2000: 148):

- (34) *Zhuren chi le yi jing lianmang* [Ming Chinese]
 Master eat ASP one surprise right-away
wen dao zuo shenme
 ask DAO do what
 ‘The master was surprised and immediately asked
 “What do you want?”’ (Hwang 2000: 148)

Instead, the head-final complementizer arose by reanalysis of the dialect’s generic speech verb *fo*, cognate with *shuo* ‘say’:

- (35) *na no ha qu ha hai mai ge fuxi*
 then 1SG TOP go COND still buy CL revision
ziliao fozho xiang-zho zho
 material CMP want-IPFV PRT
 ‘I think that if I go, I will still buy revision materials.’

This form is likely to have been modelled on a corresponding SAY complementizer in the region's Mongolic languages (cf. Chapter 6), which can be traced back to the earliest records of the Mongolian language (though probably not exclusively so, as Tibetan contains a similar device). (36) is from the *Secret history of the Mongols* (a 13th century text), and shows *kee-n* 'say' + converb functioning as a complementizer:

- (36) “*Tere Qajar sayin[,] ed sayin’* [Middle Mongolian]
 DEM.DIST land good things good
kee-gde-müy” kee-n mede-jü Ögödey
 say-PASS-IPFV CMP know-CVB.IPFV NAME
qahan jarliq bol-urun...
 Qa’an order become-CVB.PRAEP
 ‘When Ögödei Qa’an learned that the land was reputedly good and the things [therein were also reputedly] good, he ordered as follows: “...” (lit. ‘knowing saying [the words] “that land [is] good, things [there are] good” are said’). (Street 2013: 70, my gloss¹⁸)

3.4.2 SAY hearsay/quotative marker

Similarly, the emergence of a clause-final quotative/evidential marker increased the structural isomorphism in the Sprachbund by providing an equivalent for corresponding clause-final quotative/evidential markers in the local languages. Thus this too is a case of grammatical replication, as language internal material (the SAY verb, *fo*, or *fozho* SAY + IPFV) was extended to an evidential function without borrowing of form-meaning units from the substrate.

- (37) *jiu Langwan li de na ge gawa ha*
 just Langwan LOC POSS that CL boy TOP
yao-ha-le ge xifu fozho
 want-COMPL-PFV CL wife HSY
 'It is said that boy from Langwan found a wife.'

An example of the corresponding form in Amdo Tibetan is given in (38).

¹⁸ I followed Brosig (2014) with regard to some of the glossing here.

- (38) *kho petɕum-na ɲjo-dzu-re se-kɯ* [Tibetan]
 he:ABS Beijing-DAT go:IPFV-FUT-NEGO REP/HSY-MIR
 '(Someone_i) said he_j will go to Beijing./It is said he will go to Beijing.' (Shao 2015: 77)

Here, similarly to the case of the SAY complementizer, no actual reordering occurred of an evidential marker inherent to Chinese (Chinese is known not to have contained grammatical markers of hearsay evidentiality), but a head-final grammatical category emerged by reanalysis of the lexical speech verb. Next, a device from the nominal domain is considered.

3.4.3 Object marker *ha*

The postposition *ha* (and its variant *a*) functions as an object marker, occurring on a range of types of object in Xining Mandarin. Moreover, as a postposition, it participates in the convergence upon the head-final morphosyntax of the Sprachbund's non-Chinese dialects. Beyond marking patient arguments, *ha* marks a wide range of other non-agent NP objects, such as NPs denoting source, beneficiary, and goal.

- (39) 我 家 哈 借 了 幾 本 兒 書
 1st 3rd [xa] borrow PFV several MW book (*ha* marking source)
 'I borrowed several books from him.' (Dede 2007: 868)
- (40) 家 大 家 哈 辦 事 兒 著 了
 3rd everybody [xa] do business prt prt (*ha* marking beneficiary)
 'He takes care of things for everybody.' (Dede 2007: 869)
- (41) 我 你 哈 給 一 雙 筷 子
 1st 2nd [xa] give one MW chopstick (*ha* marking goal)
 'I'll give you a pair of chopsticks.' (Dede 2007: 869)
- (42) 我 你 哈 等 一 掛
 1st 2nd [xa] wait a bit (*ha* marking non-agent)
 'I'll wait for you for a bit.' (Dede 2007: 868, after Zhu and Ding 2003: 252)

An account of the constraints on object marking by *ha* remains somewhat elusive. Dede (2007) identifies the characteristic feature of the postposition *ha* as marking 'anti-ergativity'

i.e. as marking animate non-agent NPs. This explains the fact that in many cases *ha* occurs on the animate non-agent object and not on the inanimate object:

- (43) *Wang laoshi jia ha yi ben fu gei-zhe*
 NAME teacher 3SG OBJ one CL book give-ASP

'Teacher Wang is giving a book to him.' (Elicited)

However, Xining Mandarin is not an ergative/absolutive language, lacking a corresponding grammatical marker of ergativity (cf. Djamouri 2015). Also, postposition *ha* is not restricted to only marking inanimate objects, and can also appear on clausal objects, and so *ha* is also used more generally as an object marker:

- (44) 我 開水 哈 喝 了

1st boiled-water [xa] drink prt

'I drank the boiled water.'

(Dede 2007: 866, after Cheng 1980)

- (45) *Wang laoshi yi ben fu ha jia ha gei-zhe*
 NAME teacher one CL book OBJ 3SG ha give-ASP

'Teacher Wang is giving a book to him.' (Elicited)

- (46) [_{TP} *jia ji dianzhong kai hui ha*]
 3SG how.many o'clock hold meeting OBJ

wang-diao-gei-le]

forget-COMPL-CAUS-PFV

(*ha* marking a clausal object)

'He forgot what time (we) are having a meeting.'

(Elicited)

With regard to its origin, Dede (2007) argues that *ha* arose through grammaticalization of the Chinese pause or topic marker *a/ia*, and M.-L. Ma (2007), among others, also assumes a Chinese-internal source – the Yuan dynasty topic/hypothetical marker 阿 *he* (cf. Djamouri 2015: 260). In any case, an internal source seems likely because there is no similar marker among the neighbouring languages that could plausibly have been borrowed outright.

The model category suggested by Dede is the Amdo Tibetan dative, which shows a functional correlation with *ha*. Like *ha*, the former marks a wide range of non-agent NPs, including not only patient, recipient and location NPs but also oblique NPs:

- (47) *ŋa* *haba la tek* *taŋ* *zək* [Amdo Tibetan]
 1SG:ABS dog DAT be scared:PST AUX AUX
 ‘I was scared of the dog.’ (based on
 Ebihara 2005: 9, cited in
 Dede 2007: 872)

The development of a Chinese topic marker to postposition *ha* on the model of the Amdo dative would surely have been supported by the similar structures in which the topic marker and the Amdo dative occur: both mark preverbal nominal arguments (cf. Dede 2007: 874). Indeed, even after grammaticalization was complete, *ha* retains this trait of only marking preverbal and not post-verbal objects, similarly to object marking by the Standard Mandarin *ba* construction. On this account, no actual word order change was involved in the emergence of the postposition *ha*. Rather, learners created a device to match the functional range of the Amdo dative by recruiting a pre-existent marker in Chinese which occurs clause-finally (or post-nominally).

3.4.4 Future tense/modal *lia*

With regard to future marking, a change occurred from the head-initial Chinese pattern shown in (48) which contains the future modal *yao*, to the head-final Xining dialect pattern shown in (49), where *lia* marks future tense (cf. Chapter 5).

- (48) *hai'er shuo* [_{TP} *yao* [_{VP} *lai tanwang Laoshen*]] [12th/13th century Chinese]
 child say will come visit NAME
 ‘The child said s/he will come visit Laoshen.’ (Qiannv *lihun*, 1260-1320,
 Li forthcoming, my gloss)

- (49) *no Beijing qu lia*
 1SG [[Beijing go_{VP}] *lia*_{TP}]
 ‘I will go to Beijing.’ (Elicited)

As in the case of the object marker discussed above, this did not involve rearrangement of existing elements. Rather, the emergence of a new head-final pattern was independent of and displaced the Chinese head-initial construction. Rather than the head-directionality of Mandarin modal future *yao* changing from head-initial to head-final and being used as a head-final future tense marker, a Chinese sentence-final modal particle *li* was reanalysed to the

category of a future tense marker on the model of the Mongolic state/future marker (for details, see Chapter 5).¹⁹ (50) shows the Chinese particle *li*:

- (50) *zhe loushang hao liangkuai li* [Yuan dynasty Chinese]
 this upstairs very cool *li*
 'Upstairs is really cool.' (Yueyanglou, L. Wang 2015: 47)

As shown below, the Mongolic tense-aspect suffix marks both states and future tense, whereas Chinese *li* was a modal particle that likewise marked states, but not future tense, and so grammatical replication involved transferring the future marking function to *li* from the corresponding polysemous form in Mongolic.

- (51) *Tingera uro-m* [Mongghul (Mongolic)]
 sky rain-FUT
 'It will rain.' (Åkerman 2012: 29)
- (52) *Bu mudie-m* [Mongghul (Mongolic)]
 1:SG know-IPFV
 'I know.' (based on Åkerman 2012: 8)

Having provided an overview of several head-final categories which emerged through grammatical replication (a SAY complementizer, SAY evidential, object marker, and future marker), the next section discusses where head-final categories have emerged through borrowing.

3.5 New head-final orders through borrowing

Borrowings of form-meaning units are rare across the lexicon as a whole, and borrowing has also been seldom used as a strategy in the restructuring of the grammar from head-initial to head-final. However, at least two clear instances of borrowing of head-final devices can be identified.

¹⁹ As mentioned above in Section 3.3.2, *yao* can be used clause-finally, but normally as a modal of necessity rather than a future marker. However, the latter is not fully ruled out, as occasionally volitional/future usages are found as shown in the utterance below from an ethnically Hui speaker:

- (2) *jia zhaoxiang de yao li shuo*
 3SG take.picture NMLZ want MOD QUOT
 'He wants to take pictures.'

3.5.1 Ablative postposition

A notable feature of Xining Mandarin which has been created by direct borrowing of grammatical categories is the ablative postposition *sa* (Dede 1999a, 1999b). The ablative postposition has a number of variant forms (cf. Dede 1999a: 5), but at least *sa* clearly seems to have been borrowed directly from Monguor, which contains an ablative postposition with the same phonological form.²⁰ The first *sa* in (53) is the postposition (the sentence-final particle is an independent morpheme).

- (53) *no ni ha waimian sa qu gei yi ge sa*
1SG 2SG OBJ outside ABL take-BEN one CL PRT
'I will get one for you from outside.'

- (54) *Dəre:sa jausa badzar kurə şdana* [Monguor]
here:ABL leave town come may
'Setting out from here, you can get to town.' (based on Dede 1999a: 9)

The mechanism of word order change from head-initial to head-final thus involved learners borrowing a head-final device outright from their native language. Evidently, no reordering occurred of a Chinese ablative preposition (e.g. *cong* 'from' in (55)) from a pre-nominal to a post-nominal position.

- (55) *Ta cong Beijing huilai-le* [Standard Mandarin]
3SG from Beijing return-come-ASP
'He returned from Beijing.' (Elicited)

3.5.2 Possibility modal

Similarly, the Xining dialect has a possibility modal *chuang* (IPA: tʂ'uaŋ) that also constitutes a borrowing, either of the Tibetan possibility model [tʰaŋ] or that in Monguor [taŋ], with which its phonological form is similar (Min 1989, S.-C. Wang 2012). Again, there is no plausible source item for *chuang* in Chinese. (56) shows the Xining Mandarin possibility model:

²⁰ There is no form phonologically similar to postposition *sa* within Chinese that could plausibly have been the etymological origin.

- (56) *women xian zou-tuo, lu-shang ba na liang ge*
 1PL first walk-start road-on BA that two CL
peng-shang a chuang
 bump-on PRT perhaps
 ‘Us two will go first. We might bump into those two on the way.’ (S.-C. Wang 2012: 473)

Meanwhile, the Amdo and Monguor forms are syntactically and phonologically similar:

- (57) *sanjin k^ho ts^ho jo nat^haj* [Amdo Tibetan]
 tomorrow 3PL come may
 ‘They may come tomorrow.’ (S.-C. Wang 2012: 476)
- (58) *bulaii ulaasa taj* [Monguor (Mongolic)]
 child cry may
 ‘The child might cry.’ (S.-C. Wang 2012: 476)

Thus as in the case of the ablative postposition, here outright borrowing of a head-final device was the means of convergence on the head-final syntax of the substrate. However, the change discussed next cannot be so straightforwardly classified as to the mechanism concerned.

3.6 Comitative/instrumental postposition (an indeterminate case)

Dwyer (1992: 6) argues that in the Linxia dialect spoken in Gansu province the postposition *lianke* is a calque of a postposition with the same internal makeup in the local Mongolic languages:

- lianke* < *lian* ‘two (qty)’ + *ke* (measure) ‘two together’ [Linxia Mandarin dialect]
-qala < *quar* ‘two’ + *le* (plural suffix) ‘two together’ [Baoan, Santa (Mongolic)]

Correspondingly, she mentions in passing that the Xining dialect has extended the numeral *lia* ‘two’ to a comitative/instrumental postposition, probably also on the model of Mongolic (Dwyer 1992: 6, note 10). If this is correct, then the comitative/instrumental postposition in the Xining dialect is also a case of grammatical replication. (59) is from a speaker from Haiyan county, and has the meaning of *gen* ‘with’ in Standard Mandarin:

- (59) *zho jia na ge yatou lia tan-zho ma mo tan-zho fozho*
 PRT 3SG that CL girl *lia* date-IPFV Q NEG date-IPFV QUOT
 ‘Is he dating that girl or not?’

(60) is from Mongghul, and shows the corresponding postposition:

- (60) *sgo-la tɕabdʒə, soŋxo-la dʒiuurə* [Mongghul (Mongolic)]
axe-with cut pen-with write
'One cuts with an axe and writes with a pen.'
(Dede 1999a: 54, after
Zhaonasltu 1981:21)

However, it is also possible that the comitative/instrumental postposition *lia* is simply a direct borrowing of the form-meaning unit *la* in Mongghul, with a small sound change (*la* → *lia*), as suggested by Du (1995). Du (1995) notes that in Tongren county in Qinghai and in Linxia in Gansu, the form of the comitative/instrumental postposition is actually *la*, and so the case for a direct borrowing can be made even more straightforwardly as no sound change needs to be posited. Unfortunately, because of the similarity of the phonological forms concerned, and the plausibility of both mechanisms, there does not seem to be any way to conclusively decide between borrowing versus grammatical replication in this case.

Whilst this is not the introduction of an entirely alien word order to Chinese, as Chinese does possess a variety of postpositions (cf. Djamouri, Paul, and Whitman 2013), it is an alien order as far as the instrumental/comitative is concerned, which in Chinese is marked prepositionally. (61), a Standard Mandarin paraphrase of (59), uses *gen* 'with' pre-nominally:

- (61) *xianzai gen na ge nvhai hao bu hao*
now with that CL girl good NEG good
'Is (he) now getting on well with that girl or not?.'

Although the mechanism of change is not so clear, postposition *lia* is a further case where a new head-final word order has arisen to displace a head-initial structure without simply reordering the head-initial device (in this case, native Chinese prepositions). In the next section the primary mechanism of change in the dialect, grammatical replication, is discussed with regard to Heine and Kuteva's (2005) contact-induced grammaticalization account of the phenomenon.

3.7 Contact-induced grammaticalization in Xining Mandarin?

3.7.1 Background

Heine and Kuteva (2005: 1) argue that 'the transfer of grammatical meanings and structures across languages [grammatical replication, calquing] is *regular*, and that it is shaped by universal processes of grammatical change' (emphasis added). That is, they argue that

grammatical replication can in general be understood as a regular instance of grammaticalization, despite being contact-induced. As such, they claim that the following linguistic constraints exist on this type of contact-induced change, which are the same parameters observed in language-internal grammaticalization:

- (62) Parameters of grammaticalization (quoted from Heine and Kuteva 2005: 15)
- a. extension, i.e. the rise of novel grammatical meanings when linguistic expressions are extended to new contexts (context-induced reinterpretation)
 - b. desemantization (or “semantic bleaching”), i.e. loss (or generalization) in meaning content
 - c. decategorialization, i.e. loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms, and
 - d. erosion (or “phonetic reduction”), i.e. loss in phonetic substance

These processes are argued by Heine and Kuteva (2005) to operate in contact-induced grammaticalization exactly as in endogenous grammaticalization, namely in a way that adheres to the principle of uni-directionality. That is, the 'processes underlying the parameters proposed in (62) as well as the overall direction which this cluster of processes follows, *lexical-to-grammatical-to-even more grammatical*, are unlikely to be reversed' (Heine and Kuteva 2005: 17, emphasis in original).

With regard to the mechanisms of contact-induced grammaticalization, the most common type is said to be 'replica grammaticalization' (Heine and Kuteva 2005: 92). In replica grammaticalization, a grammaticalization process that occurred in one language is replicated in another, with a corresponding source item being recruited and the same pathway of change followed as in the model language:

- (63) Replica grammaticalization (Heine and Kuteva 2005: 92)
- a. Speakers notice that in language **M** [the model language] there is a grammatical category **Mx**.
 - b. They create an equivalent category **Rx** in language **R** [the replica language], using material available in **R**.
 - c. To this end, they replicate a grammaticalization process they assume to have taken place in language **M**, using an analogical formula [i.e. the same grammaticalization pathway] of the kind [**My** > **Mx**]: [**Ry** > **Rx**].
 - d. They grammaticalize **Ry** to **Rx**.

To illustrate, a case of replica grammaticalization cited by Heine and Kuteva (2005: 93, after Ho & Platt 1993: 18) is the extension of English possessive *got* to an existential marker in colloquial Singaporean English, on the model of speakers' L1 Chinese.

- (64) *In China where **got** people go to English school?* [Colloquial Singapore English]
 (Ho & Platt 1993: 18)

Heine and Kuteva (2005: 93) assume that a development from a lexical verb indicating possession to an existential marker occurred first in Chinese, and that this process was replicated in speakers' English. The possessive and existential function of *you* in the modern language are shown below respectively.

- (65) *Zhangsan **you** yi ben shu* [Standard Mandarin]
 NAME has one CL book
 'Zhangsan has a book.' (Elicited)

- (66) ***you** liang-men ke wo xiang xuan* [Standard Mandarin]
 have two-CL course I want take
 'There are two courses I want to take.' (Bao 2005: 255)

The other (less common) kind of contact-induced grammaticalization is 'ordinary contact-induced grammaticalization', for which the model is as follows:

- (67) Ordinary contact-induced grammaticalization (H & K 2005: 82)
 a. Speakers notice that in language M [model language] there is a grammatical category Mx.
 b. They create an equivalent category Rx in language R [replica language] on the basis of the use patterns available in R.
 c. To this end, they draw on universal strategies of grammaticalization, using construction Ry in order to develop Rx.
 d. They grammaticalize Ry to Rx.

Heine and Kuteva (2005: 82) illustrate ordinary contact-induced grammaticalization with data on an English-lexifier pidgin, Bislama, spoken in northern and central Vanuatu. Bislama has grammaticalized its verb *stap* 'stay, be present, exist' to a durative aspect marker on the model of the durative aspect category in Vanuatu (Eastern Oceanic), thus following a cross-linguistically common pathway of grammaticalization to develop an equivalent to the model language category. The outcome of this process is shown in (68), and the model is in (69):

- (68) *em i **stap** pik- im yam.* [Bislama (English-based pidgin)]
 he he- DUR dig- TRS yam
 'He's in the process of digging yams.' (Heine and Kuteva 2005: 82,
 after Keesing 1991: 328)

- (69) *naji ng- u- xoel dram.* [Vetmbao (Malekula, Oceanic)]
 he he- DUR- dig yam
 ‘He’s in the process of digging yams.’ (Heine and Kuteva 2005: 82,
 after Keesing 1991: 328)

The difference between replica and ordinary contact-induced grammaticalization is that replica grammaticalization replicates the grammaticalization pathway found in the model language by using the same source item, whereas ordinary grammaticalization uses a different source item (chosen according to 'universal strategies of grammaticalization').

As seen from the preceding sections, in Xining Mandarin several cases of grammatical replication exist, but the question remains of how they emerged. In the remainder of this section it is argued that contact-induced grammaticalization is not applicable to the object marker and future marker, but with regard to the non-lexical uses of SAY grammaticalization has more plausibility. First I will briefly consider the changes under discussion with regard to the extent to which grammaticalization has been involved, and then present an account of their emergence in view of findings from the study of creole formation.

3.7.2 *SAY complementizer and SAY evidential*

The emergence of the SAY complementizer *fozho* would be a potential case of replica contact-induced grammaticalization in Heine and Kuteva's (2005) framework. Grammaticalization processes are evident in that reanalysis as a complementizer has been accompanied by the loss of speech verb semantics and the loss of the morphosyntactic properties of a lexical speech verb. Meanwhile, with regard to phonetic reduction, the SAY complementizer/evidential marker *fozho* contains more phonetic material than the SAY verb *fo* (i.e. phonetic reduction did not occur), contrary to the norm in grammaticalization. This grammaticalization from speech verb to complementizer also reflects the same grammaticalization pathway from speech verb to complementizer in the model languages. As shown above, we know from *The Secret History* (a 13th century Mongolian text), that the SAY complementizer already existed in Mongolian before Xining Mandarin began to take shape as a regional variety (cf. (357)),²¹ and so SAY had grammaticalized into a complementizer in the model language before it did in Xining Mandarin. This means that replication of a grammaticalization process has *a priori* plausibility within Heine and Kuteva's (2005) framework.

²¹ In Chapter 2, the modern dialect was argued to date to the Ming period.

Likewise, the SAY evidential is also a well-attested grammaticalization pathway. The use of SAY as a hearsay evidential marker is also found in *The Secret History*, and so was existent in Mongolian at the time when the contact situation with the Chinese settlers was taking shape (cf. Chapter 6; Street 2013: 59). Thus in principle ‘replica contact-induced grammaticalization’ could account for this change, too. In Chapter 2 it was argued that substrate interference in Xining Mandarin on the whole arose gradually (i.e. rather than abruptly, as in prototypically ‘abrupt’ one generation creolization), passing through a process of stabilization and expansion as a pidgin over several generations, and so below I will suggest that there is a place for grammaticalization in the account of the emergence of the non-lexical uses of SAY in the Xining dialect.

3.7.3 *Object marker ha*

The emergence of object marker *ha* (Section 3.4.3) did not involve the core processes which grammaticalization theory associates with developments from lexical items to grammatical markers or from less grammatical to more grammatical markers. Desemanticization is not evident (the intonation unit marker already lacked semantic content), there was not a loss of morphosyntactic properties (*i/ia* was already a sentence-final particle), and no phonetic reduction is evident. Therefore, not being grammaticalization in this sense, object marker *ha* is not a case of ‘ordinary contact-induced grammaticalization’ or ‘replica contact-induced grammaticalization’.

In not involving the core grammaticalization processes, object marker *ha* is comparable to the grammatical replication of a pronominal politeness distinction which has occurred in the majority of European languages (Heine and Kuteva 2008). Heine and Kuteva (2008) note that the contact-induced extension of second person plural and third person pronouns to second person singular pronouns used as a polite/honourific form of address has also not involved loss of meaning or of morphosyntactic properties, or an extension from concrete to abstract meaning. Rather, it only involves a functional extension on the part of these pronouns. Heine and Kuteva (2005, 2008) present such cases as exceptional instances in that they do not involve these grammaticalization processes, but in Xining Mandarin quite a few such cases exist (e.g. future *lia*, object marker *ha*, aspect marker ZHE; cf. Chapter 4). However, changes like the emergence of object marker *ha* and politeness pronouns are still instances of (contact-induced) grammaticalization in the sense that they involve the creation of new grammatical markers for categories replicated from a model language.

3.7.4 *Future lia*

Like object marker *ha*, the emergence of future/modal *lia* from Chinese sentence-final particle *li* does not fit easily into the ‘contact-induced grammaticalization’ framework, as it does not show the properties of grammaticalization as traditionally defined (cf. the parameters of grammaticalization in (62)). Desemanticization (‘loss (or generalization) in meaning content’) has not occurred: future/modal *lia* is in no clear sense more generalized or semantically bleached than modal *li*. Nor is decategorialization evident (‘loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms’), as morphosyntactically both sentence-final *li* (the source item) and future/modal *lia* are sentence-final particles. Meanwhile, phonetic reduction is also not evident; *lia* simply acquired an additional function, future marking.

3.7.5 *Interim summary*

Two out of five of the above cases of grammatical replication discussed above were seen to be contrary to the claim that grammatical replication operates ‘in accordance with the principles of grammaticalization’ (Heine and Kuteva 2005: 1), because these principles were seen not to have actually operated. Meanwhile, the non-lexical uses of SAY show properties of grammaticalization. Table 3-1 summarizes, where grammaticalization processes refer to the parameters in (62) above.

<i>Device</i>	<i>Emerged through grammaticalization</i>
SAY complementizer	Partly; see below
SAY evidential	Partly; see below
Future <i>lia</i>	No
Object marker <i>ha</i>	No
Comitative/instrumental postposition	Indeterminate

Table 3-1 Grammatical replication in the Xining dialect

3.8 **Creole studies and the Xining dialect**

The cases of grammatical replication discussed above represent two different types of functional transfer identified by Siegel (2012): the first involving morphological augmentation, with target language lexical items used for substrate grammatical functions,

and the second involving morphological alteration, in which a superstrate grammatical morpheme is assigned a function from the substrate. The non-lexical uses of SAY belong to the former type, which according to Siegel (2012) is a characteristic mechanism of change in pidgins and creoles, and future *lia* and object marker *ha* to the latter type, which is associated with indiginised contact varieties. Siegel (2012: 25) places contact varieties on a continuum according to the extent to which they are characterized by these types of functional transfer. In cases where there has been almost no access to the target language, as in Tok Pisin, Seigel (2012: 20-1) notes that morphological augmentation (type 1 functional transfer) has predominated, whilst at the other extreme are varieties that do not show functional transfer at all (e.g. Australian English):

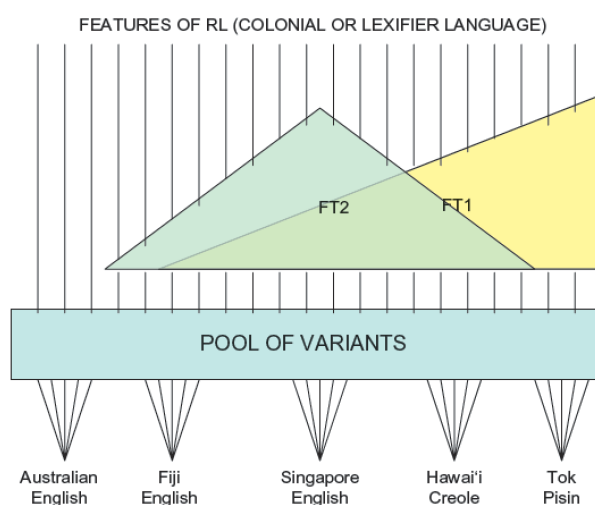


Figure 3-4 Continuum of contact varieties based on degree and type of functional transfer

In between, there are varieties which show relatively more or less of each kind of functional transfer. In terms of this scale, Xining Mandarin is positioned fairly centrally, because it shows significant amounts of both kinds of transfer, with a host of non-lexical uses of SAY (type 1 functional transfer; cf. Chapter 6) as well as many cases of morphological alteration (type 2 transfer) e.g. object marker *ha*, sentential *lia*, aspectual ZHE, causative *gei* (Li 1993). This continuum is also helpful in that it allows us to highlight the fact that, although the Xining dialect originally emerged in a creolization scenario, the abundance of morphological alteration evident in the modern dialect indicates that it now has the linguistic character of an indigenized variety more like Singapore English than an expanded pidgin like Tok Pisin. Since the two types of contact-induced change are associated with different mechanisms of change and contact situations, we will be able to make some inferences about how the features discussed above emerged in the Xining dialect.

With regard to the non-lexical uses of SAY, calques involving L2 (target language) lexical items being recruited to fulfil the function of L1 grammatical devices are rare in the interlanguage of individual second language learners, with a paucity of cases attested in the second language acquisition literature (cf. Siegel 2008, 2012). But they are attested during second language use and in expanded pidgins and creoles, when speakers have not acquired the L2 grammatical features needed for communication (Kellerman 1995, Siegel 2012: 19-20) and where access is poorer than is typical in the second language acquisition literature. In second language use, the recruitment of L2 lexical forms for first language grammatical functions is conceived as a compensatory strategy used because the target language constructions have not been acquired yet, and when the immediate communication needs force the L2 user to operate in the target language. For example, Spanish-speaking users of English ‘very consistently’ used *for* as a complementizer on the model of Spanish *para* (Andersen 1980: 277):

(70) *Jennifer, put your clothes on **for** decorate the Christmas tree.* (Andersen 1980: 277, cited in Siegel 2008: 124)

According to Siegel (2012: 18), this type of transfer is not necessary in the early stages of the development of a contact variety, when learners can use their restricted (i.e. non-expanded) pidgin/interlanguage – which in the earliest stages is assumed to comprise content words without L2 grammatical morphology – to fulfil the needs of basic communication. Such a rudimentary variety can be imagined to have sufficed in the earliest stages of trade interactions between the local tribes and the Chinese in Xining. But as Chinese became a lingua franca for speakers with different first languages, and came to be used more widely than only for trade, it had to expand grammatically beyond what Klein and Perdue (1997) call the ‘basic variety’ (Siegel 2012). Siegel (2012: 19) represents this scenario as follows (RL = recipient language; here, Chinese):

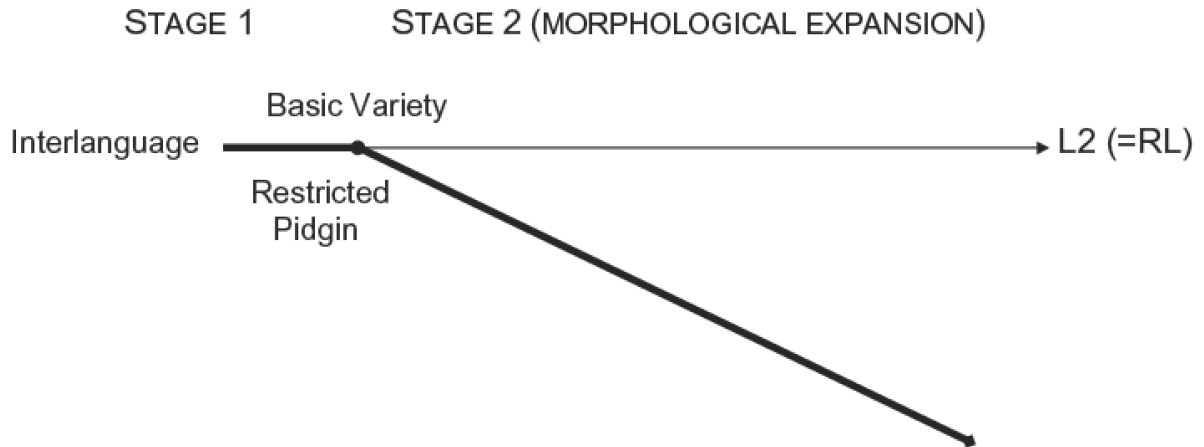


Figure 3-5 Stage 2, untargeted morphological expansion

The point which this diagram seeks to represent is that this type of morphological expansion is ‘untargeted’: speakers are drawing on lexical items in their interlanguage Chinese variety or pidgin (i.e. the variety of Chinese spoken among the Monguor/Tibetans) to create grammatical devices rather than targeting the superstrate language grammar (i.e. Chinese, as spoken by the Han immigrants, who initially were severely outnumbered by the local population). In view of the above, it is likely that transfer of the complementizer function to the Chinese speech verb initially occurred during second language use as the pidginized Chinese created by speakers of Tibetan and Mongolic languages gained in currency in the region, and as the needs of communication required a language more developed than the initial rudimentary pidgin. In other words, in the creolization scenario described in Chapter 2 it is likely that the complementizer/evidential function of SAY was initially transferred from the substrate during second language use, just as certain other features were introduced abruptly (e.g. the borrowed ablative postposition and the borrowed modal of possibility, which by definition as borrowings begin as spontaneous insertions of form-meaning units from another language). As such, when the complementizer and evidential use of SAY first appeared during second language use, they constituted a case of ‘apparent grammaticalization’ (Bruyn 1996), which Bruyn (1996: 42) describes as ‘the transfer of the result of a process of grammaticalization that has taken place in another language’. However, with regard to the dialect’s emergence on the macro-level, the establishment of these features as components of the regional variety would still have been gradual, because they had to stabilize as features used across the communities where the Chinese pidgin was spoken, and the pidgin itself had to spread across a large, previously non-Chinese speaking population – all of which, in view of the norm in fort creolization (cf. Chapter 2), would probably have taken several generations.

Thus whilst it has been argued by some authors that grammaticalization as traditionally conceived is not relevant to creolization (cf. Plag 2002, Siegel 2008, 2009), I do not think we need to reject the notion entirely with regard to SAY in the Xining dialect. Siegel (2009: 21), for example, notes that where Heine and Kuteva (2005) have treated calques in pidgins and creoles as ‘contact-induced grammaticalization’, they ought to be interpreted as cases of Bruyn’s (1996) ‘apparent grammaticalization’ (which Siegel calls ‘functional transfer’), since there is no evidence that protracted traditional grammaticalization processes are responsible for their emergence, and evidence instead that in creole formation such features tend to emerge comparatively rapidly. For instance, Siegel (2012: 21) notes that in some cases, substrate features have developed even in one generation, as in the use of *stei* (stay) as a progressive auxiliary in Hawai‘i Creole (a plantation creole) (cf. Roberts 1998). However, I argued that these features are unlikely to have emerged in the Xining dialect this abruptly (i.e. in one or two generations through nativization and shift): for creolization is known to be more gradual than – often abrupt – plantation creolization, and so it is important to distinguish between types of creolization as discussed in Chapter 2 with regard to Mühlhäusler’s (1980) distinctions. Many other cases of gradual creolization could be mentioned too (e.g. Tok Pisin, or Sranan; cf. Arends and Bruyn 1995), which are somewhat more compatible with a grammaticalization account than abrupt plantation creolization (Bruyn 2011 shows, for example, that gradual grammaticalization occurred for the definite article in Sranan).

It may be that a slightly more nuanced position is possible by taking account of insights from both camps, and by recognizing both the individual-level and the macro-level (the community-level aspect of the formation of the contact variety). On the level of individuals in the substrate population, the use of the SAY complementizer can be regarded as features that arose in their speech through instantaneous occurrences of substrate transfer. In Chapter 2 it was argued that for the majority of the Monguor nativization probably did not occur for several generations whilst the pidgin Chinese gained stability in the region and expanded grammatically, and so in this scenario it was not the case that the substrate features introduced during adult second language use were simply nativized immediately by the next generation (I argued that the latter would only have been a possibility for a minority through interethnic marriages). Thus the insight we may adopt from the grammaticalization approach is the fact that it incorporates the conventionalization of the substrate features, frequency of use as well as their propagation throughout the speech community into the definition of what it means for contact-induced change to have occurred. As Heine and Kuteva (2008: 59) note, ‘It is only if an innovation acquires some stability across time that grammatical replication has taken place’.

In particular, they note that the innovation must be transgenerational, not disappearing within a generation or two. Thus in the early Ming period when the pidgin Chinese was stabilizing, the notion of grammaticalization arguably has validity with respect to the conventionalization of the non-lexical uses of SAY in the emerging contact variety. The reality may thus have been something like that which has been found for the SAY complementizer *taki* in the creole Sranan, which emerged over some 70 years in a scenario which is comparable to the Xining dialect (on the account in Chapter 2) in that *taki* emerged mostly through (second language) learning of the lexifier language (English) by adults with nativization (i.e. child first language acquisition) playing a minimal role (see Plag 1995, Arends 1995).²²

However, the gradualness of the emergence of the SAY complementizer via grammaticalization in such circumstances is probably best viewed as coarse-grained gradualness (existing at the macro or community-level); if we look closely, zooming in towards the individual-level, we may still find instances of abrupt substrate transfer of the end-product (e.g. a SAY complementizer used with a cognitive verb) which violate the implicational hierarchies expected according to the notion of grammaticalization as stepwise extension along pathways of change. But at the community-level, it may nevertheless be true that in the emerging contact variety SAY was extended along the usual grammaticalization pathway: first being conventionalized as a complementizer with speech verbs before being conventionalized as a complementizer that occurs with cognitive verbs (cf. Chapter 6). This is essentially what Plag (1995: 134) found for *taki* in Sranan: some speakers used *taki* as a complementizer even from very early on (abrupt transfer), though at a macro-level, the frequency data cited shows that there was indeed a gradual diachronic development along a grammaticalization pathway such that the complementizer use became widely established only later on.

Nevertheless, in addition to introduction through second language use, a strategy available to the substrate population at large, there is now an increasing amount of evidence that bilingual first language acquisition can also be a route of substrate interference in creole formation, a point explicitly argued by Matthews and Yip (2009) (cf. Yip and Matthews 2007, Thomason

²² The reason why nativization played a minimal role in the formation of Sranan was due to the fact that the majority of the black population were African-born and were imported into Surinam rather than born locally (Arends 1995). In the Xining area, the reason why I concluded that nativization was slow was partly because the Monguor clans retained their integrity as socio-cultural entities and mixed Monguor-Chinese communities did not develop until much later, and so the majority of children born in the Monguor clans in the early period can be assumed to have grown up in Monguor homes with Monguor parents and with poor access to Chinese (unlike the situation today, when Chinese schooling provides a route for non-Han children to learn Chinese from a young age).

2001: 148-9). In this regard, we are chiefly considering a relatively small portion of the overall population, namely the progeny of interethnic marriages with Chinese speakers. If we wish to avoid simplifications as far as possible, then in view of such findings we may infer that G(eneration)₂, the children of the Monguor adults who acquired a Chinese pidgin, would not have been simply passive recipients of a feature transmitted to them from G(eneration)₁ but rather active agents of change – along with their caregivers.

Matthews and Yip's (2009) study of Cantonese-English bilingual children in Hong Kong provides compelling evidence for substrate interference in bilingual L1 acquisition. The bilingual children in their study recruited English *already* as a marker of perfective aspect on the model of Cantonese perfective markers (e.g. *zo3*). Here *already* is used with a modal expression (an event that has not yet occurred), on the model of the perfective marker in their dominant language Cantonese:

(71) *I give you to eat apple. Have to cut **already** first.*
 (Timmy 2;11;16, Matthews and Yip 2009: 378)

(72) *Jiu3 cit3-zo2 sin1* [Cantonese]
 need cut-PFV first
 ‘You have to cut it first.’
 (Matthews and Yip 2009: 378)

The development of *already* to a perfective marker in the English of these Hong Kong children is striking because it is a case in which the children are the innovators, developing a feature not found in the input. They identified a grammatical form in their dominant language with a lexical form in their less dominant language, and recruited the latter to the function of the former. The implication of this for the present study is that it is plausible that G₂ could have developed the SAY complementizer, even in cases where it did *not* (or did not yet) appear in the input that they received from G₁'s contact variety – and even where it did appear in the input, multiple causation is likely rather than purely mechanical transmission to G₂ of a feature created by G₁.

Matthews and Yip (2009) argue that the mechanism involved in transfer during bilingual first language acquisition is not wholesale functional transfer but rather possesses the characteristics of grammaticalization outlined above, with contact simply acting as a catalyst. In Cantonese, the ‘give’ verb *bei2* was grammaticalized via an endogenous process of grammaticalization to a permissive and a passive:

bei2 ‘give’ > permissive > passive

They propose that ‘ontogenetic grammaticalization’ (Ziegeler 1997) occurs in bilingual child language development; that is, individuals use items in ‘new, incipiently grammatical function[s]’, and yet principles of grammaticalization are still evident (Matthews and Yip 2009: 383). Their data show that the children did not abruptly calque English ‘give’ to the function of a passive, but rather their language development reflected the phenomena of gradual grammaticalization pathways as observed in (endogeneous) diachronic change in Cantonese. In children’s individual language development, ‘give’ developed from a lexical verb to a permissive to a passive in a stepwise fashion, upholding the implicational hierarchy predicted on the basis of diachronic grammaticalization pathways, and bridging contexts also existed as in diachronic change, facilitating the development from one function to another. For example, the lexical > permissive > passive development, which is an instance of Siegel’s (2012) morphological augmentation (functional transfer to a target language lexical item) unfolded chronologically as follows for Sophie, a child in their study (examples from Matthews and Yip 2009: 384-5):

- (73) *You **give** me that one, one only. [pointing to after-shave]* (Sophie 2;06)
(74) *You open **give** me see. [giving Daddy Father’s Day present]* (Sophie 3;03;20)
(75) *Here is **give** Timmy scratch [points to scratched leg]* (Sophie 3;06)

Meanwhile, bridging contexts existed for each step, in which both the old and new reading are available for the item. Matthews and Yip (2009: 386) state that in context *give* in (76) could be interpreted as a lexical verb (‘give it to me to see’) or a permissive (‘let me see’), whilst (77) could be interpreted as a permissive (‘You’ll let everyone eat it all (and it will be your fault)’ or a causative (‘[The food] will have been eaten’).

- (76) ***Give** me see, **give** me see* (Sophie 2;02)
(77) *Daddy, wake up. Otherwise you **got** nothing to eat.* (Sophie 4;11)

They conclude that Heine and Kuteva’s (2005) ‘replica contact-induced grammaticalization’ can thus unfold in ontogeny in individual language development in bilingual child language acquisition, with the qualification that what is transferred is not a diachronic process but ‘synchronically identifiable patterns of polyfunctionality’ (Matthews and Yip 2009: 389). On the basis of this evidence, it is proposed that the SAY complementizer would not have developed as a feature of the Xining dialect only through adult second language use, but also through bilingual first language acquisition. For the development from lexical SAY to SAY

complementizer, Chappell (2008: 59) identifies the bridging context as use of SAY in a serial verb construction as a quotative verb, which fulfils a reinforcing function alongside a more general speech verb. For Xining Mandarin, this is illustrated by sentences like (78) with the configuration shown in (79):

(78) *jia chi fan lia fo-zho han-zhe*
 3SG eat food PRT say-IPFV shout-IPFV
 ‘He shouted, saying he wants to eat.’ (Elicited)

(79) [[[reported speech_{TP}] V-*zho*_{VP}] V-*zhe*_{VP}]

Then, in the next stage of development, the switch context, the erstwhile quotative verb comes to be used with verbs of cognition, where it can no longer be interpreted as a quotative introducing reported speech, and is a true complementizer:

(80) *na no ha qu ha hai mai ge fuxi*
 then 1SG TOP go COND still buy CL revision
ziliao fozho xiang-zho zho
 material CMP want-IPFV PRT
 ‘I think that if I go, I will still buy revision materials.’

In the case of the SAY evidential, we would likewise expect the dominant Monguor language of the children to exert substrate interference catalyzing the development of lexical SAY into a SAY evidential, but if we take Matthews and Yip’s findings seriously, this would still be expected to proceed developmentally via an intermediate stage as a quotative verb, as in diachronic grammaticalization (cf. Chapter 6). In the case of Matthew and Yip’s (2009) children in Hong Kong, the non-standard usages of *already* and *give* were later lost as the children went on to attend international schools where they were exposed to abundant input from English monolinguals. But in the social setting in Xining, over the years there were plausibly many children who acquired Chinese with Monguor or Tibetan as their dominant language and for whom these substrate features were not subsequently lost. That is, the SAY complementizer could become established as a feature of the regional contact variety because of the large community of adult and child learners, lack of formal instruction and poor access to the target (cf. Matthews and Yip 2009: 390).

Next, with regard to future tense *lia* and object marker *ha*, these are cases of ‘morphological alteration’, involving functional transfer to Chinese grammatical morphemes. Siegel (2012) argues that morphological alteration occurs during targeted expansion of the interlanguage

variety/pidgin during continued L2 learning. This can be visually represented as follows, where the initial basic variety expands morphologically through the acquisition of target language grammatical markers (RL = recipient language, which in this case is Chinese as spoken by the Han immigrants):



Figure 3-6 Stage 2, targeted morphological expansion (by continued L2 acquisition)

Morphological alteration is frequently reported in second language acquisition and bilingual first language acquisition, with learners transferring the functions of an L1 grammatical device to an L2 grammatical device which they identify as equivalent (Siegel 2012: 15).

Whereas the first type of functional transfer, discussed above for the SAY complementizer, is common in the formation of pidgins and creoles where access to the target language is poor, morphological alteration is associated with indigenised varieties, where access to the target language is generally better, enabling the relevant grammatical categories to be acquired (and altered) similarly to in second language acquisition (Ibid.).

Concerning object marker *ha*, therefore, given the lack of grammaticalization processes, it is suggested that the mechanism here, from the perspective of the non-Han learners of Chinese, was probably reanalysis, a perception error (cf. Dede 2007: 874-5 on mechanisms of accommodation). In a naturalistic language acquisition scenario without formal instruction (like that assumed to have characterized the first phase of contact in Xining) learners do not have access to metalinguistic, grammatical information about the target language. They would therefore fall back on their first language grammar when seeking to make sense of the language they are acquiring (cf. Winford 2008). It is conceivable that Tibetan learners of Chinese, hearing utterances containing *a/ia* marking pre-verbal non-agent NPs and identifying it as equivalent to the dative/anti-ergative case marker existent in Tibetan, transferred the function of their case marker to Chinese *a/ia*. In other words, during second language acquisition, Tibetans parsing the Chinese input (a preverbal nominal followed by a marker *a/ia*) using their Tibetan grammar could interpret it as *nominal + object marker* rather than (as in the target language) *nominal + intonation unit marker*. This functional transfer would result in no modification of the intonation unit marker in terms of its degree of

grammaticalization, but the category value assigned to the device changes: *ha* is a postposition, whereas the intonation unit marker is a clause-final particle.

Similarly, *lia*, too, as a case of morphological alteration, is predicted by Siegel's (2012) account to be associated with targeted morphological expansion. Speakers of Mongolic languages identified Chinese *li* as equivalent to their first language non-past marker -NA (cf. Section 3.4.4 above, and Chapter 5), and transferred the future marking function from the latter to the former, and since, as noted above, this mechanism of change is common in both second and bilingual first language acquisition, both of these scenarios could have plausibly been routes for substrate transfer.

Drawing this section to a close therefore, what we can infer, based on Siegel's (2012) findings concerning the ways in which the two types of transfer pattern with different types of contact situations, is that the SAY complementizer (and evidential SAY) would have arisen in the earlier creolization scenario while access to Chinese was relatively poor. By contrast, object marker *ha* and future marking by *lia* would have likely become established features of the dialect later on, once the number of Chinese speakers in the region had risen through continued Han immigration. As the number of Chinese speakers in the area increased, access to Chinese would have improved and morphological expansion of the Mongolized/Tibetanized Chinese variety could occur by targeting Chinese grammatical markers in a manner more typical of second language acquisition (whereas in the early stages, a lack of access to native Chinese speakers can be expected to have meant that for many among the local population, the variety of Chinese available to them was already pidginized). Before concluding this chapter, a final factor that has been suggested to motivate contact-induced change is considered briefly, namely gap-filling.

3.9 Morphosyntactic convergence and gap-filling

In the contact linguistics literature, a gap-filling mechanism has frequently been recognized as a motivating factor in contact-induced change (e.g. a.o. Heath 1978, Campbell 1987: 277, Heine and Kuteva 2005: 124). For instance, Heath (1978: 115) remarks:

The thought arises that perhaps the choice of the particular morphemes which have been diffused is based on functional considerations; only those morphemes have actually been diffused which contribute something to the borrowing language which was previously lacking. In this approach, morphemic borrowing is viewed in its therapeutic aspect. Borrowings are interpreted as devices to fill functional gaps...

To what extent, then, has the emergence of head-final morphosyntax resulted in the filling of functional gaps in the Xining dialect? Before examining the Xining dialect data, it is necessary to provide a precise definition of gap-filling. Here I assume the definition in (81).

- (81) Replicate/borrow grammatical category X from language M *iff*
 $X = \{ X \in M \mid x \notin R \}$

where M = modal language and R = replica language

(81) says that only categories absent in the replica language but present in the model language can be replicated by the replica language (i.e. replication/borrowing does not lead to duplication of exponents for grammatical categories in the replica language, such as two future tense markers, or two ablative postpositions). The two cases of borrowing of form-meaning units in the Xining dialect have clearly not involved functional gap-filling: Chinese possessed an ablative preposition before borrowing ablative postposition *sa*, and a possibility modal before borrowing the modal *chuang*. Similarly, Chinese possessed a future marking modal before *lia* emerged as a future marker in the Xining dialect. Meanwhile, with regard to the Xining Mandarin SAY complementizer *fozho*, Ming dynasty Chinese already possessed the SAY complementizer *dao*, illustrated above, and so there was no functional gap filled there either.

However, the gap-filling formulation in (81) accounts for the object marker *ha*. An object marker with the semantic generality of *ha* did not exist in Chinese before it was replicated from the local languages. Also, the SAY hearsay evidential can be regarded as filling a functional gap in the sense that hearsay evidentiality was not a grammatical category existent in Chinese previously.

Grammatical category	Fills a functional gap?
Object marker <i>ha</i>	Yes
SAY complementizer <i>fozho</i>	No
SAY hearsay evidential <i>fozho</i>	Yes
Imperfective ZHE	Yes
Ablative postposition <i>sa</i>	No
Comitative/instrumental postposition <i>lia</i>	No
Future tense <i>lia</i>	No
Modal of possibility <i>chuang</i>	No

Table 3-2 Gap-filling in the Xining dialect

Anticipating discussion in Chapter 4, also included in this table is another clear case of functional gap-filling which has occurred in the aspectual system: as will be seen there, ZHE evidences a change from being a relatively narrow imperfective category, with various restrictions on the predicate types with which it may occur, to a general imperfective marker which resembles the general imperfective category in the aspectual system of the substrate (cf. Section 4.3.6). This thus provides a case of functional gap-filling in the sense that ZHE in the Xining dialect has been extended to mark a wider range of imperfective situation types so as to match the functional range of substrate imperfective markers.

However, what all of the devices in Table 3-2 have in common is their head-finality (with regard to ZHE, I assume that V-O-ZHE and O-V-ZHE are head-final orders, though V-ZHE-O in the New Xining dialect may not be). Thus although grammatical replication and borrowing have not generally manifested in terms of functional gap-filling, they have certainly involved the emergence of head-final syntax. If we account for head-directionality in the definition of a gap-filling, a prediction such as (82) can be formulated, which is fully satisfied:

- (82) Model language grammatical category X will be replicated/borrowed by language R
iff
 $X = \{ (x,z) \in M \mid (x,z) \notin R \}$

where x = the functional category feature of X and z = the feature setting of X as head-initial or head-final

In other words, the Tibetan and Monguor (Mongolic) speakers whose imperfect learning of Chinese led to the features discussed in this chapter transferred in each case their head-final syntax into the variety of Chinese that emerged among them. In most cases, a gap was filled only if gap-filling is defined in terms of a point of non-equivalence that incorporates head-directionality i.e. Chinese did not contain a *head-final* future tense marker (though it contained a head-initial tense marker), and it did not contain a *head-final* ablative postposition, though it contained ablative prepositions. Overall, rather than leading to filling functional gaps, grammatical replication and borrowing has primarily led to the filling of ‘syntactic gaps’ – that is, points of syntactic non-equivalence where learners possessed a head-final marker in their first language, but could not find one in the target language Chinese.

3.10 Chapter summary

This chapter has provided an overview of where head-final features have emerged in the Xining dialect and the mechanisms by which they developed. In the first place, simple reordering of existent Chinese categories was observed (verb/object, modal of necessity, imperfective aspect marker). However, a more widespread strategy was transfer of grammatical functions from head-final markers in the substrate to head-final (or clause-final) Chinese form-meaning units:²³ either in speakers’ emerging interlanguage/pidgin Chinese, as in the case of transfer of the complementizer and evidential function to speakers’ head-final speech verb, or to Chinese grammatical markers which were already head-final in Chinese. The latter was seen for the object marking function which was transferred to the topic/pause marker, and the future marking function which was assigned to Chinese sentence-final modal particle *li*. These two types of functional transfer – transfer to lexical items in speakers’ interlanguage/pidgin, and transfer to target language grammatical devices – were discussed in terms of Siegel’s (2012) generalizations about the circumstances in which these types of change occur. It was seen that the non-lexical uses of SAY represent a type of functional transfer typical of creole formation, where access to the target language is poor, and probably arose in the first instance through second language use. However, the alteration of Chinese grammatical markers was likely to have come at a later stage, after the initial pidgin underwent morphological expansion through being used more widely as a lingua franca, and in a scenario more typical of second language acquisition when access to Chinese was improved. This was because (unlike the former type of transfer) this type of transfer requires

²³ Although Paul (2015) treats particles (cf. the source item for object marker *ha* and future marker *lia*) as true syntactic heads comparable to other grammatical categories (thus, as head-final categories), others (e.g. Biberauer 2014) disagree and have argued that they are categorially deficient.

learners to first acquire (to some extent) grammatical morphemes in order to alter them, and is frequently reported in the second language acquisition literature. Finally, the chapter argued that word order change has been motivated by convergence upon the syntax of the substrate languages, and that the filling of functional gaps was not a significant factor motivating functional transfer.

Chapter 4 Imperfective and Perfective Aspect Marking by ZHE

4.1 Introduction

In many aspectual systems cross-linguistically, the perfective/imperfective distinction is the most fundamental opposition, receiving distinct morphological marking. However, across Chinese dialects, the perfective/imperfective aspectual opposition is not always morphologically distinct, because in a number of dialects ZHE can mark both imperfective and perfective aspect (Sun 1998). In Xining Mandarin, ZHE will be seen to function a) as a general imperfective marker and b) as a perfective marker. An analysis of imperfective and perfective ZHE will be presented which explains where the different imperfective viewpoints are available, as well as the restrictions on where ZHE can be imperfective and where it can be perfective. The generality of ZHE as an imperfective marker will be argued to be (at least in part) due to substrate interference from Monguor. Meanwhile, the perfective function (an anomalous property among Northern Mandarin dialects), will be argued to be a feature of Southern Chinese brought to the region through immigration from the Lower Yangtze region.

4.2 Background: ZHE in Modern Standard Mandarin

ZHE in Modern Standard Mandarin is an imperfective marker, which does not also mark perfective aspect. One of the most influential characterizations of Modern Standard Mandarin ZHE is as a resultant state marker (e.g. Smith 1997). According to Smith (1997: 76), ‘Resultative imperfective viewpoints present a state that follows the final point of a telic event.’ The use of ZHE as a resultant state marker is seen with verbs of position, posture and post-event states, where ZHE highlights the state following the action denoted by the predicate (Smith 1997: 273).²⁴

(83) *Qiang shang gua-zhe ji zhang huar* [Standard Mandarin]
wall on hang-IPFV several CL picture.

'Several pictures are hanging on the wall.' (Smith 1997: 273)

(84) *Ta zai chuang shang tang-zhe* [Standard Mandarin]
he at bed on lie-IPFV

'He is lying on the bed.' (Smith 1997: 273)

²⁴ Here and elsewhere in this chapter I have standardized the way ZHE is glossed in examples cited from other sources (e.g. changing *zhe* to IPFV).

- (85) *Men shang xie-zhe si ge zi* [Standard Mandarin]
 door on write-IPFV four CL character
 'Four characters are written on the door.' (Smith 1997: 273)

Smith's (1997) definition of ZHE as a resultant viewpoint marker accounts for the fact that individual-level statives (states conceived as permanent properties of an individual) cannot be combined with ZHE, because they lack a final endpoint (Smith, 1997: 131), and for the fact that habituals cannot occur with ZHE, since these too lack a resultant state in their event structure. Smith (1997: 274) illustrates the unacceptability of ZHE with individual-level statives in Standard Mandarin as follows:

- (86) *??ta zhidao-zhe zhe ge huida* [Standard Mandarin]
 he know-IPFV the CL answer
 (intended) 'He knows the answer.' (Smith 1997: 274)

- (87) **ta conghui-zhe* [Standard Mandarin]
 he intelligent-IPFV
 (intended) 'He is intelligent.' (Smith 1997: 274)

However, the occurrence of ZHE with stage-level statives is not predicted by the definition of ZHE as a resultant imperfective viewpoint. These are stipulated as extended uses in Smith's account (1997: 273).

- (88) *Women bici shen ai-zhe. bici yilai-zhe.* [Standard Mandarin]
 we e.o. deep love-IPFV. e.o. rely-IPFV.
 'We deeply loved each other, and relied on each other.' (Smith 1997: 273)

In addition, the characterization of Standard Mandarin ZHE as a resultant state marker leaves a number of further usage restrictions unexplained. For instance, it is unexpected on this definition that ZHE cannot mark resultant states with achievement verbs, as these involve a change of state. To explain this, Smith (1997: 274) stipulates that in Standard Mandarin, achievements never allow the imperfective viewpoint (i.e. a preliminary stage reading and a resultant state reading are alike not possible). Furthermore, it has been observed that resultant state marking by Standard Mandarin ZHE is not possible even with accomplishments like (89), even though they contain a resultant state in their event structure:

- (89) **Zhangsan gai-zhe yi-dong fangzi* [Standard Mandarin]
 NAME build-IPFV one-CL house
 (intended) 'Zhangsan is building a house/Zhangsan
 has built a house.' (Lin 2002: 260, after L.
 Zhang 1996)

An alternative characterization of ZHE is that it is a durative marker (Li and Thompson 1981, Xiao and McEnery 2004: 182). This subsumes resultant state marking (e.g. with verbs of position, posture and post-event states), but also accounts for other uses that are not resultative, such as in complex sentences. For example, ZHE can occur in the first clause to provide a durative or 'ongoing background' for the event in the following clause:

- (90) *xiao gou yao-zhe weiba pao le* [Standard Mandarin]
 small dog shake-IPFV tail run CRS
 'The small dog ran away wagging its tail.' (Li and Thompson 1981: 223)

However, the durative marker analysis also leaves a number of properties unexplained. For example, ZHE is affected by the quantification property of objects (Lin 2002: 263):

- (91) *Ta he-zhe cha* [Standard Mandarin]
 He drink-IPFV tea
 'He is drinking tea.' (Lin 2002: 263)
- (92) **Ta he-zhe yi bei cha* [Standard Mandarin]
 he drink-IPFV one cup tea
 (intended) 'He is drinking a cup of tea.' (Lin 2002: 263)

To explain this fact, and a number of other restrictions on the use of ZHE, Lin (2002: 263) makes a perceptive proposal which goes some way to explaining ZHE in Standard Mandarin, and below I will adapt it to explain the behaviour of ZHE in the Xining dialect. Lin (2002: 263) initially proposes that

- (93) ZHE must aspectually select an atelic situation as its complement

This explains the behaviour of ZHE in (91) and (92). The atelic activity of drinking tea in (91) allows ZHE to occur, but the telic event of drinking a cup of tea in (92) does not, even though the situation contains a resultant state (of having drunk the cup of tea). That is, if ZHE selects only atelic predicates, then it is correctly predicted that (92) is unacceptable because the

situation is telic. This selectional restriction also explains quite a few other properties of ZHE that are unexplained on the traditional accounts, including the ungrammaticality of ZHE with achievements (e.g. (94) - (95)) and most accomplishments (e.g. (96)), which are telic:

- (94) **ta daoda-zhe shanding* [Standard Mandarin]
 he arrive-IPFV top-of-the mountain
 (intended) 'He is reaching/has reached the top of the mountain.' (Lin 2002: 261, after L. Zhang 1996)
- (95) **ta si-zhe* [Standard Mandarin]
 3SG die-IPFV
 (intended) 'He is dying.' (Li and Thompson 1981: 196)
- (96) **ta chibao-zhe* [Standard Mandarin]
 3SG eat-full-IPFV
 (intended) 'He has eaten his fill.' (Elicited)

As formulated in (93), however, Lin's (2002) analysis is not perfect. It does not explain, for example, the ungrammaticality of ZHE with activity verbs marked by durative frequency adverbials, which are atelic, or the non-occurrence of ZHE with individual-level statives (cf. (86) and (87)):

- (97) **ta shui-zhe shi fenzhong* [Standard Mandarin]
 he sleep-IPFV ten minute
 (intended) 'He is sleeping/has slept for ten minutes.' (Lin 2002: 261, after L. Zhang 1996)

Lin (2002: 292) therefore concludes by reformulating the analysis such that ZHE selects only aspectually homogeneous predicates (i.e. with the property of cumulativity and distributivity), which does predict the ungrammaticality of ZHE in (97) (multiples of sleeping for ten minutes have count rather than cumulative reference) as well as its acceptability in atelic predicates.²⁵ Having introduced the analysis which will be the starting point in our consideration of the Xining dialect, I will now present the data to be accounted for, before defining the selectional restrictions and truth conditions of Xining imperfective ZHE.

²⁵ However, even Lin's (2002) revised analysis fails to exclude individual-level statives (which are homogeneous).

4.3 ZHE in the Xining dialect: a general imperfective marker

Xining Mandarin ZHE is a ‘general imperfective’ marker, in line with Smith's (1997: 276) observation that greater generality is found for imperfective ZHE among Northern Mandarin dialects. In Comrie's (1976: 25) system, imperfective aspect is subdivided into ‘habitual’ and ‘continuous’ aspect, where the latter is defined negatively as non-habitual, and positively as providing an internal viewpoint on both stative and dynamic situations (i.e. a non-progressive and progressive viewpoint respectively).

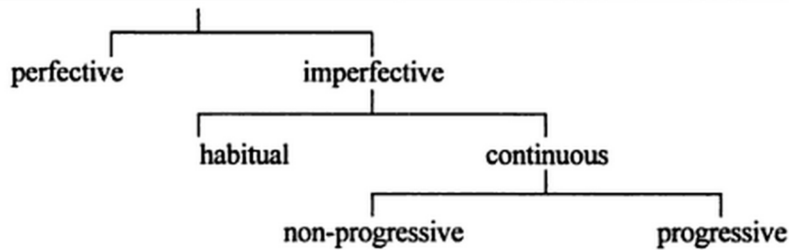


Figure 4-1 Classification of aspectual oppositions (Comrie 1976: 25)

Xining ZHE will be seen to be a general imperfective in the sense that it is situated at the ‘imperfective’ node in this hierarchy, marking all of the more specific types of imperfective aspect subsumed under this node. In addition, from the perspective of Smith (1997), Xining Mandarin ZHE will be seen to mark all three subparts of event structure: the preliminary stages of an event, an internal portion of the event, and a resultant state created by an event.



Figure 4-2. IPFV marking in Xining Mandarin

The generality is also seen in that beyond the possibilities found for Standard Mandarin ZHE, in the Xining dialect ZHE can mark a range of other stative situation types (e.g. individual-level predicates, habituals and generic predicates). Some (apparently) new empirical observations about the distribution of ZHE are presented, but most of the data presented is available in the existent literature (in Chinese), albeit not in one place (e.g. Wu 1982, Z.-Q. Wang 1983, X.-R. Jia 1993, Du 1993, Ren 2006, S.-C. Wang 2009b). However, ZHE-marked propositions have not been systematically classified according to their aspectual class in order to show the generality of the imperfective category in the dialect. In addition, more importantly, these works do not explain what conditions when and where the various imperfective viewpoints (preliminary, internal and resultant stage focus) are available for

ZHE. The contribution of the present section is to bring together the varied types of situation marked by imperfective ZHE and to propose a unified account of its temporal meaning.

It should be noted at this point that, as will be seen in the examples below, ZHE in the Xining dialect has previously been observed to have the phonological forms *zho* [tʂo] and *zhe* [tʂe], whilst I found that the form *zhi* [tʂɿz]²⁶ is also used among speakers from Haiyan county. The following discussion applies across these phonological forms (differences between these forms will be discussed in Section 4.5).²⁷ A phonetic transcription for each token of ZHE is provided in square brackets.

The discussion proceeds as follows. Sections 4.3.1-4.3.4 present the facts on imperfective marking by ZHE, showing the range of predicate types that it can occur with by considering internal, preliminary and resultant stage viewpoints in turn. Section 4.3.5 presents a more formal analysis of ZHE, making more precise the claim that it is a ‘general imperfective’. Then, Section 4.3.6 explains the generality of imperfective ZHE as an effect of substrate interference from Monguor.

4.3.1 *Internal stage focus*

Continuous aspect marking by ZHE, which does not make visible either endpoint, is possible with durative predicates (states, activities and accomplishments). Internal stage focus by imperfective ZHE will be illustrated for the following contexts, classified in terms of Comrie’s (1976) system:

²⁶ i.e. similar in pronunciation to Standard Mandarin *zhi* ‘juice’, but with heavier friction.

²⁷ The goal of this chapter is relatively modest in the sense that it is not to catalogue all of the functions that ZHE can fulfil – i.e. aspectual and non-aspectual – (cf. Du 1993, Ren 2006 for an overview), but to focus specifically on its fundamental function as an aspect marker, and on the imperfective/perfective polysemy. However, it is necessary to mention that the Xining dialect also retains the sentence-final use of ZHE as a mood marker (cf. Du 1993), which appears in some of the examples provided. Yap and Wang (2011) trace this mood marker back to the light (‘semantically general’) noun ZHE:

(3) 此四者，天下之窮民而無告者

ci si ZHE, tian xia zhi qiong min er wu gao ZHE
these four ZHE sky below GEN poor people CONN NEG appeal NOMZ

‘These four kinds of people, (they are) those people in the world who are poor and have no place to appeal to.’ (Meng Zi, 1B/5)

This device is glossed throughout as a particle (e.g. in (99)).

- i. Continuous
 - a. Non-progressive
 - i. Stative verbs
 - 1. Stage-level
 - 2. Individual-level
 - ii. Generic sentences
 - iii. Expressions of modality
 - b. Progressive
- ii. Habitual

These will now be briefly illustrated in turn.

4.3.1.1 *Stative verbs*

With regard to statives, ZHE occurs with a wide range of states, both inherently stative predicates (stative verbs/adjectives) and derived statives (e.g. containing habitual adverbials). ZHE also marks both stage-level and individual-level statives (states conceived as transitory as well as those denoting permanent properties of an individual). Use with stage-level statives is shown by use on adjectives:

- (98) *ni shenti hao-zhe* [tʂɛ]
 you body good-IPFV
 'You are healthy.'

Individual-level statives such as cognitive verb *zhidao* 'know' can also be marked by imperfective ZHE, unlike in Standard Mandarin where ZHE is disallowed with individual-level predicates (cf. (86) and (87) above).

- (99) *jiamen zhidao-zho* [tʂɔ], *no de tongxue-men ha wen-le zho* [tʂɔ]
 3PL know-IPFV 1SG POSS classmate-PL OBJ ask-ASP PRT
 'They know. My classmates asked them.'

ZHE can also mark statives derived covertly, such as (100) which is a (non-stative) achievement predicate, but here it is not used to denote a single event of giving but rather an ongoing state of affairs (an established government policy).

(100) *bu shi guojia **gei-zhe** [tʂɛ] liu wan wu*
 NEG be country give-IPFV six ten.thousand five
fo a mei
 PRT PRT NEG
 'Doesn't the country give 65,000?'

4.3.1.2 Generic sentences

Similarly, ZHE may occur in generic sentences, which 'hold of classes or kinds' and are thus another kind of individual-level predicate (Smith 1997: 33).

(101) *zangzu ren chi zhu rou **zhe** [tʂɛ]*
 Tibetan person eat pig meat IPFV
 'Tibetans eat pork.' (Elicited)

4.3.1.3 Modals

ZHE also marks modal expressions of ability and desire, which can be assumed to be aspectually stative (e.g. Lin 2003: 435). In (102) the resultative verb complement *ha* is used to denote ability, and ZHE marks the state of being able to do something, whilst (103) is a state of desiring something.

(102) *yi ge zhu a **wei-ha-zho** [tʂɔ] bei*
 one CL pig PRT feed-COMPL-IPFV PRT
 '(S/he) can even raise a pig.'

(103) *zha jia jiu mingzao jiu **yao-zho** [tʂɔ] fozho*
 here 3SG just tomorrow just want-IPFV QUOT
 '(He said) he wants (them) tomorrow.'

4.3.1.4 Habituals

In addition, ZHE can mark habitual situations, a usage not noted in the above-mentioned studies. Habituals can be treated as derived statives, consisting of a pattern of situations occurring with a certain frequency during a given time period (cf. Smith 1997: 50-1, de Swart 1998).

- (104) *Na meitian ge ya chi-zho* [tʂɔ] *me, a*
 then everyday PRT PRT eat-IPFV PRT PRT
qu-gei-zho [tʂɔ] *li a*
 go-CAUS-IPFV PRT PRT
 'Everyday he eats and eats. Where does it all go?'

- (105) *tiantian shangxue-zho* [tʂɔ] *fozho*
 everyday attend.school-IPFV QUOT
 '(He) goes to school everyday.'

4.3.1.5 Progressive marking

With regard to progressive marking by ZHE, this is possible with dynamic, durative predicates i.e. with Vendler's (1967) activity and accomplishment verbs. (106) to (107) illustrate for activities:

- (106) *Ni lia fa-zho* [tʂɔ] *ma?*
 2SG two play-IPFV Q
 'Are you two playing?'

- (107) *jia lia ban xiangqi-zhe* [tʂɛ] *me*
 3SG two play chess-IPFV PRT
 'Those two are playing Chinese chess.'

(108) illustrates for an accomplishment predicate:

- (108) *Lao Bi xie yi bai zi zhe* [tʂɛ] *lia*
 NAME write one hundred character IPFV PRT
 'Lao Bi is writing one hundred characters.' (Elicited)

Having considered use on stative predicates of various kinds, and progressive marking on dynamic predicates, the next section considers preliminary stage focus.

4.3.2 Preliminary stage focus

Like the progressive use, preliminary stage focus also occurs in dynamic rather than stative predicates, but it involves focusing on a portion of event structure preceding the initial point. This is seen in English by the use of *-ing* for preliminary stage focus in *She was winning the*

race or *the team was reaching the top*, which according to Smith (1997: 75) focus a portion of event structure prior to the achievement event itself. I only found preliminary stage focus mentioned for Xining Mandarin by Ren (2006). Unlike in Standard Mandarin, where achievements cannot be marked by ZHE at all, Xining Mandarin ZHE allows preliminary stage focus with this predicate type:

(109) Xiao Zhang na ha Xining mai-**zhi** [tʂʊ̃²] fangfang ma
 NAME there TOP Xining buy-IPFV house Q

‘Is Xiao Zhang buying a house there in Xining?’

Some further examples of preliminary stage focus on achievements are as shown below for *si* ‘die’ and *gei* ‘give’:

(110) Xiao Wang dao-le de shihou, Zhangsan **si-zhe** [tʂɛ]
 NAME arrive-PFV NMLZ time NAME die-IPFV

‘When Xiao Wang arrived, Zhangsan was dying.’ (Elicited)

(111) Wang Laoshi jia ha yi ben fu **gei-zhe** [tʂɛ]
 NAME teacher 3SG DAT one CL book give-IPFV

‘Teacher Wang is giving a book to him.’ (Elicited)

Activity predicates, unlike statives, allow an initial point and so in suitable contexts permit preliminary stage focus. Here ZHE focuses on a portion of event structure prior to the beginning of the event of going (leaving):

(112) a yi tian **zou-zhi** [tʂʊ̃²] fozho, aye
 Q one day walk-IPFV PRT, grandfather

‘Which day is grandpa leaving?’

4.3.3 Resultant state marking

Since resultant states only arise from events with a final endpoint, resultant state marking is possible with accomplishment and achievement predicates but not activities or states (Smith 1997, Dahl 1985). (113) illustrates the kind of resultant state marking on locative achievement predicates that is also possible with ZHE in Standard Mandarin (cf. (83)):

- (113) *Jia li cun-zho* [tʂə] *liang wan duo?*
 house LOC store-IPFV two ten.thousand many
 'Is twenty thousand Yuan stored in the house?'

Meanwhile, in (114) and (115), the assertion is made about a state holding at speech time as a result of an accomplishment event:

- (114) *xianzai renmen zou-wan-zhe* [tʂɛ] *ai*
 now people walk-finish-IPFV PRT
 'Everyone has now left.'

- (115) *na na ge Li bobo jia ye gai-ha-zhi* [tʂʰɿ] *zhi* [tʂʰɿ] *mei ba*
 then that CL NAME uncle house also build-COMPL-IPFV PRT NEG PRT
 'That uncle Li, hasn't he built a house?'

The state resulting from the past telic event is taken to continue to hold at the reference time, usually the speech time by default:

- (116) *jia naxie zangyu juzi bei-ha-zhe* [tʂɛ]
 3SG those Tibetan sentence memorize-COMPL-IPFV
 'He has memorized those Tibetan sentences (i.e. he knows them now).' (Elicited)

Also, as Du (1993: 50) notes, unlike in Standard Mandarin, Xining Mandarin ZHE can mark negated predicates (cf. Section 4.5). Thus in (117) ZHE indicates that at speech time the state of Wang Lin's item not having come still holds.

- (117) *Wang Lin jia de na hai mei lai-zho* [tʂə]²⁸ *bei*
 NAME 3SG POSS that still NEG come-IPFV PRT
 'Wang Lin's item still hasn't come?'

In addition, a point apparently not mentioned in the previous literature is that with achievement and accomplishment verbs that are compositionally derived - i.e. resultative verb compounds - the resultant state reading is the only viewpoint available (preliminary or internal stage focus is not possible). Consider the verb *si* 'die', a monomorphemic

²⁸ Unusually, a schwa was used in ZHE here, as in Standard Mandarin.

achievement verb which receives a non-resultative (preliminary) reading without completive *ha*, but requires a resultative reading when *ha* is present.

(118) *Xiao Wang dao-le de shihou, Zhangsan si-zhe* [tʂɛ]
 NAME arrive-PFV time.of NAME die-IPFV
 ‘When Xiao Wang arrived, Zhangsan was dying.’ (Elicited)

(119) *Xiao Wang dao-le de shihou, Zhangsan si-ha-zhe* [tʂɛ]
 NAME arrive-PFV time.of NAME die-COMPL-IPFV
 ‘When Xiao Wang arrived, Zhangsan was dead.’
 ≠ ‘When Xiao Wang arrived, Zhangsan was dying.’ (Elicited)

The same obligatory resultant state reading arises in (120) - (121), because the former contains resultative verb complement *diao* and the latter *ha*.

(120) *mao ba nomen jia xiaohai chi-diao-zhe* [tʂɛ]
 cat BA 1PL 3SG small.child eat-COMPL-IPFV
 ‘The cat has eaten our child.’ (Elicited)

(121) *jia lai-ha-zhe* [tʂɛ] (#*gonggongche-shang lia*)
 3SG come-COMPL-IPFV (bus-on PRT)
 ‘He has come. (#He’s on the bus.)’ (Elicited)

Both assert a state following a past event. In (120) no preliminary stage reading is possible, and likewise in (121) the subject is asserted to be in a state of having already come, and as such cannot be said to be still en route (i.e. a preliminary stage reading). The behaviour of ZHE with achievement predicates can be schematically represented as follows, where the slashes represent the event phase available for selection by ZHE (I and F are the initial point and the final point respectively, adjacent here because achievements are non-durative).

Monomorphemic achievements: ..///..IF..///..

Resultative verb compound (RVC) achievements: IF../////..

4.3.4 *Interim summary*

So far we have seen that imperfective ZHE can mark preliminary stages, internal stages and resultant stages of situations. Sometimes, all three viewpoints are available on the same

predicate. Thus on the preliminary stage reading given in the translation for (122), shown to be acceptable by the first of the bracketed conjuncts, Xiao Wang has not actually reached the UK yet.

(122) *Xiao Wang yingguo zuo-zho* [tʂə] *yi nian*

NAME UK live-IPFV one year,

(*keshi hai mei dao yingguo*

but still NEG arrive United Kingdom

/xianzai yijing guo-le bannian)

now already pass-PFV half.year

‘Xiao Wang is living in the UK for a year. (But he hasn’t reached the UK yet / Now half a year has already passed.)’ (Elicited)

However, this sentence is also compatible with the second bracketed conjunct, indicating the availability of an internal stage (progressive) reading for ZHE here (‘Xiao Wang is (currently) living in the UK for a year.’). Or, (122) could felicitously be translated ‘Xiao Wang has (already) lived in the UK for one year’, indicating the availability of a resultant state reading in which the full year has passed.²⁹

4.3.5 Aspectual selection by ZHE

The existing studies on Xining ZHE mentioned above do not discuss what constrains where ZHE can provide the different imperfective viewpoints just described. Is ZHE simply ambiguous between different imperfective functions? If so, how many imperfective ZHEs are there in the Xining dialect? Here I do not pursue the hypothesis that imperfective ZHE is ambiguous between different functions (e.g. sometimes denoting progressive aspect and sometimes denoting stative viewpoint, cf. Lin 2002). Instead, I will argue for a single unified analysis in which imperfective ZHE has only one function, as a general imperfective, and show that this accounts for the data above.³⁰

As discussed in Section 4.2, concerning Standard Mandarin, Lin (2002) proposes that ZHE selects only atelic propositions, and Xiao and McEnery (2004: 182) and others (e.g. Li and

²⁹ In fact, ZHE in (122) could even be interpreted as an instance of perfective ZHE because according to my informant (122) could present an event in a sequence (a typical context for perfective aspect), being felicitously followed by a conjunct like *xianzai yijing huilai le* ‘Now he has already come back.’ Perfective/imperfective ambiguity is discussed in Section 4.4.1.

³⁰ That is, I posit two-way ambiguity for the aspect marker ZHE the Xining dialect, between imperfective on the one hand, and perfective on the other hand (see below).

Thompson 1981) have argued that ZHE is a durative marker, compatible only with +durative situations. By contrast, Xining Mandarin ZHE has been seen to mark both telic (e.g. accomplishments/RVCs) and atelic propositions, and to occur with durative and non-durative situations alike – in other words, to be unrestricted by the aspectual class of the situation type, occurring across all of Vendler’s (1967) verb types and a number of derived situation types. Therefore to provide a unified analysis of the uses of imperfective ZHE, I will assume that event structure contains phases (cf. Lin 2002: 264) – maximally preliminary, internal and resultant phases (or stages), as posited by Smith (1997) – and the imperfective aspect selects these phases rather than the situation as a whole (cf. Klein, Li and Hendricks 2000: 751, among others). Whether or not these phases are available for marking by ZHE will be argued to depend simply on the aspectual class of the situation, and whether or not a given phase is present in that situation type.

Following de Swart (1998), I adopt a three-way classification of eventuality descriptions (i.e. linguistic situation types) into states, processes and events. This ontology, which is discussed further in the following chapter, can be briefly described as follows. Eventuality descriptions are distinguished in terms of mereological structure (the relation of parts to the whole). States and processes are ‘homogeneous’ in the sense that they denote divisive reference (subintervals of *being happy* equal *being happy*) and cumulative reference (*reading plus reading* is simply *reading*). However, events are ‘quantized’ instead of homogeneous, lacking the subinterval property, and having count instead of cumulative reference. For example, the event *eat two apples* is countable, and the subinterval property is seen in that no proper part of eating two apples equals eating two apples.

To explain the behaviour of ZHE, I adopt the uniform model of aspect in de Swart (1998), in which lexical as well as grammatical devices can function as aspectual operators and perform mappings between the three types of eventuality description. That is, the aspectual class of the underlying eventuality description (i.e. lexical aspect or aktionsart) can be modified by aspectual operators such as temporal adverbials: for example, a habitual adverbial ‘maps eventuality descriptions onto state descriptions’ i.e. a homogeneous situation type (de Swart 1998: 383).³¹

³¹ The fact that grammatical aspect markers also map between eventuality description types in de Swart (1998) means that ZHE itself is an aspectual operator, mapping to a stative situation type, although that is not relevant to the analysis of ZHE itself but to markers that select ZHE-marked propositions, such as *lia* (see next chapter).

In the framework just outlined, it is proposed that the selectional restrictions of ZHE are as given in (123), which captures the generality of Xining ZHE and explains why it occurs freely with all kinds of aspectual situation types:

(123) ZHE selects a homogeneous phase of event structure as its complement

On the analysis in (123), the reason why ZHE is unrestricted with regard to the aspectual class of its complement is because, on standard assumptions, all situation types contain homogeneous phases, even if the event in its entirety is not homogeneous. For example, a telic event contains a resultant state in its event structure, and thus a homogeneous portion, despite telicity involving a change of state and thus the event as a whole being non-homogeneous. On this analysis, the event structure of the predicate marked by ZHE – and not any difference in the function of ZHE – determines which viewpoints are available (i.e. preliminary, internal or resultant). The prediction of (123) is that the availability of preliminary, internal and resultant state focus with ZHE will correspond to which of these phases are available in the structure of the different situation types, which is given as follows:

	<i>Preliminary</i>	<i>Internal</i>	<i>Resultant</i>
States	No	Yes	No
Process	Yes	Yes	No
Event	Yes	Yes	Yes

Table 4-1 Patterning of imperfective viewpoints with situation types

States are expected to allow only the internal stage reading because they have neither initial nor final endpoints. This was seen to be borne out in Section 4.3.1 above, both for bare stative verbs (e.g. (99)), and derived statives, such as those formed through the addition of habitual adverbials (e.g. (105)). Meanwhile, processes (Vendlerian activities) allow internal stage focus, being inherently durative, but not resultant state focus because they lack a final endpoint. Preliminary focus is also expected to be possible for processes if they are interpreted as having an initial point (i.e. as process events). Internal stage focus was illustrated for processes with the examples of progressive marking by ZHE (e.g. (106)), and preliminary focus was illustrated in e.g. (112), whilst resultant state marking on activities is not attested.

With regard to events, preliminary and resultant stages are expected to be available in all cases, because events possess an initial point and a final endpoint, whilst if the event is

durative, then internal stage focus should also be possible. This threeway ambiguity was demonstrated in (124) above, repeated below, which is a durative event formed with a stative verb.

- (124) *Xiao Wang yingguo zuo zho [tʂɔ] yi nian*
 NAME UK live IPFV one year (Elicited)

This is an event because, according to de Swart (1998: 357), duration adverbials, by providing a bound, perform a mapping from state or process to (quantized) event, and so although the verb *zuo* ‘live’ is stative, this basic eventuality description is mapped to an event by the addition of the bound. That is, *live in the UK for one year* lacks the subinterval property, since proper parts of living in the UK for one year do not equal living there for one year, and after adding the adverbial the predicate has count rather than cumulative reference.

With regard to non-durative events (i.e. achievements), it was noted that like monomorphemic achievements, RVC achievements are telic, and so have an inherent culmination point, and yet unlike with monomorphemic achievements ZHE obligatorily selects the resultant state and cannot select the preliminary stages. In line with Tai’s (1984: 295) intuition that RVCs contain a ‘presupposed activity’ but an ‘asserted result’, the function of the second component of this type of resultative complement is to assert that the target phase has been reached (cf. Klein et al. 2000: 750). Therefore, since the resultant state has been attained, only this resultant state is available for selection by ZHE, and so the behaviour of ZHE here can be seen to follow from the nature of the event structure of the predicate it selects.

Having defined the selectional restrictions of imperfective ZHE as in (123) (explaining where it occurs), the truth conditions for a proposition φ marked by ZHE can be given as follows.

(125), proposed for the Xining dialect, is the same as the truth conditions in Standard Mandarin (on Lin’s 2002: 286-7 account), except that in Standard Mandarin, where preliminary stage focus is not possible for ZHE, it is necessary to stipulate that ZHE can only select the resultant rather than the preliminary stages of two-phase events. In the Xining dialect this is not necessary, because ZHE does not possess this restriction.

- (125) $-zhe(\varphi)$ is true at a reference time t if and only if t is included within a homogeneous phase of the event structure

With statives of various kinds (Section 4.3.1), this amounts to saying that at reference time, the state holds, and with progressives, the activity is ongoing at reference time (i.e. as in

Standard Mandarin). For preliminary stage focus, at reference time the initial point of the situation has not been reached, but rather the preliminary stages are ongoing and thus the situation has not yet begun. For resultant states, these are asserted to hold at the reference time (by default, speech time); in (126), the state of having memorized the sentences holds at speech time:

(126) *jia naxie zangyu juzi bei-ha-zhe* [tʂɛ]

3SG those Tibetan sentence memorize-COMPL-IPFV

‘He has memorized those Tibetan sentences (i.e. he knows them now).’

The preceding discussion illustrates that where other aspectual operators are present, verb type alone underdetermines the imperfective viewpoints available for marking by ZHE. This was seen to be the case where habitual and durative adverbials are present (e.g. in (105) and (122) respectively), which override the aspectual class of the verb. According to de Swart (1998), these devices perform a stative and eventive mapping respectively, which on the analysis in (123) explains why only internal stage focus is possible for ZHE in the former case, and why all three imperfective viewpoints are possible in the latter case. The same was observed with covert stative aspectual operators, such as in generic sentences, where the verb type did not determine the aspectual viewpoints available with ZHE. This shows the inadequacy of a verb-level classification (Vendler 1967) for explaining the viewpoints provided by ZHE. But the behavior of ZHE falls out fairly straightforwardly from the threeway ontology of eventuality descriptions, on a compositional approach that accounts for the effects of all aspectual operators (such as temporal adverbials and coercion effects like the interpretation of a predicate as generic). With regard to the ambiguity in ZHE sentences predicted by Table 4-1, in language use, discourse and real-world context strongly preclude the kind of ambiguity illustrated above with the elicited example in (122), meaning that using ZHE with eventive predicates does not cause confusion (i.e. it is usually clear from the context whether one is referring, for example, to a resultant state or an ongoing process event). In the next section, a contact explanation is proposed for the existence of a general imperfective in the Xining dialect.

4.3.6 Imperfective ZHE and language contact

In this section it is suggested that contact with the local non-Sinitic languages is likely to have been responsible for the extension from imperfective marker to ‘general imperfective marker’ in the Xining dialect. It is proposed that the extension of imperfective marking by ZHE to

new contexts was precipitated by the model of general imperfective markers in the local languages. Here I focus on Huzhu Monguor (Mongghul), which is the Mongolic language spoken closest to Xining proper (Wang and Dede 2016: 407). According to Dede (1999a: 11), the river valleys in which Xining is located were occupied by Monguor speakers in the early Ming period when the Han settlers began to arrive in significant numbers, and they transferred Monguor morphosyntactic features like the ablative postposition into the Xining dialect (cf. discussion in Chapter 2). In view of the level of morphosyntactic interference found in the Xining dialect, it is to be expected that they would have committed errors involving the use of imperfective ZHE in contexts where imperfective marking is found in their first language. Given that the non-Han peoples probably did not have formal instruction, lacking access to negative evidence (metalinguistic information about where Chinese ZHE is *not* allowed), Monguor speakers would have had difficulty avoiding creating a more general Chinese imperfective in their L2 speech by using ZHE as they use general imperfective markers in their native language. This kind of overgeneralization is to be expected all the more in the naturalistic learning scenario that seems to have existed here, because it is known from second language acquisition studies that when a target language structure/aspectual category is narrower in its distribution than an L1 structure/aspectual category, even with good access to instruction and to the target language, learners show persistent difficulties in narrowing the scope of the L2 structure/category (cf. Liu 2012: 186, and references therein). With a sufficiently large community of learners, as were present in the Xining area, and poor access to the target language, such errors of generalization could become established as features of the emerging contact variety.

The generality of the modern Xining imperfective was seen to include the fact that it marks habituals, negated states, generic situations and individual-level stative. Such predicate types are not marked by imperfective ZHE in Northern Mandarin dialects like modern Beijing Mandarin, and are not reported for Ming dynasty Chinese either (the time period to which the Xining dialect is assumed to date; cf. Chapter 2).³² But they are marked in Mongghul. Mongghul contains a fairly complex aspectual system: various imperfective suffixes exist, and the choice of suffix is conditioned by speaker involvement (a grammaticalized egophoric/non-egophoric distinction). Contexts marked imperfective in Mongghul which are also marked by ZHE include ongoing activities (progressive aspect) and resultant states ((127) and (128)):

³² For instance, taxonomic studies on ZHE in *Laoqida*, a text representative of colloquial Chinese in the early Ming period, do not report these uses (e.g. Chen 1988).

(127) *Bu you-nii* [Mongghul]
 1:SG walk-SUBJ:IMPERF
 ‘I am walking.’ (Åkerman 2012: 7)

(128) *Bu nie youbii-nu wari-ji* [Mongghul]
 1:SG this pen-ACC take-SUBJ:STATE
 ‘I am holding this pen.’ (Åkerman 2012: 7)

But in the Xining dialect, imperfective aspect is also marked in contexts where the imperfective is not used in Standard Mandarin, or in northern Mandarin dialects like Beijing Mandarin. A range of other contexts marked by imperfective suffixes in Mongghul are presented below, which we saw above are ZHE-marked in the Xining dialect.

Individual-level statives

(129) *Bu mudie-nu* [Mongghul]
 1:SG know-IMPERF
 ‘I know.’ (Åkerman 2012: 25)

Habituals

(130) *Bu iidaadu ula ghari-la xi-nii* [Mongghul]
 1:SG often hill climb-PURP go-SUBJ:IMPERF
 ‘I go often to climb hills.’ (Åkerman 2012: 19)

Negatives

(131) *Bu duo kurdulaa Mongghul pujig suri-ji gui* [Mongghul]
 1:SG now ever Mongghul letter study-IMPERF SUBJ:NEG:COP
 ‘I have never studied the Mongghul writing system.’ (Åkerman 2012: 8)

(132) *Bu ii mudie-nu* [Mongghul]
 1:SG NEG know-IMPERF
 ‘I don’t know.’ (Åkerman 2012: 19)

Generics

(133) *Saayuo niiman sara manta-na* [Mongghul]
 potatoes eight month dig-OBJ:IMPERF
 ‘Potatoes are dug up in August.’ (Åkerman 2012: 23)

Thus the contexts in which Chinese imperfective ZHE is used constituted a subset of those marked in Mongghul, and there was nothing in the target language input (i.e. no positive linguistic evidence in Chinese) from which Monguor speakers could learn that ZHE is ungrammatical in these contexts. It is therefore likely that there was transfer of the generality of their L1 imperfective markers to Chinese ZHE. In the next section, perfective marking by ZHE is considered.

4.4 Perfective marking by ZHE

According to Qu's (2006, 2007) cross-dialectal studies, among Northwestern Mandarin dialects, the use of ZHE as a perfective marker is rare (other than in the Xining dialect, it is reported only for the Ningxia dialect (Tongxin county)), whilst in Northern and Northeastern dialects it is not attested. Nevertheless, despite the fact that it was observed some time ago that both imperfective and perfective functions exist for Xining ZHE (e.g. X.-R. Jia 1993), the factors conditioning when ZHE behaves as a perfective maker (as opposed to an imperfective marker) have not been discussed.

A characteristic function of the perfective aspect is in the expression of a sequence of events in the past (Hopper 1979, Bybee et al. 1994: 90, 126). Bybee et al. (1994: 54) note that 'Perfective is the aspect used for narrating sequences of discrete events in which the situation is reported for its own sake, independent of its relevance to other situations.' In these circumstances, the event marked by ZHE is viewed as a whole, with endpoints visible. This is illustrated in (134), where ZHE marks the first in a sequence of events.

- (134) *ganiang, chuzuche no-ha da-gei-zho* [tʂɔ],
 girl taxi 1SG-DAT hit-give-PFV
nomen yigua shanglai-le a
 1PL all up.come-PFV PRT
 'The girl, she called a taxi for me. We all got on.'

Thus in addition to the perfective marker *le*, which can also be seen at the end of (134), it has often been noted that Xining ZHE also marks perfective aspect, occurring in contexts where perfective *le* would be used in Standard Mandarin (e.g. X.-R. Jia 1993: 267-8). In sentences that also contain sentence-final *le* as a *perfect* marker, ZHE can occur post-verbally equivalent to Standard Mandarin perfective marker *le* ('verbal-*le*'; cf. Li and Thompson 1981: 185-215). The broad meaning of (135) would be translated into Standard Mandarin as (136):

(135) *zhe qu-zho* [tʂo] *kuai-zhe* [tʂɛ] *yi nian le a mei*
 this go-PFV almost-COMPL one year PERF PRT NEG
 ‘Hasn’t (Xiao Wang) been gone for almost a year?’

(136) *Xiao Wang qu-le kuai-dao yi nian le ma* [Standard Mandarin]
 NAME go-PFV almost-COMPL one year PERF Q
 ‘Hasn’t Xiao Wang been gone for almost a year?’

Meanwhile, (137) below shows that ZHE can occur as a perfective marker and an imperfective marker in the same sentence. In the first clause ZHE marks the first event in a sequence (as noted, a typical context for perfective marking), whilst in the second clause ZHE is an imperfective marker expressing an activity as ongoing at the speech time. (138) is equivalent to the following Standard Mandarin sentence, where the first ZHE is translated with perfective *le*, and the second with progressive *zai*.

(137) *ni ha ye jiao-zhe* [tʂɛ] *jiamen chi huoguo zhe* [tʂɛ] *a*
 2SG OBJ also call-PFV 3PL eat hotpot IPFV PRT
 ‘(They) also called you. They are eating hotpot.’

(138) *ye jiao-le ni, tamen zai chi huoguo* [Standard Mandarin]
 also call-PFV 2SG, 3PL PROG eat hotpot
 ‘(They) also called you. They are eating hotpot.’

In addition, it can be demonstrated that ZHE satisfies the technical definition of the perfective viewpoint provided by Smith (1997) by making visible both initial and final endpoints. Smith (1997: 230-1) shows that to verify the visibility of the initial point, a *when* conjunct can be added, and if a sequential reading is derived (i.e. the event of the main clause following that of the *when* conjunct) then the main clause is aspectually perfective. But if a simultaneous reading is available, then the main clause is imperfective. To illustrate, in Japanese, because *te i* does not possess a perfective marking function, (139) can only be interpreted as meaning Mari was already angry when Ken broke the window. Hence it is treated by Shirai (1998: 679) as an imperfective resultative.

- (139) *Ken-ga madogarasu-o watt-a toki,* [Japanese]
 NAME-NOM window:glass-ACC break-PST time
Mari-wa okot-te i-ta
 NAME-TOP get:angry-ASP-PST
 ‘When Ken broke the glass window, Mari was angry.’ (based on Shirai 1998:
 679)

Applying this test to Xining Mandarin, even though the imperfective reading is available (the first translation of (140)), a perfective reading is also possible, in which the initial point is visible, as shown by the existence of a sequential (inceptive) reading for the main clause.

- (140) *jia dao no jia de shihou, no shengqi-zhe* [tʂɛ]
 3SG arrive 1SG house time.of 1SG become.angry-IPFV
 ‘When he arrived at my house, I was (already) angry.’
 ‘When he arrived at my house, I got angry.’ (Elicited)

Next, because the perfective viewpoint on a past event presents the event as terminated (and/or completed, depending on the situation type concerned), the perfective viewpoint is incompatible with an assertion that the event continued (Smith 1997: 67). The fact that in (141) a conjunct can be added asserting that the event does not continue (not possible for the imperfective viewpoint) shows that the final endpoint is visible and that ZHE here is perfective rather than imperfective.

- (141) *Xiao Li qu-zho* [tʂɔ] *yi nian, xianzai yijing hui zhongguo le*
 NAME go-PFV one year now already return China PFV
 ‘Xiao Li went for a year. Now he has already returned to China.’ (Elicited)

Finally, it should be highlighted that, as we saw in (140) above, ZHE sometimes can be observed to be ambiguous between an imperfective and a perfective reading. In the following example from A.-S. Zhang (2007: 344), which contains an activity verb *ma* ‘curse’, the event of cursing can either be viewed perfectly as bounded and already over, or else imperfectively as in progress at the speech time.

- (142) *Musa ha laoshi ma-zhe* [tʂɛ]
 NAME OBJ teacher curse-PFV/IPFV
 ‘Musa was criticized by the teacher.’
 ‘Musa is being criticized by the teacher.’ (A.-S. Zhang 2007: 344, my gloss)

Having described the facts concerning perfective ZHE, in the next section an analysis is provided of its selectional restrictions.

4.4.1 Aspectual selection by perfective ZHE

In this chapter I assume a two-way ambiguity for aspectual ZHE between general imperfective marker and perfective marker, and argue that the aspectual class of the sentence constrains the perfective usage, meaning that the perfective viewpoint is not available in all contexts. In particular, it is proposed that perfective marking by ZHE is only possible on predicates which are quantized in the sense of de Swart (1998) (cf. Section 4.3.5):

(143) Perfective ZHE selects a quantized situation as its complement

The claim that ZHE can only provide a perfective viewpoint with quantized situations correctly allows perfective marking on Vendlerian achievement and accomplishment predicates, which are events in de Swart's classification. Achievement predicates can receive a perfective reading, such as with *qu* 'go' as in (141) above, or in accomplishment predicates like (144):

(144) *jia zuo-zho* [tʂɔ] *de fangzi ha yigua chai-dao-zho* [tʂɔ]
 3SG live-IPFV NMLZ house TOP all demolish-COMPL-PFV
mei you a
 NEG have PRT
 'Did he demolish all the houses that were lived in?'

Similarly, resultative verb compounds, although demonstrated above to accept a resultative imperfective viewpoint, can also be marked by perfective ZHE, as predicted, because they are aspectually eventive (being achievements or accomplishments).

(145) *no shi yi dian ban ho jiu zou-diao-zho* [tʂɔ] *a*
 1SG ten one o'clock half after just walk-COMPL-PFV PRT
 'After 11.30am, I left.'

But the definition of perfective ZHE in (143) excludes perfective marking on stative predicates, where only an imperfective viewpoint is possible. It is well-known that in many languages, the combination of perfective aspect with stative predicates yields an inchoative reading denoting entry into a state (cf. Comrie 1976: 19), and this is the case in Standard Mandarin too, for the perfective marker *le* (Wu 2004: 281ff.). However, no such inchoative

reading is derived when Xining ZHE combines with stative verbs, but rather a durative imperfective reading as illustrated above (Section 4.3.1). Likewise, ZHE does not mark perfective aspect in habitual sentences, which is predicted because they are aspectually stative according to de Swart (1998: 383); in habitual contexts, ZHE only yields an imperfective viewpoint (e.g. (105) above). Similarly, with modal and generic expressions, both kinds of stative (homogeneous) predicates, ZHE functions as an imperfective marker (e.g. (102)). Thus (143) correctly predicts that with both basic and derived statives, ZHE cannot function as a perfective marker.

However, with activity predicates, which are homogeneous processes in de Swart's (1998) account, we saw that ZHE can function as a perfective marker, apparently contradicting the proposed restriction of perfective marking to quantized predicates. In the example from A.-S. Zhang (2007: 344), repeated below, ZHE can be either imperfective ZHE or perfective ZHE.

(146) *Musa ha laoshi ma-zhe* [tsɛ]

NAME OBL teacher criticize-PFV/IPFV

'Musa was criticized by the teacher.'

'Musa is being criticized by the teacher.' (A.-S. Zhang 2007: 344, my gloss)

This ambiguity between perfective and imperfective readings is not due to ambiguity in the lexical aspect of the predicate (*ma* 'criticize' is an activity predicate, a process verb, on either reading). Rather, on the present account, the ambiguity is explainable in terms of the activity predicate being capable of interpretation either as a process (homogeneous, without an initial or final endpoint) or as a bounded process event situated on the temporal axis.³³ It is known that in a suitable context almost any process verb can be interpreted as an event (Dowty 1972, Bach 1986: 10). That is, in view of Davidson's (1967) intuition that events are spatio-temporal entities, a compositional model of aspect (in the spirit of de Swart 1998) has the advantage of allowing activities to be inherently homogeneous, and yet also to be subsequently quantized once they are mapped onto the temporal dimension (for further discussion cf. Chapter 5, Section 5.5.3). Once the latter occurs, the homogeneous predicate becomes bounded in time, with a final endpoint, and hence quantized and available for selection by perfective ZHE.

³³ Note that this cannot be a resultant state usage because this is not possible for ZHE with activity predicates, as these lack a final endpoint, and so do not contain a resultant state in their event structure (Smith 1997).

Thus it is argued that perfective marking by ZHE is constrained to quantized predicates, but it will be recalled that the data and analysis of imperfective ZHE in the previous sections demonstrate that imperfective ZHE is not correspondingly limited to homogeneous predicates. Beyond marking homogeneous predicates like bare stative verbs, in line with its status as a general imperfective marker, imperfective ZHE can also select homogeneous phases of (quantized) events, such as a resultant state following the final endpoint of an event, or preliminary stages. On the present definitions of imperfective and perfective ZHE, ambiguity is therefore expected to arise between imperfective and perfective viewpoints for eventive predicates, as these are available for selection by both imperfective and perfective ZHE. That this is indeed the case can be illustrated for (122), repeated here:³⁴

- (147) *Xiao Wang yingguo zuo-zho* [tʂɔ] *yi nian*
 NAME UK live-IPFV one year,
(keshi hai mei dao yingguo
 but still NEG arrive United Kingdom
/xianzai yijing guo-le bannian)
 now already pass-PFV half.year
 ‘Xiao Wang is living in the UK for a year. (But he hasn’t reached the UK yet / Now half a year has already passed.)’ (Elicited)

Both of the readings given in the translation here are imperfective readings (preliminary or progressive). Yet we also saw that a similar example occurred in the corpus data with a perfective reading ((135) above):

- (148) *zhe qu-zho* [tʂɔ] *kuai-zhe* [tʂɛ] *yi nian le a mei*
 this go-PFV almost-COMPL one year PERF PRT NEG
 ‘Hasn’t (Xiao Wang) been gone for almost a year?’

Imperfective/perfective ambiguity is often between a resultant state viewpoint and perfective viewpoint, as both of these viewpoints typically occur on past events, and if the resultant state still holds at the speech time, then both viewpoints have the same truth conditions. As Lin (2002: 282) shows, even in Standard Mandarin, sometimes a resultant state holding at the speech time due to a past event can be described using imperfective ZHE or perfective *le* i.e.

³⁴ (146) illustrated perfective/imperfective ambiguity due to a slightly different scenario, a predicate itself being ambiguous between a process and event reading.

Standard Mandarin imperfective ZHE and perfective *le* can be used interchangeably in some contexts with only a small difference in meaning. For example:

(149) *Men kai-zhe* [Standard Mandarin]
 door open-IPFV
 ‘The door is in a state of being opened.’ (Lin 2002: 282)

(150) *Men kai-le* [Standard Mandarin]
 door open-PFV
 ‘The door is opened.’ (Lin 2002: 282)

In Lin’s (2002: 285) analysis of examples like this, the truth conditions of perfective *le* are satisfied by the initial subinterval of the situation (formally defined as in Bennet and Partee 1978) preceding the reference time (by default, speech time), whilst the truth conditions of ZHE are satisfied by the result phase being ongoing at reference time (speech time). As such, both sentences could be used to describe a situation in which the speaker is referring to a door that is open at speech time. However, the definition of perfective *le* also allows for the entire event (instead of only the initial subinterval) to precede speech time, such as in the case of *le*-marked events with past time adverbials (e.g. *zuotian* ‘yesterday’).

With regard to the Xining dialect, the analysis presented above treats ZHE in sentences denoting past events like the following as ambiguous between imperfective (resultant state) ZHE and perfective ZHE, with discourse and real world context determining whether the event is viewed as a discrete whole, for its own sake (as in the perfective aspect), or whether the speaker is presenting the resultant state as ongoing at reference time. As in the Standard Mandarin examples from Lin (2002), in many cases perfective ZHE and imperfective ZHE can describe the same real world situation, and the difference in meaning is small:

(151) *yi ge yatou bao qu-zhe* [tʂɛ]
 a CL girl register go-PFV/IPFV
 ‘A girl went to register/A girl has gone to register.’

(152) *Bohai a qu-zhi* [tʂɿʔ] *zho* [tʂɔ], *aye*
 NAME Q go-PFV/IPFV PRT grandpa
 ‘Grandpa, where did Bohai go?/where has Bohai gone?’

But discourse context can force a perfective reading for ZHE, as we saw for the ZHE-marked predicate below, where ZHE marks an event in a sequence, such that it is clear that what is denoted is not a resultant state which holds at speech time:

- (153) *ni ha ye jiao-zhe* [tʂɛ] *jiamen chi huoguo zhe* [tʂɛ] *a*
 2SG OBJ also call-PFV 3PL eat hotpot IPFV PRT
 ‘(They) also called you. They are eating hotpot.’

In the next section, the origin of perfective ZHE is considered.

4.4.2 *The origin of perfective ZHE in the Xining dialect*

In general, the polyfunctionality found for ZHE in the Xining dialect strikingly resembles that of Southern Chinese varieties, in contrast to the pattern in Northern Mandarin (cf. Qu 2006, 2007). In Chapter 2, it was demonstrated that considerable evidence exists to suggest that the immigrants to the Qinghai-Gansu region during the Ming period (the time period to which the Xining dialect dates) came chiefly from the Lower Yangtze region. Accordingly, it is proposed that the perfective function of ZHE in the Xining dialect is a retention from the Lower Yangtze varieties of Chinese spoken by these immigrants, rather than, as suggested by X.-R. Jia (1993), a feature created through contact with the local languages. This view is in line with that of Ren (2006: 214), who also treats perfective ZHE as a retention from early Mandarin, though she does not consider a northern versus southern distinction or the possibility of a role for contact.

Both the imperfective and perfective function of ZHE predate the large scale Han immigration into the Qinghai region during the early Ming period. In addition to the use of ZHE as a resultant state marker, by the 9th century ZHE had begun to be used as a progressive marker (Mei 1978: 9), and this usage became more common in the Song period (960-1279) (Chen 1997):

- (154) *lei zhe gu, zhishi xiang qian qu.* [11th century Chinese]
 beat IPFV drum just towards front go
 ‘Beating the drum, (they) are just going forward.’ (Zhuzi yulei, 11th century, L.-Y. Wang 2009: 108, after Jiang 2006)

The earliest known perfective usage of ZHE is from the 12th century (Mei 1988: 210). Thereafter, in early Mandarin, ZHE was often used interchangeably with perfective *le* as a perfective aspect marker (Mei 1978: 3).

(155) 忽然 死 著

huran si zhe

suddenly die PART

‘(Someone) died suddenly.’

(*Zhuzi Yulei*, Chen 1997: 218)

However, according to Mei (1988), such perfective uses of ZHE are a feature of southern rather than northern texts, as in the latter the perfective marker has been *le* rather than ZHE since the late Tang dynasty.

With regard to modern Mandarin dialects, that ZHE is a feature of Southern Chinese is also suggested by Qu’s (2006) cross-dialectal study. In Southern Mandarin dialects – Jiang-Huai Mandarin and Southwestern Mandarin – ZHE functions as a locative preposition (*fangwei jieci*), durative (*chixu mao*) and perfective marker (*wancheng mao*). However, in Beijing Mandarin (Northern Mandarin), Northeast Mandarin, and in Shandong province (also Northern Mandarin), only the durative function is found. Meanwhile, rather uniquely among Northwestern dialects, which elsewhere lack the perfective function, the Xining and Tongxin (Ningxia province) dialect pattern with Jiang-Huai and Southwest Mandarin in possessing both the perfective and prepositional function (cf. Qu 2007: 113). The fact that the Tongxin dialect possesses perfective ZHE will be seen below to be explainable in the same way as for the Xining dialect.

<i>Mandarin Dialects</i>	<i>Preposition</i>	<i>Durative</i>	<i>Perfective</i>
Beijing Mandarin (Beijing Mandarin)		+	
Haerbing (Northeast Mandarin)		+	
Muping, Shandong (Jiaoliao Mandarin)		+	
Jinan, Shandong (Jilu Mandarin)		+	
Lanzhou, Gansu (Lanyin Mandarin)	+	+	
Xian, Shaanxi (Central Plains Mandarin)	+	+	
Xining, Qinghai (Central Plains Mandarin)	+	+	+
Tongxin, Ningxia (Lanyin Mandarin)	+	+	+
Taixian, Jiangsu (Jiang-Huai Mandarin)	+	+	+
Changde, Hunan (Southwest Mandarin)	+	+	+

Table 4-2 Uses of ZHE across Mandarin dialects (reproduced from Qu 2006: 41)

With regard to the prepositional function, locative/directional uses of ZHE are first attested in the Six dynasties period (220-589) in Southern texts from south of the lower reaches of the Yangtze river (e.g. *shishuo xinyu*) (Mei 1988: 197). Table 4-2 shows that to this day this has not become established in Northern Mandarin dialects (cf. also Qu 2007). It is therefore proposed that its existence in the Northwestern Xining dialect (illustrated below) can be attributed to the fact that it was a feature of the Chinese language of the Ming immigrants to the area, in line with the fact that the majority of these seem to have come from the lower Yangtze region (cf. Chapter 2).

(156) *si zho* [tʂə] *litou le*

die ZHE inside ASP

'Die inside.'

(locative preposition ZHE, equivalent to Standard Mandarin *zai* 'at, in')

- (157) *jiu qu zho* [tʂɔ] *zha le bei*
 just marry ZHE here ASP PRT
 '(He) married a wife and brought her here.'
 (directional preposition ZHE, equivalent to Standard Mandarin *dao* 'to')

Meanwhile, with regard to how the perfective use of ZHE developed in Xining Mandarin, like the prepositional locative use it is likely to have been a feature of the Chinese language that was brought to the area by the Ming dynasty Han settlers, rather than a later regional innovation. Mei's (1988: 201, 210) diachronic and cross-dialectal study shows that the perfective usage of ZHE is first documented in the 12th century and initially emerged in the Jiangsu and Zhejiang area, before spreading to other areas. In addition, with regard to the Wu dialect, in the Ming period ZHE was used primarily as a perfective marker (Long and Sun 2013: 405). Even today, Modern Wu dialects use *tsi* (cognate of ZHE) for both imperfective and perfective functions, and the primary function of ZHE in Wu is still to mark perfective aspect (Sun 1998: 157, Mei 1988), as in (158), even though it also marks imperfective aspect as in (159):

- (158) 依 看仔 小人 就 回 来 [Modern Wu: Shanghai]
Yi k'ø-tsi çiyin cyu xyei læ.
 3rd see-PFV children then return come
 'Having seen the children, he returned home.' (Sun 1998: 161)
- (159) *qi-zi ma xun ma* [Modern Wu: Suzhou]
 ride-IPFV horse seek horse
 'Look for a horse while riding a horse.'³⁵ (Li 1998: 201)

It is possible, therefore, that the perfective function of ZHE in the Xining dialect is due partly to Wu influence, as well as the Mandarin variety of speakers who immigrated from Nanjing (*Nanzhili*). As discussed in Chapter 2, the majority of the Ming dynasty Han immigrants seem to have come from the lower Yangtze region (according to Yan 2012, as large a proportion as 80%), and we also saw that there is evidence from sources written in the early Qing dynasty that the Wu language and culture was also brought to the region during the earlier Ming period. In this light, the polyfunctionality of ZHE in the Xining dialect plausibly constitutes a

³⁵ Li (1998: 201) analyses ZHE here as marking *wancheng chixu ti*: the continuation of the resultant state of being seated associated with the verb of posture *qi* 'ride/sit astride'.

retention from the Lower Yangtze varieties, whether Jiang-Huai Mandarin dialect or Wu (or both), originally brought to Qinghai through this immigration.

Qu (2006: 42, 2007: 115) notes briefly that the immigrants to Xining were very diverse in origin (mentioning locations spread across the North and South of China). However, Qu refers to post-1949 immigration, which is not likely to explain the source of the polysemy of ZHE.³⁶ As discussed in Chapter 2, immigration into Qinghai in modern times has been of a very different nature from the Ming period immigration, being characterized by the influence of Standard Mandarin (*Putonghua*), which is the prestige language and a lingua franca for the immigrants (who do not share a single regional dialect). Standard Mandarin lacks prepositional/perfective ZHE, and so clearly cannot be the origin of these features in the Xining dialect. In addition, as Dede (1999a: 17, note 17) observes, modern immigration, although involving immigrants from all over the country, seems to have involved a majority from northern regions, which lack perfective ZHE. With regard to the threeway polyfunctionality for ZHE in the Ningxia dialect (a Northwestern Mandarin dialect), Qu (2006: 42) suggests that – like argued here for the Xining dialect – this dialect was also formed in the early Ming period through immigration from the Jiang-Huai region (i.e. roughly, Nanjing/*Nanzhili* province; cf. Chapter 2), and so the perfective function of ZHE in Ningxia (Tongxin dialect) is explainable in the same way as for the Xining dialect.

Having considered the role of immigration, if the perfective function of ZHE was already a feature of the Chinese language of the Han settlers, then one may wonder whether contact with the indigenous non-Sinitic languages has played any role with regard to perfective ZHE in the Xining dialect. As discussed in Chapter 2, the contact scenario seems to have involved imperfect language learning by a sizeable population of speakers of local non-Sinitic languages. X.-R. Jia (1993) thus assumes that perfective ZHE is a feature induced by contact with Qinghai Mongolian, which shows a similar imperfective/perfective polysemy for the marker *dʒ*. Indeed, in Huzhu Monguor (Mongghul), which as mentioned above is the Mongolic language spoken closest to Xining proper, such polysemy is also found. The Mongghul suffix *-jia* primarily marks perfective aspect, but it can also mark ongoing states, whilst ‘the suffix *-jii* usually marks stative aspect, but sometimes it can also mark perfective aspect’ (Åkerman 2012: 21). Perfective and state marking are illustrated for *-jia* in (160) and (161) respectively.

³⁶ The various places of origin are mentioned by Qu on the basis of C.-C. Zhang (1994 [1998: 4-5]), who is discussing population increase in Xining in modern times.

- (160) *Tie qigudur re-jia* [Mongghul]
 3:SG yesterday come-OBJ:PFV
 He came yesterday. (Åkerman 2012: 19)
- (161) *Tie sou-jia* [Mongghul]
 3:SG sit-OBJ:STATE
 He is sitting. (Åkerman 2012: 21)

As noted by X.-R. Jia (1993), the phonological similarity between ZHE and Qinghai Mongolian *dʒ* with regard to the initial affricate could have led to Mongolic speakers identifying ZHE with the Mongolic form. However, if perfective marking by ZHE was already a feature inherent in the Chinese language brought to the region, as seems to have been the case, we cannot conclude that perfective ZHE is a contact-induced feature of the Xining dialect. Rather, it is suggested that the imperfective/perfective polysemy of ZHE in the target Chinese language of the Han settlers constituted a fortuitous point of equivalence with markers in the aspectual system of speakers of the local Mongolic languages. If the above discussion is correct, perfective ZHE is actually a retention rather than a contact-induced feature. However, that does not mean that contact played no role whatsoever. It is well known that aspect is a notoriously difficult domain for second language learners, and so if it were not for this overlap with the aspectual system of the local languages, this feature of ZHE might have been lost along with other properties of ZHE that have disappeared or been altered in the Xining dialect. Above we saw that, apparently due to Mongolic influence, various restrictions on imperfective marking by ZHE have been stripped away from Xining ZHE, leading to it becoming a general imperfective. Thus the role of contact can be discerned in the fact that it is probably not a coincidence that both the preservation of the perfective/imperfective polysemy and the change from imperfective → general imperfective have resulted in convergence on the aspectual system of the substrate. Before concluding this chapter, I will briefly consider the two phonological forms of ZHE in the Xining dialect.

4.5 On the form of ZHE

Unlike in Standard Mandarin, where ZHE has a single phonological form [tʂə], Xining Mandarin ZHE has often been noted to have two functionally distinct variants: *zho* [tʂɔ] and *zhe* [tʂɛ] (e.g. Wu 1982, Du 1993). However, in the majority of locations beyond the capital such a clear functional distinction is not evident (Ren 2006: 206, 214). Also, as was seen in the examples above, in addition to *zho* [tʂɔ] and *zhe* [tʂɛ], speakers from Haiyan county also

use *zhi* [tʂʰɿ²], which is not reported for Xining city (cf. the Gangou dialect in Minhe county where [tʂʰɿ] is used; Zhao 2015). The differences between *tʂʰɿ* and *tʂʰɿɛ*, for the speakers that distinguish these variants, have been described in detail by Du (1993) and are largely syntactic and polarity-related. That is, we have seen above that in terms of aspect marking, both forms mark both imperfective (e.g. (98) and (99)) and perfective aspect (e.g. (135) and (137)) (but cf. Ren 2006 on some aspectual differences at a more fine-grained level). Here I will briefly outline the main points concerning the functional distinction between the forms of ZHE.

Firstly, Du (1993: 50) notes that *zhe* [tʂʰɿɛ] is restricted to occurring clause-finally, whilst *zho* [tʂʰɿ] occurs clause-medially or clause-finally i.e. V-*zhe* [tʂʰɿɛ]-O is not attested (cf. Ren 2006: 211). This was generally true in my data but exceptions exist (e.g. (100) above, repeated here, from a speaker from Haiyan county):

- (162) *bu shi guojia gei-zhe [tʂʰɿɛ] liu wan wu*
 NEG be country give-IPFV six ten.thousand five
fo a mei
 PRT PRT NEG
 'Doesn't the country give 65,000?'

Secondly, these forms show differences in their interaction with negation, with *zho* having been observed to occur with negation whereas *zhe* is usually disallowed with negation. (163) - (164) illustrate this latter observation (with data from a speaker from Menyuan county):

- (163) *jia xianzai chang ge zhe / *zho*
 3SG now sing song IPFV/IPFV
 'He is now singing.' (Elicited)

- (164) *jia xianzai mei chang ge zho / *zhe*
 3SG now NEG sing song IPFV/IPFV
 'He is not now singing.' (Elicited)

Likewise, Haiyan speakers also used *zho* rather than *zhe* with negation.

Meanwhile, as for Haiyan *zhi*, this form patterns with Xining speakers' *zho* [tʂɔ] rather than *zhe* [tʂɛ] in being permissible with negation, as shown in (165), and in being found both clause-medially (as in (166)) and clause-finally ((165)):

(165) *na ge jiu mei dui-zhi* [tʂɿ²] *zho* [tʂɔ:]
 that CL just NEG right-IPFV PRT
 'That is not right.'

(166) *de-ha-zhi* [tʂɿ²] *ji nian li fo*
 obtain-COMPL-IPFV several year PRT PRT
 'How many years has (he) had this (sickness)?'

Finally, Du (1993: 51) reports that in interrogative sentences, only *zhe* can be used as an aspect marker clause-finally, and not *zho*. However, this generalization was less robust in my data, with plenty of examples occurring, such as the following, where *zho* was used in a question (and likewise, *zhi* is also not restricted by the interrogative/declarative mood distinction).

(167) *qiang-zho* [tʂɔ] *mei*
 pungent-IPFV NEG
 'Is that (smell) pungent?'

(168) *yeer, zhe liang tian ni zuo sa zhi* [tʂɿ²] *zho* [tʂɔ]
 grandfather this two day 2SG do what IPFV PRT
 'Grandfather, what have you been doing these days?'

In summary, the phonetic variation in the form of ZHE, interesting though it is, does not seem to be significant with regard to the issue addressed above concerning the constraints on the imperfective/perfective functions of ZHE.

4.6 Chapter summary

In this chapter aspect marking by ZHE in the Xining dialect has been discussed and a unified analysis proposed of its various imperfective functions. The generality of imperfective marking by ZHE was argued to be explained by the proposal that it selects a homogeneous

phase of eventuality structure, which was seen to correctly predict that the imperfective viewpoint available in a given sentence (preliminary, internal and/or resultant) is determined by the eventuality structure of the predicate ZHE selects. With regard to perfective marking by ZHE, perfective ZHE was argued to select quantized eventualities, which accounted for the fact that ZHE functions only as an imperfective marker on stative predicates (whether basic or derived). The results have the theoretical implications of providing support for the threeway ontology of events, states and processes and for the mereological supercategory distinctions (homogeneous vs. quantized) which define them. These were found to determine the behaviour of grammatical aspect marking by ZHE, whereas the data highlights the insufficiency of traditional verb-based classifications (e.g. Vendler 1967), which fail to predict the usage restrictions imposed on ZHE by aspectual operators beyond the VP (such as temporal adverbials). In addition, the generality of imperfective ZHE in the Xining dialect was explained from a diachronic perspective as a consequence of contact with Monguor, whilst the presence of a perfective function for ZHE was argued to be a retention from the Southern Chinese variety spoken by the Ming dynasty immigrants to Qinghai.

Chapter 5 Tense and Mood Marking by the particle *lia*³⁷

5.1 Introduction

This chapter presents a corpus-based analysis of the particle *lia*, which functions as a future tense marker and as a marker of affirmative mood. It is argued that this distribution of *lia* can be explained in terms of the selectional restrictions that *lia* places upon the aspectual class of its complement. In particular, *lia* functions as a future tense marker with aspectually quantized expressions, but as a marker of affirmative mood with aspectually homogeneous expressions. *Lia* thus provides an example, from Chinese, of de Swart's (1998) notion of aspectually sensitive tenses. An explanation for this scenario is proposed involving calquing of the function of Mongolic non-past marker -NA.

5.2 Previous studies on *lia*

Both future tense and modal functions of the particle *lia* are reported in existing studies, but little attempt has been made to explain the puzzle of why *lia* sometimes obligatorily derives a future reading and yet elsewhere imposes no future time restriction. With regard to the future usage, Cheng (1980: 149) was the first to mention that *lia* (in his transcription: *lie*) *biaoshi dongzuo jijiang fasheng* ('expresses that an event is about to occur'). The future marking usage has since been mentioned by others such as S.-C. Wang (2009b: 129), who illustrates as follows, where the event of the flower blooming necessarily follows the utterance time (cf. Du 1995, Ren 2004 and Ma 2009):

(169) *huaer kai lia*
flower open *lia*

'The flower will bloom.'

(S.-C. Wang 2009b: 129)

Although noting a future marking function, these studies do not attempt to rule out potential alternative analyses, for example as prospective aspect or irrealis mood, and so a further objective of the present chapter is to substantiate the future tense analysis by showing that these alternatives are not viable.

³⁷ The analysis of *lia* here differs from that in a paper based on this chapter to appear in the *International Journal of Chinese Linguistics*. There *lia* is accounted for in terms of the stative/dynamic distinction by uniformly adopting the assumptions in de Swart's (1998) framework. However, here, on slightly different assumptions, the analysis is presented using the quantized/homogeneous distinction (cf. Section 5.5.5).

In terms of mood, the semantic contribution of *lia* has been described variously as *kending* 'affirmative' (e.g. A.-S. Zhang 2007: 343-4, Ren 2004), as providing an 'affirming tone' (Zhu et al. 1997: 437, note 15), *chenshu yuqi* 'declarative mood', *gantān yuqi* 'exclamative mood' (Zhang and Wang 2012: 187), or as declarative mood with strong subjective speaker attitude (Du 1995: 58). (170) illustrates examples of this kind:

(170) *wo huimin jiu shi lia*
 1SG Hui.people really be *lia*
 'I am a Hui.' (A.-S. Zhang 2007: 351, ex. (50))

With regard to how the modal and future function relate to each other, according to Du (1995: 58), *lia* simultaneously fulfils the dual function of marking mood and future tense in both declarative and interrogative contexts, although in the latter case the modal contribution is interrogative mood rather than subjective speaker attitude. Du (1995) claims that declarative clauses marked by *lia* can only have future time reference; the only exception mentioned is aspectually frequentive predicates, which denote the repeated occurrence of events (without the attainment of an endpoint).

But Du's (1995) characterization ignores many other types of declarative clause identified in this chapter where *lia* is non-future denoting, as well as simple statives like the copula construction in (170) above. Du (1995) claims that a two-way partition exists: *lia* in some predicates is a mood marker (non-future denoting), and in other predicates denotes mood *and* future tense. However, below data will be presented to show that *lia* can also denote only future tense. More generally, it remains unexplained why in some predicates (e.g. (169)) *lia* functions to obligatorily denote future time reference but elsewhere the future function is absent and only mood is denoted. In this chapter I show that with regard to its temporality, *lia* is an aspectually sensitive tense in the sense of de Swart (1998), and that the future tense function of *lia* is present precisely on those predicates which are aspectually quantized, and not on those that are aspectually homogeneous.

Previous treatments of sentential *lia* have considered only a limited subset of the possible contexts in which this particle can be used, and so this chapter seeks to integrate a much larger array of different uses of *lia* found in corpus data into a single unified analysis. Before proceeding, a clarification is necessary concerning the phonological form of *lia*. It is usually realized in the corpus data as [lia], but in a minority of cases as *li* [l], suggesting that *lia* may have been derived by a fusion of *li* and the sentence-final particle *a/ya* (cf. Z.-Q. Wang 1983).

For convenience, in this chapter *lia* is used to refer to both phonological forms, since this was by far the most frequent realization in the corpus data.³⁸

The remainder of this chapter is organized as follows. Next, the theoretical background will be outlined (Section 5.3). Then predictions are formulated to capture the distribution of *lia* (Section 5.4). Then the the future (Section 5.5) and modal (Section 5.6) uses of *lia* are discussed and it is argued that their distribution is accounted for by the predicate's aspectual class. In Section 5.7 relative future uses are considered, and analyses of *lia* as irrealis mood and prospective aspect are refuted. Finally, an account of the origin of *lia* is provided in terms of Mongolic contact influence (Section 5.8). Section 5.9 concludes.

5.3 Theoretical background

Tense, the 'grammaticalized expression of location in time' (Comrie 1985: 9), 'relates the time of the situation referred to to some other time' (Comrie 1976: 1-3). The discussion in this chapter assumes Klein's (1994: 119) theory of tense, which builds on Reichenbach (1947) and posits the following time spans/points (TU is taken to be a timepoint):

Utterance time (TU): The time the sentence is uttered.

Topic time (TT): The time to which the speaker's claim is confined.

Situation time (TSit): The time of the event denoted by the predicate of the sentence.

In Klein's framework, temporal and aspectual distinctions are expressed by ordering relations of precedence, inclusion and subsequence for TU, TT and TSit. Tense is the relation between the topic time (TT) and utterance time (TU), whilst aspect is the relation between TT and situation time (TSit). Topic time (TT) can be specified by the discourse and maintained anaphorically (e.g. in answer to a question about a particular time frame), or it can be indicated by temporal adverbials in the sentence itself.

Future tense indicates that TT is ordered after TU ($TU < TT$): the speaker's claim is restricted to the period TT which follows the speech time. The typical simple future tense, as defined by Klein (1994: 114), is represented below, in which the TU is in the pre-time (i.e. prior to TT),

³⁸ It should also be recalled that an instrumental/comitative postposition with the same phonological form, *lia*, exists in the Xining dialect (cf. Chapter 3). As discussed there, this device has been suggested to be grammaticalized from the numeral *lia* 'two' (Dwyer 1992), or else to be a borrowing of a Monguor postposition (Du 1995). It is a different morpheme from the sentential particle and is not relevant to the discussion in this chapter, where '*lia*' refers only to the sentential particle.

can be grammatical aspect markers or adverbials; this was illustrated in the previous chapter with respect to ZHE marking with habitual adverbials, which map to a homogeneous eventuality (requiring ZHE to be an imperfective rather than perfective marker).

5.4 Aspectual selection by *lia*

The present chapter claims that future *lia* selects quantized expressions as its complement, as stated in (171), and that modal *lia* selects homogeneous predicates as its complement, as stated in (172).

(171) Future tense marker *lia* selects quantized expressions.

(172) Affirmative mood marker *lia* selects homogeneous expressions.

Although the types of sentences with which *lia* occurs will be seen to be quite diverse, it will be argued that the aspectual restrictions stated in (171) and (172) account for the distribution of the future and modal functions of *lia* in the corpus data and determine when it is a future marker and when it is only a mood marker.

To briefly illustrate how these predictions work, in de Swart's (1998) model the aspectual class of the predicate is different at different levels of the structure. What matters with regard to *lia*, a T/Mood head, is the aspectual class of its immediate complement (e.g. AspP or ν P) and not the aspectual class of phrases lower down in the structure (e.g. VP). In (173) through the addition of a habitual frequency adverbial the eventive predicate is shifted into a homogeneous predicate that possesses the subinterval property (cf. Ibid.):

(173) *jia meizhou Xining qu lia*
3SG every week Xining go *lia*
'He goes to Xining every week.'
≠ 'He will go to Xining every week.' (Elicited)

This aspectual shift results in the complement of *lia* being homogeneous rather than eventive, and so (171)-(172) correctly predict the fact that *lia* does not derive future time reference in habitual predicates.

5.5 Future marking with *lia*

Crucially for the analysis of *lia* as an aspectually sensitive future tense, in quantized sentences, *lia* is incompatible with past time adverbs, which order the TT prior to TU (TT < TU) (the only exceptions, when *lia* does not denote absolute future tense, are if the context allows *lia* to

denote relative future tense (discussed in Section 5.7.1) or if the predicate has been aspectually shifted so that it is no longer quantized; cf. Section 5.6.4 and 5.6.5). By default, however, in quantized sentences *lia* functions as an absolute future marker which orders TT *after* the time of utterance (TU < TT). The interaction with temporal adverbials is a basic test for the future semantics of *lia*, which was not applied in the previous studies.

Examples of activity, accomplishment, and achievement predicate types are presented in this section (statives, with which *lia* does not yield a future reading, are discussed in Section 5.6). It can also be seen, as noted by Du (1995: 58), that *lia* is in complementary distribution with the perfective marker *le*. Consider the activity verb *xiayu* 'rain'. With the past time adverb *zuotian* 'yesterday', *lia* cannot be used, but with a future time adverb it can be used:

(174) *zuotian xiayu le /*lia*
 yesterday rain PFV //*lia*
 'Yesterday it rained.' (Elicited)

(175) *mingtian xiayu lia /*le*
 tomorrow rain *lia*/PFV
 'Tomorrow it will rain.' (Elicited)

Similarly, *lia* can occur in the accomplishment predicate *xie yi bai zi* 'write a hundred characters' with the future time adverb *mingtian* 'tomorrow' but not the past time adverb *zuotian* 'yesterday':

(176) *zuotian jia yi bai zi xie le /*lia*
 yesterday 3SG one hundred character write PFV//*lia*
 'Yesterday he wrote a hundred characters.' (Elicited)

(177) *mingtian jia yi bai zi xie lia /*le*
 tomorrow 3SG one hundred characters write *lia*/PFV
 'Tomorrow he will write a hundred characters.' (Elicited)

The same holds with the achievement verbs *si* 'die' and *lai* 'come':

(178) *zuotian Zhangsan si le /*lia*
 yesterday NAME die PFV//*lia*
 'Yesterday Zhangsan died.' (Elicited)

(179) *mingtian Zhangsan si lia/*le*
 tomorrow NAME die *lia*/PFV
 ‘Tomorrow Zhangsan will die.’ (Elicited)

(180) *jia zuotian lai le /*lia*
 3SG yesterday come PFV/*lia*
 ‘Yesterday he came.’ (Elicited)

(181) *jia mingtian lai lia/*le*
 3SG tomorrow come *lia*/PFV
 ‘Tomorrow he will come.’ (Elicited)

The fact that past-time adverbs cannot cancel the future tense reading supplied by *lia* indicates that futurity is an inherent component of the meaning of *lia*, rather than only a conversational implicature. It is important to note as well that if the future-denoting adverb is removed from the above sentences, a future reading is still derived, such that *lia* alone is sufficient to specify future time reference.

Similarly, with regard to complex clauses, when *lia* occurs in a ‘when’ clause, only an event future with regard to the TU may be denoted. This is shown by the unacceptability of adding a past time adverb to the ‘when’ clause in (182).

(182) (**shang ge libai*) *Xiao Wang nomen jia li lai lia*
 last CL week NAME 1PL home LOC come *lia*
de kongli, no mai cai qu lia
 NMLZ time, 1SG buy vegetable go *lia* (Elicited)
 ‘When Xiao Wang comes to our house (in the future), I will go and buy vegetables.’

The unacceptability of the past adverb shows that *lia* cannot encode relative future tense here (i.e. (182) cannot mean ‘Last week when Xiao Wang *was going to come* to our house...’).

Lia is also used in predictive conditional sentences. In predictive statements (‘if X happens (in future), then Y will happen’), *lia* can be used in both the condition and the consequence clause (as in (183)), or just in the main clause (as in (184)).

(183) *yaoshi ni name leng de difang qu lia, ni yiding*
 if 2SG that cold NMLZ place go *lia* 2SG certainly
ganmao lia
 catch-cold *lia*

‘If you go to such a cold place, you will certainly get a cold.’ (Elicited)

(184) *kuai dian chi a bu shi ha mei you diao lia*
 fast little eat PRT NEG be TOP NEG have COMPL *lia*

‘Eat a bit faster! Otherwise there will be nothing (left)!’

In each scenario, TT for both clauses is understood to be after TU. That is, if *lia* only occurs on the main clause (and temporal adverbs are absent in the dependent clause), then the temporal reference of the dependent clause is derived from the main clause, and *lia* marking on the main clause means that TT denoted by the dependent clause is also obligatorily post-TU.

With regard to the futurity requirement, it should be noted that *pace* Cheng (1980: 149) there is not an imminency restriction on *lia*. This can be seen in that *lia* can mark events in the more distant future ('the year after next'), even where these are portrayed as non-imminent by the use of *cai* 'not until':³⁹

(185) *jia hounian cai qu lia*
 he after.year not.until go *lia*

'Not until the year after next will he go.' (Elicited)

From the above it can be seen that *lia* represents an important point of difference between Xining Mandarin and Standard Mandarin with respect to temporal marking. As many have pointed out, Standard Mandarin is a language without grammatical tense markers (e.g. Li and Thompson 1981:13; Norman 1988:163; Klein 1994: 124), which relies on lexical means like adverbials or on the context to determine temporal reference. This is illustrated in (186), where a grammatical future marker is not required:

(186) *Wo mingtian qu taibei* [Standard Mandarin]
 I tomorrow go Taipei

‘I will go to Taipei tomorrow.’ (Lin 2002b: 296)

³⁹ Thanks to Boping Yuan at the ISOCTAL conference (Newcastle University, December 2015) for suggesting this diagnostic as a test for imminency.

But in Xining mandarin, as in (187) below, my informants felt that *lia* is required even though temporal reference is clear due to the presence of an adverbial, and the sentence is felt to be incomplete without it (on the non-occurrence of *lia* with *bu*, cf. Section 5.5.5):

(187) *jia mingtian lai *(lia), jintian bu lai*
 3SG tomorrow come *lia* today NEG come
 ‘He will come tomorrow. Today he won’t come.’ (Elicited)

(188) *mingtian no Xining qu *(lia)*
 tomorrow 1SG Xining go *lia*
 ‘Tomorrow I will go to Xining.’ (Elicited)

Similarly, *lia* was felt to be obligatory where future time reference is clear from the preceding discourse, such as if (188) does not contain the temporal adverb but instead is uttered in answer to (189):

(189) *ni mingtian a-zha qu lia*
 2SG tomorrow Q-place go *lia*
 ‘Where are you going tomorrow?’ (Elicited)

This provides an indication of the grammaticalized status of *lia* as a future marker, but it is not to imply, however, that all reference to future events must use *lia*. Imperative contexts are one case where *lia* was not required in the corpus data:

(190) *na ni xing ge qu sa*
 then 2SG walk CL go PRT
 ‘Then you take it and go.’

Also, sometimes no temporal marking was present at all, as in Standard Mandarin. This is seen in the first clause of (191):

(191) *na ge jiao-gei dian fo-zho, no ha mei jiao ai*
 that CL pay-CAUS a.bit say-IPFV, 1SG OBJ NEG pay PRT
 ‘That guy said he would pay a bit, but he didn't pay for me.’

Finally, the dialect can use the imperfective marker ZHE as a futurate, similarly to the use of the English progressive to refer to future events:

- (192) *Xiao Wang Yingguo zuo-zho yi nian, kesi hai mei dao yingguo*
 NAME UK live-IPFV one year, but still NEG arrive UK
 ‘Xiao Wang is living in the UK for a year. But he hasn’t reached the UK yet.’
 (Elicited)

5.5.1 Aspectual selection by future *lia*

The hypotheses in (171) and (172) were tested against the corpus data (approx. 20 hours in length). Future marking with *lia* was considered in relation to predicate aspect, utilizing Vendler’s (1967) classification of predicate aspect. Vendler (1967) classified verbs into states, activities, accomplishments and achievements, according to their telicity/atelicity, whether they denote a point-in-time or a duration (i.e. are punctual/durative) and whether they are dynamic or stative (i.e. whether or not they involve change). The four verb types can be summarized as follows:

Class	[±Dynamic]	[±Telic]	[±Punctual]	Examples
State	–	–	–	Know, love
Activity	+	–	–	Run, walk, swim
Accomplishment	+	+	–	Run a mile, paint a picture
Achievement	+	+	+	Recognize, find, spot, reach

Table 5-1 Vendler’s four verb classes (reproduced from Chen and Shirai 2010: 2)

To determine the aspectual class of the verbal predicates with which *lia* occurred, the predicates were examined in context in order to understand the meaning of the utterance, and the operational tests from Chen and Shirai (2010) were applied (see Appendix A). As shown in Table 5-2, future denoting tokens of *lia* occurred primarily on achievement predicates, and to a lesser extent also on activity predicates. Stative predicates marked by *lia* rarely had future time reference (10 tokens), whilst *lia* occurred once on an accomplishment predicate (see below). 119/317 tokens of *lia* in the corpus data occurred in future-denoting predicates.

<i>Lexical aspect</i>	<i>No. of Tokens</i>
<i>ACH</i>	76
<i>ACC</i>	1
<i>ACT</i>	32
<i>STA</i>	10
<i>Total</i>	119

Table 5-2 *Lia*-marked predicates with future time reference.

The examples with which *lia* marked future tense will now be examined to demonstrate that they are aspectually quantized expressions, satisfying (171). After that, the non-future uses will be catalogued and discussed to show that they belong to the mereological supercategory of homogeneous eventualities, in line with (172).

5.5.2 *Achievement and accomplishment predicates*

Achievements (76/119 tokens) and accomplishments are uncontroversial cases of quantized predicates (e.g. Bary 2009: 41). The quantization property is clearest with regard to achievement predicates, because they are punctual and so cannot possess the subinterval property, and they can straightforwardly be seen to have count rather than cumulative reference. This can be illustrated by the predicate *jin jianyu* 'enter prison': subparts of *jin jianyu* 'enter prison' are not equal to the whole and events of entering prison are countable.

- (193) *jia jiu xiang no yihouyou jin jianyu lia*
 3SG just think 1SG suddenly enter prison *lia*
 'He's just thinking, "I'm going to suddenly go to prison."'

Achievement verbs were the verb class with which *lia* was most frequently a future marker, and these uses were comprised mainly of motion verbs (e.g. *qu* 'go', *huilai* 'come back', *lai* 'come', *guo* 'pass', *xiache* 'get out of the car', *shanglai* 'come up') and resultative verb compounds more generally (e.g. *hao-dao* 'become good', *mo-shang* 'grasp', *ban-dao* 'fall over').

- (194) *zai jiu zhe ge wawa-men ga le ha ban-dao lia*
 also just this CL child-PL little PRT PRT fall-arrive *lia*
 'Also, children are small, (they) will fall over.'

- (195) *yi dian ban na, no jin sheng yiyuan li qu lia*
 one o'clock half PRT, 1SG today province hospital LOC go *lia*
 'At 1.30pm I am going to the hospital today.'

(196) *huilai de lushang, no fo no zhe xiache lia*
 return NMLZ road-on, 1SG say 1SG here down-car *lia*
 'The three of us in one car, on the way home, I said, "I will get off here".'

(197) *ni ha feng-ha-gei lia*
 3SG OBL crazy-COMPL-CAUS *lia*
 'You will be driven crazy.'

Accomplishment predicates are also straightforwardly quantized. Consider the accomplishment predicates *zuo-shang* 'do'-COMPL and *chi-bao* 'eat until full'.

(198) *no ye zuo-shang ge lia*
 1SG also do-COMPL CL *lia*
 'I will also do (and finish) one.'

(199) *Zhangsan chi-bao lia*
 NAME eat-full *lia*
 'Zhangsan will eat until full.' (Elicited)

However, in the corpus data only 1 token of future-denoting *lia* on an accomplishment occurred (*zuo-shang* do-COMPL); accomplishments in Mandarin are often formed from resultative verb compounds (though not exclusively, as quantized objects can also derive accomplishment VPs e.g. *chi yi wan mifan* 'eat a bowl of rice'). But the resultative verb compounds with which *lia* occurred profiled the result (as in *ban-dao* 'fall over') rather than the process (except in the case of *zuo-shang*), and so fall under the achievement type according to the diagnostic tests applied (Appendix A).

5.5.3 Activity predicates

Lia occurred on a range of activity verbs such as *zuo* 'do', *zuo* 'sit', *han* 'shout', *chi* 'eat', *zou* 'walk/go', *ku* 'cry' and *gan* 'do'.

(200) *ranhou chi lia*
 then eat *lia*
 'Then (we) will eat.'

(201) *bu yong da-saochu bei, jia ling-shang e zou lia*
 NEG need hit-sweep PRT 3SG lead-COMPL PRT walk *lia*
 'There's no need to sweep. He will take (it) and go.'

(202) *mama ku lia*
mother cry *lia*
'Mother will cry.'

(203) *na ge huoer fei gan lia*
that CL work who do *lia*
'Who will do that work?'

For activity predicates (32/119 tokens), the quantization property is less obvious. Vendlerian activity predicates are 'processes' in de Swart's (1998) framework, and are traditionally classified as homogeneous, possessing the subinterval property (parts of *walking* = *walking*). If this is the case, then (171) would predict that bare activity predicates should not occur with future *lia*. But we have seen that bare activity predicates pattern with achievements and accomplishments in being standardly future-denoting when marked by *lia* (this is the case unless the context forces a progressive reading, thus yielding an aspectually homogeneous predicate; see Section 5.6.4). It is suggested that what is needed to make sense of this is a refinement in our treatment of activities in view of their status as eventive predicates.

Following Rothstein (1999), activities can be taken to denote future with *lia* because activity predicates denote *events*, and the denotation of events - even events composed of homogeneous processes - is 'in the count domain', and hence quantized. As discussed above, in de Swart's (1998) compositional, layered model of tense and aspect, no contradiction arises from a predicate being homogeneous and quantized at different levels of phrase structure due to the aspectual class of the VP being modified by higher operators. So in the case of activities, we can retain the insight that they are homogeneous processes, and yet also allow them to be quantized at the level of phrase structure where they become events: this is standardly assumed to occur above VP (see below).

With regard to the count status of events, Davidson's (1967) introduction of an event argument for the logical form of action sentences captured the fact that an event has ontological status as a 'thing' in itself. Instead of thinking of *Shem kicked Shuan* as a two place predicate, Davidson (1967: 47-8) suggested that it is a three place predicate: $((\exists x)$ (Kicked (Shem, Shaun, x)) ('there is an event x such that x is a kicking of Shaun by Shem'). In the spirit of this insight, Rothstein (1999: 386) argues that all events are temporally defined countable entities, and in particular 'verbally expressed *processes* [i.e. Vendler's activities] also denote countable events' (emphasis added). In other words, it is necessary to account for the fact that events can be homogeneous in nature (activity predicates) and yet also be atomic

in the sense that they behave as countable entities that can be assigned a temporal location by tense markers (cf. Ibid. 389). As such, accounts of event structure rely on some kind of temporal trace function that maps events to their 'run time', the delimited time span in which they occur (e.g. Krifka 1989, 1998). After this mapping to 'run time' has occurred, a discrete event is denoted, which is quantized and so can be selected by devices that require quantized expressions as their input.

Syntactic accounts have represented the nature of events in various ways, which have in common the fact that they represent the property of being an event (as opposed to a state) at a level above VP. Macdonald (2006) utilizes an Inner AspP immediately above VP, which is not possessed by statives. Husband's (2010) compositional approach to statives builds on Kratzer (1996) and assumes a stative vs. eventive VoiceP. Similarly, in a minimalist framework (Chomsky 1995), Manninen (2001) posits that it is *v*P which is specified as stative or eventive by a stative or eventive *v*. As such, it is possible for the same VP to be interpreted eventively and non-eventively (e.g. as on a generic reading for activity predicates). Therefore when eventive activities are marked with *lia*, what is located in the future is a spatio-temporally delimited, atomic event (in (204), an event of eating), which is aspectually quantized.

(204) *na no lia chi lia*
 then 1SG two eat *lia*
 'The two of us will eat.'

Finally, in the corpus data, one future use of *lia* occurred on a *wh*-adverb that, because it is not a complete predicate, cannot be regarded as homogeneous or quantized. However, based on the meaning of the utterance given in the translation, this usage seems to have elided the activity verb *ban* 'do', and so the full sentence (which also occurs in my data) would be *amen ban lia*.

(205) *amen lia*
 how *lia*
 'What are (we) going to do?' (in Standard Mandarin: *zenme ban? Lit.* 'how do?')

In line with the preceding discussion about activity verbs, a future reading was derived.

5.5.4 *Statives*

So far we have seen that (171) works because achievements are inherently quantized, and activities are quantized by virtue of being events, but what about the statives with which *lia* is future denoting? 10 tokens of *lia* occurred on stative verbs in sentences with future time reference. These uses all involved contextual support for the future reading, such as the presence of a condition clause which means that the *lia*-marked state will only come about if the condition is fulfilled:

- (206) [*no zhe dian ha he-shang ha COND*] *jiu cheng lia*
1SG this little OBJ drink-COMPL COND then ok *lia*
'If I drink this, then it will be OK.'

Also, future time adverbs yielded a future reading with *lia* marked stative predicates:

- (207) *xia yi xingqi a keneng you ke lia*
next one week PRT perhaps have class *lia*
'Maybe next week we will have class.'

Similarly, with adverbial clauses which in context referred to a future event, *lia* could mark a stative in the main clause which had future time reference:

- (208) [*Xiao Bi hui qu ha*] *you ge zuomo tou lia*
NAME return go TOP have CL ponder head *lia*
'When Little Bi goes back (to listen to this), he will be puzzled.' (*lit.* he will have a pondering head)

The question is whether *lia* is functioning as a future marker in these examples, as in the quantized predicates considered above, or whether its future-denoting function is absent and *lia* is simply the atemporal mood marker, which commonly marks stative verbs without forcing a future reading (cf. Section 5.6 below). Elicited data can shed light on this issue, because it shows that it is possible for *lia* to mark future tense with stative verbs:

- (209) *tianqi re lia*
weather hot *lia*
'The weather is hot.'
'The weather will become hot.' (Elicited)

(210) *Xiao Wang jia ha xiangxin lia*
 NAME 3SG OBJ believe *lia*

‘Xiao Wang trusts him.’

‘Xiao Wang will trust him.’

(Elicited)

On the future reading in examples (209)-(210), what is indicated is a state which will come about at some point in the future. In de Swart’s (1998) framework, it can be assumed that the state has been coerced into an (inchoative) event, which is quantized (cf. de Swart 1998: 383), denoting the onset of a state. After this covert mapping has applied from a state to a quantized event, the input conditions of future *lia* are satisfied, hence the grammaticality of the future readings here. Similarly, in Smith’s (1997: 70) terminology, a shift in situation type has occurred from a stative to a derived telic situation denoting a change into the state concerned – to either an achievement or accomplishment, depending on whether duration is involved.

Therefore with regard to examples (206)-(208) from the corpus data, whether *lia* is interpreted as the future marker or the atemporal mood marker becomes a matter of whether an inchoative reading is present. In (207), which apparently lacks an inchoative reading and is a true stative (i.e. the speaker is speculating about whether the timetable is such that a state of having a class will hold at a given time in the future), the future reading comes from the temporal adverbial (and the contribution of *lia* is in the domain of modality rather than tense). That is, it is assumed that (207) contains a token of atemporal modal *lia* rather than future-denoting *lia* –in line with the fact that *lia*-marked existential/possessive *you* in the corpus data was always non-future denoting, except where future-denoting adverbs or other contextual support was present (see Section 5.6.2 below). However, examples (206) and (208) can be interpreted as denoting inchoative achievement events, which Dowty (1979: 141) defines as containing a BECOME operator, such that what is denoted by (206) and (208) are events of becoming OK or becoming puzzled, where previously these states did not hold. On this reading, it is predicted that future *lia* may occur.

In support of this analysis is the fact that with individual-level statives, which do not permit an inchoative reading, future marking by *lia* is not possible:

(211) *zhe ge haizi, congming lia*
 this CL child, clever *lia*

‘This child is intelligent.’

≠ ‘This child will be intelligent.’

(Elicited)

In general, in the corpus data, *lia*-marked stative verbs were overwhelmingly non-future denoting (110 tokens) (cf. Section 5.6.2 below), and thus in the vast majority of cases simply indicated a state holding at the speech time, compared to only 10 uses which were future denoting. Hence where stative verbs allow either a true stative or an inchoative (eventive) reading, they are not by default interpreted as inchoative predicates: the future denoting tokens discussed here occurred in a particular context conducive to an inchoative reading or else received a future reading purely due to the use of lexical strategies like temporal adverbials.

5.5.5 *Future lia and bu negation*

Elicited data shows that *lia* is incompatible with *bu* negation, consistent with the non-occurrence of *lia* on *bu*-marked predicates in the corpus data. The inability of future *lia* to occur with *bu* negation is captured under the generalization that future *lia* selects only +quantized predicates. In Standard Mandarin, *bu* negation is stative (Lin 2003) or unbounded (Ernst 1995), and so homogeneous, and the same can be assumed to be the case in the Xining dialect, where *bu* negation behaves similarly in this respect (cf. Wang and Dede 2016). That is to say, as in Standard Mandarin, *bu* negation occurs with stative verbs, adjectives and modal auxiliaries, which are aspectually stative (cf. Lin 2003). In addition, as in Standard Mandarin, *bu* occurs with examples that have a volitional/future reading, such as (212) below.

(212) *jia na zha bu zuo (*lia)*

3SG that place NEG live (**lia*)

‘He does not want to live here/He will not live here.’ (Elicited)

The homogeneous nature of *bu* negation in such future-denoting examples can be seen in that Lin (2003), following Huang (1988), argues that a null volitional or future modal verb is present here, and it is this which allows the stative negator *bu* to occur. From this perspective, the non-occurrence of future *lia* is expected even in these future-denoting examples, because modals can be regarded as a type of stative predicate, with which *lia* systematically cannot denote future (Section 5.6.2). However, the fact that *lia* cannot be the affirmative mood marker with *bu* negation is not predicted by the hypothesis in (172), which says that affirmative modal *lia* selects homogeneous predicates. Rather, as discussed in Section 5.6 below, this will be seen to be due to the fact that affirmative *lia* resists use with negation of any kind, even *mei* negation.

Finally, one may wonder whether it would not be simpler to posit that future *lia* selects *dynamic* predicates (rather than quantized predicates) i.e. this would account for the occurrence of future *lia* with activities (Section 5.5.3), and with regard to future-denoting statives in Section 5.5.4, these are not true statives but indicate a change of state.⁴⁰ However, on the assumptions in this dissertation (including in Chapter 4 above), this analysis makes the wrong prediction in other respects, and so was not pursued: with progressive predicates, which here I assume are dynamic rather than stative (*pace* de Swart 1998, but see Lin 2003: 429-30 and references therein for arguments to this effect), *lia* does not denote a future reading:

- (213) *xia-zho lia?*
 fall-IPFV *lia*
 'Is it raining?'

The non-future reading here is predicted by the present analysis because imperfective is an aspectual operator that maps to a homogeneous eventuality type which possesses the subinterval property and cumulative reference. As such, the analysis in terms of quantization correctly predicts that future *lia* cannot occur.

5.6 Modal *lia*

Palmer (1986:16) defines modality as 'the grammaticalization of speakers' (subjective) attitudes and opinions'. Within this domain, epistemic modality is concerned with 'the speaker's attitude to the truth value or factual status of the proposition' (Palmer 2001: 8).⁴¹ Devices expressing epistemic modality can be further differentiated according to the degree of the speaker's commitment to the truthfulness of the proposition, with English modals for example forming a spectrum from greater to lesser certainty (from *may* to *must* to *will*). Previous characterizations of the modal contribution of *lia*, for example as *kending* (e.g. A.-S. Zhang 2007: 343-4, Ren 2004), which involves a judgement concerning the certainty of the proposition, can be seen to be compatible with this definition of epistemic modality. In view of the speaker certainty observed in previous studies as being conveyed by *lia*, *lia* can be understood as belonging in the domain of epistemic modality: in particular, expressing the speaker's high degree of 'commitment to the truth value or factual status of the proposition' (Palmer 2001: 8). For instance, in the existential possessive sentence in (214), the speaker was

⁴⁰ This insightful question was raised by an anonymous reviewer of a paper, to appear, based on this chapter.

⁴¹ Palmer draws a distinction between 'mood' and 'modality', although I do not distinguish these terms in this discussion.

strongly affirming that the speaker's school certainly does have a foreign teacher, perhaps in contrast to other schools which do not:

- (214) *qishi nomen xuexiao li waijiao you lia*
 actually 1PL school LOC foreign-teacher has *lia*
 'Actually our school has a foreign teacher.'

This is thus an (emphatic) epistemic function, conveying the speaker's judgement concerning the accuracy of the proposition, and the use of *lia* here contrasts with sentence-final particles such as *ba* which express a low degree of certainty. *Lia* itself is not obligatory as a mood marker, and so (214) is felicitous without it, but if *lia* is removed then the assertion of speaker certainty is also removed and the sentence is simply a declarative statement.⁴²

Nevertheless, modal *lia* does appear in contexts where its modal contribution is not epistemic, involving certainty. In yes/no questions, where the speaker is not affirming anything, *lia* can simply mark, according to Du (1995: 58), interrogative mood, where its meaning is similar to that of an A-not-A question in Standard Mandarin. That is, *lia* appears in polar questions which allow two alternative answers, comparable to Standard Mandarin *ni qu bu qu (lit.)* 'you go not go?' (V-NEG-V).⁴³ According to Du, the difference between a Standard Mandarin A-not-A question and a *lia*-marked question in Xining Mandarin is that only the latter must have future time reference. However, in this chapter we have seen that this analysis is not actually correct: in fact, *lia* only requires future reference with aspectually quantized predicates. In (215), which is a question containing the stative possessive verb *you*, *lia* does not force a future reading (other non-future denoting, homogeneous interrogative sentences include (230),(232), (234) and (236)):

- (215) *ni fo zhe ge ming jia you lia mei*
 2SG say this CL destiny 3SG has *lia* NEG
 'Do you say he has this destiny or not?'

⁴² For Xining dialect speakers who find OV existential constructions with the existential verb *you* awkward, such as one of my informants, the same holds with the object following *you*. The presence or absence of *lia* affects the epistemic modality of the sentence, but not its grammaticality:

- (4) *nomen xuexiao li you waijiao (lia)*
 1PL school LOC has foreign-teacher *lia*
 'Our school has a foreign teacher.'

⁴³ The incompatibility of modal *lia* with negative predicates does not preclude negative question particles as in (215), which scope over the *lia*-marked affirmative predicate.

It is evident that modal *lia* is atemporal and does not impose any absolute temporal restrictions on the predicate it marks, because unlike future *lia* which occurs with eventive predicates, modal *lia* which selects homogeneous predicates can occur with past time reference:

- (216) *qiannian xuexiao waijiao you lia*
 previous-year school foreign-teacher has *lia*
 'The year before last, the school had a foreign teacher.' (Elicited)

With regard to the modal semantics of the future marking uses of *lia*, Du (1995: 58) claims that in declarative clauses, as well as expressing future tense, *lia* simultaneously expresses strong subjective speaker attitude. He illustrates with examples like:

- (217) *ni zai bu lai ha, no zou lia*
 2SG ADV NEG come COND, 1SG walk *lia*
 'If you still don't come, I will go.'

Whilst this may be the case in examples like this, the modal contribution of *lia* is nevertheless context-dependent. According to my informant, *lia* can appear in formal announcements/news broadcasts in the Xining dialect in rural areas, which is a context in which the speaker relays information in an objective manner without conveying his/her subjective attitude. For example,

- (218) *xiangqinmen, jie-dao shangji tongzhi,*
 fellow.villager receive-COMPL authorities notification
minger xia dayu lia, zhuyi fa dafei de xiaoxi
 tomorrow fall big.rain *lia*, attend send flood POSS message
 'Fellow villagers, receive this notification from the authorities: tomorrow it will rain heavily. Pay attention to (this) flood warning.' (Elicited)

Lia here is naturally translated with future modal *hui* in Standard Mandarin, which is also used to express predictive future, but which does not convey subjective speaker attitude (cf. Tsai 2015). Thus in such uses *lia* simply conveys plain future tense without being an emphatic or attitudinal marker.

A further indication that *lia* can express plain future tense without attitudinal/epistemic modality comes from the use of *lia* to denote future in conditional clauses. As Haegeman (2010: 629-31) notes, conditional and temporal clauses have often been observed to be a

context where speaker-related modality, such as epistemic expressions, cannot be used (cf. Tenny 2000), and Paul (2015: 561) likewise finds that attitudinal markers in Chinese are banned in non-root clauses. For example, consider (219) (from Haegeman 2010: 630, after Declerck and Depraetere 1995:278):

(219) **John will do it when/if he may/must have time.*

However, as discussed above, *lia* can force a future reading in conditional clauses, and so this is another context where *lia* expresses only plain future without subjective speaker attitude:

(220) *yaoshi ni name leng de difang qu lia, ni yiding*
 if 2SG that cold NMLZ place go *lia* 2SG certainly
ganmao lia
 catch-cold *lia*
 ‘If you go to such a cold place, you will certainly get a cold.’ (Elicited)

So whilst it may be that *lia* can simultaneously express speaker attitude and future tense, *lia* can also be used as a plain future marker. The extent to which future-denoting *lia* conveys speaker attitude is strongly influenced by context.

A further noteworthy idiosyncratic property of modal *lia*, not possessed by future *lia*, is that it strongly tends not to occur with negation (whether by *bu* or *mei*). This was not noticed by the previous studies cited in Section 5.2. *Lia* frequently occurs with the existential/possessive verb *you* 'have', but it is not found in my corpus data marking *mei you* ('not have'). In elicitation sessions, informants found that with *meiyou*, *lia* could not be used.

(221) *xuexiao waijiao mei you (*lia)*
 school foreign-teacher NEG have (**lia*)
 ‘The school does not have a foreign teacher.’ (Elicited)

Likewise, affirmative *lia* occurs with the modal of necessity, but cannot occur when the modal is negated:

(222) *nomen jiu daoche qu de yao lia*
 1PL just change-car go NMLZ need *lia*
 ‘We need to go change buses.’

- (223) *na ge gawa fu ha mai de bu yao (*lia)*
 That CL boy book OBL buy NMLZ NEG must *lia*
 ‘That boy does not need to buy books.’ (Elicited)

One exception to this generalization occurred, however. In (224) *lia* marks a state of not being grown up, and expresses the speaker’s subjective attitude, the modal contribution identified by Du (1995).

- (224) *jia cai duo da-zhe, san si sui ha, hai mei chengnian lia*
 3SG only how old-IPFV, three four year COND, still NEG grown.up *lia*
 ‘He’s only how old? If he’s thirty or forty, and still not grown up...!’

Thus whilst this polarity property is a very robust tendency, it is apparently not an absolute restriction.⁴⁴ Future-denoting *lia*, however, which this chapter argues selects quantized predicates, can occur with negation by *mei* (but not with the stative negator *bu*, as discussed in Section 5.5.5 above). This is shown in (225):

- (225) *kuai dian chi a bu shi ha mei you-diao lia*
 fast little eat PRT NEG be TOP NEG have-COMPL *lia*
 ‘Eat a bit faster! Otherwise there will be nothing (left)!’

However, it should be noted that, as in Standard Mandarin, *mei* negation is not typically used to negate future events, but rather *bu* is used (cf. Section 5.5.5) and so future *lia* has very few opportunities to occur with *mei*-negation, even though it can do so. By contrast, negated states are common (e.g. *meiyou* ‘not have’, *bu shi* ‘not be’, *bu hao* ‘not good’ etc.), but affirmative *lia* still did not occur in such contexts, showing that there exists a polarity or realis dimension to the meaning of affirmative *lia*, which is used to assert the existence but not the non-existence of a given state of affairs.

5.6.1 Aspectual selection by modal *lia*

The utterances in the corpus data with which *lia* marks affirmative mood fell into seven categories: stative verbs, modal auxiliaries, progressives, locatives, resultant states, predicates with habitual adverbs, and generic predicates. The crucial point is not necessarily the verb type (although this is relevant if no higher aspectual operators are present) but the final derived aspectual class after all aspectual operators below *lia* are applied. This is because the

⁴⁴ Note that the incompatibility of modal *lia* with negative predicates does not preclude negative question particles as in (215), which scope over the *lia*-marked affirmative predicate.

VP itself may be quantized (as with achievement verbs), but aspectual operators such as a modal verb or imperfective aspect map the eventuality to a homogeneous predicate and mean that *lia* must be only mood-denoting and not future-denoting.

<i>Homogeneous predicate type</i>	<i>No. of Tokens</i>
<i>Stative verb</i>	112
<i>Modal</i>	48
<i>Progressive</i>	10
<i>Locative</i>	6
<i>Resultant state</i>	15
<i>Habitual adverb</i>	3
<i>Generic</i>	4
<i>Total</i>	198

Table 5-3 *Lia*-marked predicates with non-future time reference.

As Table 5-3 shows, the two primary contexts in which *lia* was non-future denoting were with stative verbs and modal verbs, and then with a selection of other predicate types. These different usages will now be illustrated in turn.

5.6.2 *Stative verbs*

The most common context in the corpus data in which *lia* was an affirmative mood marker was with stative verbs (112 tokens), and of these the existential/possessive verb *you* accounted for 67 uses. With these uses, the aspectual class of the stative verb was not modified by higher aspectual operators, and so these predicates are homogeneous and cannot be selected by future *lia*. Instead, *lia* functions as a mood marker.

- (226) *na ge bu shi ba, wawa you lia bei*
 that CL NEG be PRT child have *lia* PRT
 'Not that one... He has a child.'

Additionally, adjectival stative verbs took mood marking (36 tokens):

- (227) *no cheng lia, bieren bu cheng*
 1SG ok *lia*, other-people NEG ok
 'I'm OK. Other people are not OK.'

(228) *Shenghuofei gou lia*
 Living.cost enough *lia*

'Is (this) enough for the cost of living?'

In addition, copula constructions were marked by modal *lia* (6 tokens), and 3 further tokens of *lia* occurred in null copula constructions (which, when translated into Standard Mandarin, require the copula). The latter are illustrated by (230), which could alternatively be classified as a (non-literal) locative.

(229) *Xiao Zhang jiu shi lia*
 NAME really be *lia*

'This really is Xiao Zhang.'

(230) *na ge fei fo-zho ni dai Xiao Wang lia*
 that CL who say-IPFV 2SG and NAME COM
yikuai li fo a ma
 together *lia* PRT PRT Q

'Who was it that said it, you and Xiao Wang are together?'

5.6.3 *Stative modal auxiliaries*

Another class of predicates with which *lia* functioned as a mood marker rather than as a future marker was modal auxiliaries (48 tokens), which are a type of stative predicate (e.g. cf. Lin 2002: 274). These mainly included predicates denoting ability and necessity. For instance, (231) contains the completive complement *ha* after the verb, which indicates that the activity denoted by the verb can be achieved and in (232), *lia* occurs with an expression of ability formed with the verbal complement *lai*:

(231) *ye he-ha lia, chi-ha lia ye*
 also drink-COMPL *lia*, eat COMPL *lia* also
 '(He) can also drink (a lot), (He) can also eat (a lot).'

(232) *Zhongguohua shuo-lai lia*
 China speech say-COMPL *lia*
 'Can he speak Chinese?'

These expressions of ability were generally formed with achievement verbs (resultative verb compounds), but because a non-eventive reading is intended, *lia* functions as a mood marker and not as a future marker.

Modal uses conveying necessity are illustrated in (233):

- (233) *danzi xi de yao lia*
sheet wash NMLZ need *lia*
'The sheet must be washed.'

5.6.4 Progressives

Progressive predicates derived by the IPFV marker cannot be selected by future *lia*, but only by modal *lia* because imperfective aspect is an aspectual operator that maps its input to a +homogeneous eventuality (cf. de Swart 1998). 4 tokens of this type occurred in the corpus data. The fact that a progressive reading obtains here is due to the predicate which the imperfective marker selects being +dynamic. Since ZHE in Xining mandarin is a general imperfective marker (cf. Chapter 4), it allows the underlying aspectual class to shine through unaltered (cf. Smith 1997): with activities a progressive reading is derived.

- (234) *xia-zho lia?*
fall-IPFV *lia*
'Is it raining?'

- (235) *ban ye-li ku-zho li*
half night-LOC cry-IPFV *lia*
'In the middle of the night (she was) crying.'

In (236), an accomplishment predicate which is aspectually quantized at the level of VP (due to the presence of a temporal duration adverbial) is mapped to a homogeneous predicate at the level of AspP by the imperfective marker, and so *lia* yields a modal rather than a future reading.

- (236) *nian-zho si nian li ma*
read-IPFV four year *lia* Q
'Is he studying for four years?'

In addition, *lia* occurred with bare activity predicates that had a progressive reading in the absence of an overt imperfective marker (6 tokens), even though usually bare activities marked by *lia* received a future reading (32 bare activity predicates marked by *lia* expressed future events). But for these tokens, a progressive reading was apparently clear from the real world context, allowing the imperfective marker to be omitted and a progressive reading retained. With these predicates, *lia* yielded the modal reading.

(237) *ni hufo lia jiu*
 2SG nonsense-speak *lia* just
 'You are speaking nonsense.'

(238) *poniang wawazi dagong lia*
 wife child work *lia*
 'Wife and child are both working.'

5.6.5 Resultant states

As well as deriving processes, imperfective ZHE can derive resultant states, which can be selected by modal *lia* but not future *lia* (7 tokens):

(239) *Qilian-de na kao-a-zho lia*
 Qilian-POSS that pass-COMPL-IPFV *lia*
 'Has that (classmate) from Qilian passed the exam?'

Also, sometimes *lia* marked a resultant state when imperfective aspect was not overtly marked but the context made it clear that a resultant state was denoted. These uses (8 tokens) were with bare achievement predicates, with which *lia* normally had future time reference (76 tokens of future *lia* occurred with achievements). For instance, with *zang-wan* 'dirty-finish' ('become utterly dirty') a resultant state was denoted, which holds at the speech time. Meanwhile, in (241) it is clear from the context that the resultant state holds at the speech time and so in these circumstances the imperfective marker can be omitted and *lia* derives a modal reading rather than a future reading.

(240) *kuku zang-wan-gei lia*
 trousers dirty-COMPL-CAUS *lia*
 'The trousers have been made utterly dirty.'

(241) *jiu xiang mei jiner nomen lia jiaren jiehe dao*
 just like NEG today 1PL two family combine COMPL
yikuai lia
 together *lia*
 'Isn't it just like (today)? Today our two families have come together.'

5.6.6 *Locatives*

Another class of homogeneous utterances with which *lia* fulfils a modal rather than future marking function was locative constructions, which also present a state. 6 tokens of this usage occurred.

- (242) *aomi bei a-zha lia dui-zhe ma*
secret PRT Q-place *lia* correct-IPFV Q
'Secrets, where are (they)? Right?'

5.6.7 *Habitual frequency adverbials*

On a habitual interpretation, an underlyingly quantized event is mapped to a homogeneous state (cf. de Swart 1998), and so in this context *lia* fulfils a modal rather than future tense function. Examples like (243), which Du (1995: 58) treats as cases of frequentive aspect, were rightly noted by Du not to yield future time reference, but this chapter observes that aspectually they belong to the same mereological class of sentence types as the other non-future denoting predicates.

- (243) *dongbudong jiu chufen-ha bei-gei lia*
frequently just disciplinary action-OBJ bear-CAUS *lia*
'[He] often bears disciplinary action.'

- (244) *jia jiu tiantian lian-shang he lia*
3SG just everyday connect-COMPL drink *lia*
'He just drank every day continuously.'

5.6.8 *Generic predicates*

Another type of utterance with which modal *lia* occurred was in generic sentences, which preclude *lia* from denoting future tense because they are aspectually stative, denoting general truths and regularities rather than referring to particular incidents (e.g. Carlson 1995: 232).

- (245) *ren xue ha jinbu lia*
People study COND advance-step *lia*
'If people study, they improve.'

The preceding sections have provided an account of the distribution of *lia*, and demonstrated that the future tense uses and atemporal mood uses pattern with the aspectual class of the predicate, and in particular with whether it is quantized or homogeneous. In the next section,

relative future uses are considered, and then analysis of *lia* as a prospective aspect or irrealis marker is argued not to be feasible.

5.7 Discussion

5.7.1 *Relative future tense uses*

That *lia* can denote relative future tense has been overlooked in the literature on the Xining dialect, but Zhao (2015) mentions this use for the Gangou dialect. Relative future tense takes a contextually-determined time other than the utterance time as its reference point, and this can be denoted by *lia*, which in complex clauses can express the ‘future in the past’ (cf. Comrie, 1985: 74-5). In Klein’s (1994: 2) framework, aspect marking specifies the relation between TT and TSit in terms of precedence, simultaneity, or subsequence. Since *lia* lacks certain other properties associated with the prospective aspect cross-linguistically (see below), it is argued that the label ‘relative future tense’ is appropriate for ‘future in the past’ uses (i.e. TT < TSit < TU). A relative future use of *lia* is illustrated in (246):

- (246) *zuotian no yaoshi Xining qu-le (*lia) dehua*
 yesterday 1SG if Xining go-PFV (*lia) COND
no node pengyou ha jian-ha lia
 1SG 1SG.POSS friend OBL see-COMPL **lia** (Elicited)
 ‘If I had gone to Xining yesterday, I would have seen my friend.’

This is a counterfactual past conditional, which involves an event that did not happen, but the speaker hypothesizes about what the consequences might have been if the event had taken place. Future markers can be found in counterfactuals cross-linguistically, for example in Zulu (Halpert 2010), and also in Standard Mandarin where the modal *hui* can be used (Su 2008). In Xining Mandarin, *lia* marks the unrealized consequence clause, and cannot occur on the counterfactual past clause in place of the perfective marker *le*. This type of usage is consistent with an analysis of *lia* as relative future tense because the event of the main clause (TSit) occurs after the event of the conditional clause (TT) and so TSit is future with regard to TT (in (246), seeing the friend follows going to Xining). In the next section, two possible alternative analyses of *lia* in terms of irrealis mood and prospective aspect will be examined.

5.7.2 *Lia is not an irrealis marker or a prospective aspect marker*

Given that irrealis marking is also used in conditional clauses and future contexts cross-linguistically, it is worth considering the possibility of treating *lia* as an irrealis marker.

However, an important argument against analyzing *lia* as irrealis is that it is only permissible on conditional clauses that have future time reference (relative or absolute future). Irrealis marking, on the other hand, would be expected to be possible in past conditional clauses as well, since it simply marks non-reality status rather than temporal reference. This is illustrated by two unrelated languages, Iatmul (Papuan) and Russian:

(247) *saanya kla-ikiya-j-a-n nyigi gu kla-ikiya-di*
 money get-IRR-3PL-SR-NR bitter water get-IRR-3PL
 ‘If they had received money, they would have bought beer’ (Jendraschek 2014: 154)

(248) *Esli by ja pribyl na vokzal, menja by posadili v tjur'mu*
 if I arrive(IRR) at station me put(IRR) in prison
 ‘If I had shown up at the station, they would have thrown me in prison.’
 (Chung and Timberlake 1985: 251)

By contrast, as shown in (246) above, *lia* cannot occur in past conditional clauses. This means that although *lia* shows some functional overlap with irrealis markers in that both mark future and conditional clauses, the core future semantics of *lia* constrain which irrealis contexts it can occur in.

An additional indication that *lia* is not an irrealis marker is that, as with Standard Mandarin *hui* (Su 2008), in condition clauses an indicative interpretation is available in addition to a counterfactual reading, which shows that the semantic contribution of *lia* is independent of reality status:

(249) *zuotian ni yaoshi Xining qu-le dehua, ni no de*
 Yesterday 2SG if Xining go-PFV COND, 2SG 1SG POSS
pengyou ha jian-ha lia
 friend OBL see-COMPL *lia*
 ‘If you went to Xining yesterday, you will have seen my friend.’ (IND)
 ‘If you had gone to Xining yesterday, you would have seen my friend.’ (CF)
 (Elicited)

On the indicative reading, *lia* occurs in a realis rather than irrealis predicate, but on the counterfactual reading, it marks an irrealis clause. But the core futurity requirement is satisfied on both readings, since the *lia* marked clause temporally follows the topic time denoted by the conditional clause. Again, this indicates that *lia* is constrained to future contexts (here, relative future) rather than to irrealis contexts.

Finally, the possibility that *lia* could be a prospective aspect marker rather than a future tense marker also deserves consideration, since this also superficially resembles future marking. In the 'prospective aspect', a situation is viewed from the perspective of an earlier reference time (Comrie 1976: 64-7): a future event may be viewed from the perspective of the present, or a past event may be viewed from the perspective of an earlier point in the past. Prospective aspect is thus a 'perspectival' aspect (Dik 1997: 238-41), because it fulfils a temporal (tense) function of locating time spans relative to each other. But despite the tense-like function of prospective aspect, this category nevertheless differs from true tense, and *lia* shows the properties expected for tense rather than prospective aspect.

Firstly, *lia* is not associated with the truth conditions expected of the prospective aspect, but rather with those of the straightforward future tense. Comrie (1976: 64-5) notes that if an event expressed with prospective aspect does not occur, then the statement has not been falsified, whereas with the straightforward future, if the event does not occur, then the statement has been falsified. That is, the prospective aspect simply denotes 'the already present seeds of some future situation, which future situation might well be prevented from coming about by intervening factors' (Ibid. 65). Comrie illustrates this contrast as follows, where (250) is prospective aspect and (251) is future tense, and only the latter asserts that the event will certainly come about:

(250) *Bill is going to throw himself off the cliff.*

(251) *Bill will throw himself off the cliff.*

This distinction exists because prospective aspect carries a caveat that the statement is made not absolutely, but 'on the basis of what can be known at the (earlier) reference time' (Dik 1997: 239). *Lia* does not possess these properties of prospective aspect. For example, if (252) is uttered, and then the event does not occur, (252) has simply been falsified.

(252) *Lao Bi mingtian Xining qu lia*

NAME tomorrow Xining go *lia*

'Lao Bi will go to Xining tomorrow.'

(Elicited)

A second piece of evidence that *lia* denotes future and not prospective aspect is that simple clauses marked with *lia* are not compatible with past time reference, even in a suitable discourse context. Thus the simple clause in (254) cannot be used when, as here, TT is specified by the question as prior to TU.

(253) *Zuotian san dian tianqi amen le*
 yesterday three o'clock weather how PFV
 ‘What was the weather like at 3 o’clock yesterday?’ (Elicited)

(254) *#tianqi re lia*
 weather hot *lia*
 (intended) ‘The weather was about to warm up.’ (Elicited)

By contrast, past time reference is acceptable for prospective aspect in simple clauses in languages with this category, even in out of the blue contexts, as illustrated for Turkish by (255) and for English in (256):

(255) *çalış-acak-Ø-ti*
 work-PROSP-COP-PAST
 ‘I was going to work.’ (Key and Schreiner 2014)

(256) *Socrates was going to die.* (Klein 1994: 116)

In summary, the properties of *lia* are those of a future tense marker, as assumed in the literature and in this chapter, rather than an irrealis mood marker or a prospective aspect marker. In the next section, the origin of *lia* is discussed.

5.8 Contact origin: Mongolic non-past suffix -NA

In this section an explanation is provided for the aspectually conditioned future tense marking found for *lia* in the Xining dialect. It is argued that *lia* descends from the native Chinese mood marker *li*, and that the future marking function was copied to *lia* from the Mongolic non-past marker -NA when local speakers of Mongolic languages (e.g. Mongghul, and possibly Qinghai Mongolian) learned Chinese (imperfectly) following Han immigration into the area, a scenario which began in the Ming period (cf. Chapter 2). *Li* was already used as a modal particle during the preceding Yuan dynasty, predominantly to denote hyperbole and exclamatory mood, and sometimes interrogative mood (J.-X. Zhang 2005: 37, L. Wang 2015: 46-7):

(257) *zhe loushang hao liangkuai li* [Yuan dynasty Chinese]
 this upstairs very cool li
 'Upstairs is really cool.' (Yueyanglou, L. Wang 2015: 47)

(258) *Ni kan, ta chuan-zhe shenme yifu li?* [Yuan dynasty Chinese]
 you look, he wear-IPFV what clothes li
 'You look, what is he wearing?!' (Qiangtuo mashang, Chen
 2014: 110, after Tai Tian 2003)

In terms of aspect, Chen (2014: 110) shows that *li* marks the existence of an ongoing state or activity:

(259) *ta hai bu ren de wo li* [Yuan dynasty Chinese]
 3SG still NEG know DE 1SG li
 'He still does not recognize me.' (Chenzhou tiaomi, Chen 2014:
 110)

Thus this modal particle would have already been existent in the Chinese language during the Ming period, when Han settlers were arriving in Qinghai. The exclamatory/affirmative modal functions identified for Xining *lia* clearly resemble those of Chinese *li* in these examples from the Yuan dynasty, and the contexts of occurrence are also corresponding: above we have seen examples of *lia* marking ongoing states, as well as occurring in exclamatory questions as in (258).

With regard to the phonological form of *lia*, it likely emerged via a merger of native Chinese morpheme *li* and sentence-final particle *a/ya* (cf. Z.-Q. Wang 1983: 41). However, in some locations in Qinghai province (e.g. Gangou, Zhao 2015), the phonological form is unchanged (*li*) i.e. merger with *a* has not occurred. In addition, in my data for the Xining dialect, *lia* is also sometimes realized as *li* by speakers from Menyuan and Haiyan counties:

(260) *ni tan-shang-zhe, wala wala de, no qi-shang-lai li*
 2SG date-COMPL-IPFV, ONM ONM NMLZ, 1SG anger-up-come FUT
fozho
 QUOT
 '(I said) You carry on casually dating and I will get angry.'

That is, *li* and *lia* in the Xining dialect are variants of the same morpheme with the same state marking/emphatic function illustrated above for Chinese *li*.

With regard to the future marking function of *lia*, which is not inherited from Chinese *li*, it is argued that this has arisen due to contact influence with Mongolic languages in the region, in particular due to transfer from the non-past marker -NA. In Mongolic languages, the aspectual class of the predicate plays a vital role in determining the temporal reference of the non-past marker -NA.⁴⁵ With stative predicates, a present reading is derived, whilst with non-stative (action) predicates, a future reading is derived (e.g. Ujyediin 1998; Svantesson 1991; Brosig 2009; Binnick 2011, cf. Åkerman 2012: 27). In Khalka Mongolian, future time reference is derived with activity, accomplishment and achievement verbs. This is illustrated for an activity in (261) and an achievement in (262) (Brosig 2009: 107):

(261) *Ama önödöör Mijabijama-taj barilda-na.* [Khalka Mongolian]
 today =COM wrestle-NA
 ‘Ama will wrestle with Miyabiyama today.’ (Brosig 2009: 106)

(262) *Hjatad-uud-yn talaar gomdol baj-val biden-d* [Khalka Mongolian]
 Chinese-PL=GEN concerning complaint COP-KV:if we=DAT
hand bid oč-ood al-aad ög-nö
 turn we go_there-KV kill-KV give-NA
 ‘If there should be any complaints regarding the Chinese, just
 turn to us, we will go there and kill them for you.’ (Brosig 2009: 106)

Meanwhile, with stative verbs -NA has present time reference:

(263) *bide egün-i mede-ne* [Mongolian (Inner Mongolia)]
 we this-ACC know-NPT
 ‘We know this.’ (Ujyediin 1998: 156)

Thus the distribution of the future marking function of -NA closely matches that found for *lia*, which was seen above to likewise normally derive a future reading with accomplishments, achievements and activities, but a non-future reading with statives.

Meanwhile, with derived statives, -NA yields a non-future reading, such as with the progressive aspect formed with the auxiliary *bayi* (Ujyediin 1998: 182); in Section 5.6.1 this was seen to also be the case for *lia*.

⁴⁵ For ease of exposition, I use -NA to refer to cognates of this morpheme across the Mongolic languages, whilst recognizing the phonological variation existing in its form across the dialects.

- (264) *bi jakidal biči-ǰü bayi-na* [Mongolian (Inner Mongolia)]
 I letter write-CONV be-NPT
 'I am writing a letter.' (Ujiyediin 1998: 160)

Also, -NA does not derive a future reading with 'timeless facts' and habituals (Ujiyediin 1998: 133-4), just as found for *lia* (Section 5.6.1):

- (265) *söni önggere-bel edür bolo-na* [Mongolian (Inner Mongolia)]
 night pass-CON day be-NPT
 'Day follows night.' (Ujiyediin 1998: 134)

- (266) *tere edür büri doloᠶan čax-tu bosu-na* [Mongolian (Inner Mongolia)]
 he everyday seven o'clock-DAT get up-NPT
 'He gets up at 7 o'clock every day.' (Ujiyediin 1998: 134)

But the Mongolic language spoken closest to Xining city is Mongghul (Huzhu Monguor), and so this will be considered briefly now, since we have striking evidence for substrate interference on the Xining dialect from Monguor in the borrowed ablative postposition discussed in Chapters 2 and 3. The Mongghul suffix *-m/-n* shows a similar pattern of temporal marking as that just discussed for other Mongolic languages, and is similar to that for *lia* in Xining Mandarin. According to Åkerman (2012: 7), Mongghul suffix *-m/-n* 'marks either imperfective aspect or future tense depending on whether it occurs with a stative verb or a dynamic verb'.

- (267) *Bu mudie-m* [Mongghul]
 1:SG know-IMPERF
 'I know.' (Åkerman 2012: 8)

- (268) *Tie muxi shda-m* [Mongghul]
 3:SG read can-IMPERF
 'He can read.' (Åkerman 2012: 28)

The non-future reading found with stative verbs and modals was illustrated for *lia* in Section 5.6.1. However, with dynamic verbs, a future reading is derived (cf. Section 5.5.2-5.5.3 on *lia*):

- (269) *Tingera uro-m* [Mongghul]
 sky rain-FUT
 'It will rain.' (Åkerman 2012: 29)

Further evidence for a Mongolic tense-aspect suffix as the model on which Xining Mandarin *lia* developed its selectional restriction as a future marker on quantized predicates comes from data showing the functional equivalence between cognates of these morphemes elsewhere within the Qinghai-Gansu Sprachbund. Tangwang (a Sinitic variety heavily influenced by Dongxiang), also contains a marker *-li*, which Lee-Smith (1996: 878) identifies as equivalent to Dongxiang *-nə*. She describes the functions of these morphemes as 'incomplete, ongoing, indicative, present or future' (Lee-Smith 1996: 878).⁴⁶ The future and non-future functions are shown below for both languages:

- | | | |
|-------|-------------------------------------------------------------------------------|-----------------------|
| (270) | <i>uə²²⁴ k^h ɛ̃³¹-li</i> | [Tangwang] |
| | pi utɕə-nə | [Dongxiang] |
| | I look (incomplete) | |
| | 'I will look.' | (Lee-Smith 1996: 879) |
| (271) | <i>tʂɪ³¹ kie³¹ j̃⁵³ xou²²⁴-li</i> | [Tangwang] |
| | ənə niə qoni warata-nə | [Dongxiang] |
| | This one sheep cry (ongoing) | |
| | 'This sheep often cries.' | (Lee-Smith 1996: 879) |

The Tangwang data shows that the functional convergence of *lia* upon the Mongolic non-past marker, argued for here for the Xining dialect, is a phenomenon not limited to the Xining area but also found in cognates of these morphemes elsewhere in the Sprachbund.

With regard to how contact would have led to transfer of the aspectually conditioned future marking function to *lia*, as discussed in the preceding chapters, Mongghul speakers inhabited the Xining area in the early Ming period and likely acquired Chinese as a language for, among other things, trading with the Chinese settlers (cf. Chapter 2). This involved transferring the head-final syntax of their native language into what would initially have been a developing Chinese pigeon, borrowing some forms outright (e.g. the ablative postposition and probably the necessity modal, discussed in Chapter 3) and calquing the function of others (e.g. the generality of the imperfective marker ZHE, as argued in Chapter 4). It is therefore proposed that the functional correspondence illustrated above between *lia* and *-NA* can be explained in terms of transfer by the Monguor during imperfect L2 learning, and also by

⁴⁶ Although Lee-Smith (1996: 878) includes present-marking as a function of Tangwang *li*, in Xining Mandarin, the affirmative mood marker *lia* is able to occur with past time adverbs (cf. Section 5.6), showing that there is not an absolute present tense constraint on modal *lia*.

speakers of Qinghai Mongolian, many of whom according to X.-R. Jia (1993: 272) likely shifted to Chinese following the suppression by the Chinese of the revolt led by Mongol prince Lobzang Danjin (1692-1755) (cf. Chapter 2). The mechanism of change is proposed to have been ‘pattern replication’ (Matras and Sakel 2007) or ‘grammatical replication’ (Heine and Kuteva 2005) i.e. replication of functions without outright borrowing of form-meaning units.

Matras and Sakel (2007: 844-5) note that ‘pattern replication’ is frequently attested cross-linguistically in the development of tense/aspect markers, and Siegel (2008: 112) notes that this same mechanism, which he calls ‘functional transfer’, is common with regard to tense-modality-aspect (TMA) in expanded pidgins (i.e. pidgins that expand so as to have grammatical morphology) and creoles. That is, rather than directly borrowing tense forms from another language, speakers tend to replicate them using forms in the lexifier language. In other words, *lia* illustrates the assignment of a substrate grammatical function (future marking) to a superstrate form (modal *li*). It is proposed that when the Monguor and speakers of Qinghai Mongolian encountered the Chinese morpheme *li* occurring at the end of stative sentences, they identified it with -NA in their native language, which also occurs at the end of stative sentences. But because -NA is also used with non-statives to mark future tense, they extended *lia* to this function, replicating the aspectually conditioned future tense marking function found for -NA in their native language.

Without assuming such a replication mechanism, it is difficult to explain why the same pattern of aspectually conditioned future tense marking is found for sentential particle *lia* as in Mongolic, given that this is not a feature of *li/lia* found in Mandarin dialects more widely across China. But it may be observed that the modal/future polysemy of *lia* finds a diachronic explanation in terms of Hopper’s (1991) notion of ‘persistence’ and ‘layering’: in the extension of Chinese modal particle *li* to a future marking function as a result of contact, its modal semantics were not lost from the dialect, but in many cases they still colour uses in which *lia* functions as a future marker, as observed by Du (1995). Meanwhile, ‘layering’ is evident in that despite extension to a future marking function, the purely modal function is also still found (with homogeneous predicates).

Finally, the above account in terms of grammatical replication finds indirect support from the implausibility of *lia* being an outright borrowing of a form-meaning unit from another language (or an internal development, given that aspectually conditioned future tense marking by *li* seems to be absent in other Chinese dialects). Du (1995: 60) makes a passing remark in

which he suggests that sentential *lia* is a borrowing of *-la* from Monguor (i.e. Mongghul (spoken in Huzhu county) and Mangghuer (spoken in Minhe county)). However, this does not seem to be a tenable account. In the first place, a borrowing account is doubtful because as shown above, Chinese already contained a mood marker with the same modal function as *lia*, the same patterning with stative predicates and almost the same phonological form. That is, to substantiate the claim that Xining *li/lia* is a borrowing, it would be necessary to first establish and explain how Chinese *li* disappeared from the dialect. But more importantly, the borrowing account does not work because *-la* in Monguor does not actually possess the future tense marking function or the mood marking function fulfilled by *lia* in the Xining dialect.

Du (1995: 60-1) does not provide any argumentation or elaboration in support of borrowing, except to present an example in which a phonologically similar suffix, *la*, occurs in a clause which he says has future time reference.⁴⁷ Closer examination of post-verbal markers with the form *la* in Monguor shows that they are functionally different from *lia* in the Xining dialect. Detailed discussion of tense/aspect/mood in the relevant varieties can be found in Slater (2003), on Mangghuer, and Åkerman (2012) on Mongghul. On the one hand, there is the verbalizer *-la*, which occurs with denominal verbs e.g. *fuuda* ‘sack’ : *fuuda.la-* ‘to put into a sack’, *mori* ‘horse’ : *mori.la-* ‘to ride’ (Georg 2003: 294). Likewise, the verbalizer *-la* exists in Mangghuer (Slater 2003: 113). On the other hand, there is a marker *-la* in Mangghuer which Slater (2003: 122, 239ff.) calls a complementizer denoting purpose, and a device which Georg (2003: 301) calls the final converb *-la* also exists in Mongghul. However, these devices perform neither the future nor the modal function of sentential *lia*.

As such, sentential particle *lia* cannot be regarded as a borrowing. Importantly, this conclusion is supported by the fact that Altaicist Jia Xi Ru identifies the modal particle use of *lia* in the Qinghai dialect as a point of difference rather than similarity with regard to *-la* in Monguor and similar forms in other Altaic languages in the region (X.-R. Jia 1994: 62). That is, although the comitative/instrumental postposition *lia* could be a borrowing from Monguor (cf. Chapter 3), as Du (1995) suggests, this does not mean that the sentential particle *lia*, which is a functionally distinct morpheme, is also a borrowing. If all other things were equal (i.e. if a viable source item did exist in a local language), faced with a choice between a ‘pattern replication’ mechanism, which is cross-linguistically widespread in the development of tense/aspect markers, and a direct borrowing account, the former would still have greater *a*

⁴⁷ The example that Du (1995: 60-1) highlights is an imperative, and so not a true future tense usage.

priori plausibility, assuming that Matras and Sakel (2007: 844) are correct that tense/aspect markers resist outright borrowing.

5.9 Conclusion

In summary, this chapter has examined the sentential particle *lia*, and we saw that its future tense and affirmative mood marking functions are conditioned by predicate aspect: with aspectually homogeneous eventualities, *lia* is an affirmative mood marker, but with quantized eventualities, *lia* denotes future tense. A broad array of data was examined to elucidate the temporal properties of *lia*, which was demonstrated to be an aspectually sensitive (future) tense, in de Swart's (1998) sense. Finally, the future marking function of *lia* was argued to have been calqued on to the pre-existing Chinese mood marker *li* from Mongolic non-past suffix -NA, which shows a corresponding patterning with the aspectual class of the situation marked.

Chapter 6 Non-lexical Uses of SAY

6.1 Introduction

Cross-linguistically, the grammaticalization of *verba dicendi* (or verbs of ‘saying’) can lead to a wide range of functional extensions (Heine and Kuteva 2002: 261-9) which have been shown to be variously present in – for example – African (Lord 1993, Güldemann 2008), Sinitic (Chappell 2008, Yeung 2006) and Tibeto-Burman (Saxena 1988) languages.

Güldemann's (2008) study examined extensions of SAY in a representative sample of languages indigenous to the African mainland belonging to Central Sudanic, East Sudanic, Afroasiatic and Niger-Congo stock. Meanwhile, Chappell (2008) discusses SAY grammaticalizations in Chinese dialects (Cantonese, Southern Min, Hakka, Xiang, Wu, Jin, Gan and three varieties of Mandarin), focusing on the development of a complementizer function. Saxena (1988) examined Tibeto-Burman languages of the South Asian subcontinent (including Newari, Magar, Sherpa, Jirel, Mehei, and Adi) in comparison with Indic and Dravidian languages (Nepali, Bengali and Assamese), as well as Tibeto-Burman languages outside of the South Asian subcontinent (Lhasa Tibetan, Lahu, Lisu, Tangkhul Naga and Jinghapaw). The following non-lexical functions of *verba dicendi* are cross-linguistically attested, whilst (i)-(ix) will be discussed in this chapter with regard to the Xining dialect:⁴⁸

- (i) complementizer
- (ii) quotation marker
- (iii) hearsay marker
- (iv) deontic modal (e.g. volitional mood marker)
- (v) mirative marker
- (vi) topic marker
- (vii) clause linkage (reason, purpose, contrastive, condition)
- (viii) naming constructions
- (ix) discourse marker
- (x) irrealis marker
- (xi) ideophone marker
- (xii) simile (relevant for similitives and manner-clause linkage)
- (xiii) indirect causation
- (xiv) listing constructions

Figure 6-1 Functional extensions of speech verbs (cf. Güldemann 2008: 522 and Chappell 2008:49)

With regard to Chinese dialects specifically, Chappell (2012: 81) notes the existence of the following non-lexical functions of SAY and associated structures, discussing in particular

⁴⁸ For (xiii), indirect causation, see Zhao (2015: 81-3) on the Gangou dialect (Minhe county, Qinghai province).

discourse functions for SAY in Southern Min, Hakka, Nanchang Gan, Cantonese Yue and colloquial Beijing Mandarin:

(i)	Complementizer	Verb ₁ Verb _{SAY}
(ii)	Topic marker	SAY + Clause
(iii)	(Composite) conjunctions	Conjunction- SAY
(iv)	Hearsay evidentiality	Verb _{SAY} Verb ₂
(v)	Irrealis marker	(if) SAY + Clause
(vi)	Clause-final discourse marker	Clause + SAY

Among Mandarin dialects, Standard Mandarin (*Putonghua*, the official language of China) is not reported to use *shuo* ‘say’ for non-lexical functions. But Taiwan Mandarin has developed an evidential and complementizer usage and also uses *shuo* in discourse functions (Wang et al. 2003, Su 2004). Meanwhile, various uses of *shuo* in the Beijing dialect are attested: as a quote marker, complementizer, for topic marking, (composite) clause linkage and discourse marking (though not clause-finally), listing constructions and irrealis marking (Fang 2006). The most detailed study relating to SAY verb grammaticalizations in Xining Mandarin was by A.-S. Zhang (2007), who focused on quotatives in the Xining dialect of ethnically Hui speakers. However, as discussed below, various authors have noted the existence of evidential/discourse marker uses. In the wider area, a variety of functions of SAY are also reported for Tangwang, a Mongolicized Sinitic language in neighbouring Gansu province (Djamouri 2013).

The structure of this chapter is as follows. Section 6.2 briefly introduces the lexical speech verb in the Xining dialect. Section 6.3 considers SAY complementizers in Chinese dialects and then introduces four varieties of SAY complementizer in the Xining dialect. Section 6.4 considers evidential and discourse functions of SAY. Volitional mood marking is considered in Section 6.5, following by use as a clause connective in Section 6.6, and then topic and condition clause marking is discussed in Section 6.7. Finally, Section 6.8 summarizes the findings in the chapter.

6.2 Reported speech in Xining Mandarin

With regard to reported speech constructions, the generic speech verb is *fō* (IPA: *fɔ̃⁴⁴*), which is cognate with Mandarin *shuo*. In terms of its syntactic position, *fō* may occur as a full lexical verb both before and after its reported speech complement, and both orders are shown in the same utterance in (272). Aside from word order variation in the dialect, the speech verb-quotation order may be preferred when the quotation is relatively long (Zhao 2015: 87).

(272) *no fo yi xingqi ha chuyuan li a mei, shisi tian li ha*
 1SG say one week TOP exit-hospital FUT PRT NEG, 14 day LOC TOP
cai chou xian li fozho fo-zhe fo a
 only pull.out wire FUT CMP say-ASP PRT PRT

'I said, "Can you get out of hospital in one week?" (He) said that only after fourteen days will they take out the stitches.'

In terms of frequency, in reported speech constructions in the corpus data, lexical verb *fo* 'say' much more commonly preceded the reported speech than followed it (cf. Appendix B). When following the reported speech, speech verb *fo* was usually (but not always) preceded by the complementizer *fozho*.

6.3 SAY complementizer

This section discusses the syntax of complementizers grammaticalized from verba dicendi in Chinese dialects, focusing in particular on whether or not they occur within the complement clause (as 'that'-type elements), or remain attached to the matrix verb complex as 'particle complementizers'. A corpus based analysis is presented of complementizers grammaticalized from the speech verb *fo* 'say' in the Xining Mandarin dialect. Xining Mandarin is shown to possess head-final ('that'-type) complementizers *fozho* and *fo* which occur within the complement clause, as well as a particle complementizer use of *fo* that remains within the matrix verb complex and resembles the use of *shuo* as a complementizer in Beijing Mandarin. In addition, a complex complementizer (combining two instances of *fozho*) is discussed. The differing diachronic origins of the Xining Mandarin complementizers are also explored.

6.3.1 Background to the SAY verb to complementizer change

The development of complementizers from verba dicendi is known to be cross-linguistically widespread (e.g. Saxena 1988, Lord 1993, Heine and Kuteva, 2002: 261-64, Chappell 2008, Güldemann 2008), but the syntactic structure assumed for the resulting SAY-complementizer has not been the same in all of these studies. Lord's (1976) analysis of SAY complementizers in Kwa (Niger-Congo) languages concerns "'that"-complementizers', which function as a 'grammatical marker introducing object complements after verbs of saying and verbs of mental action' (Lord 1976: 179). Consistent with this definition, in generative studies of SAY complementizers (e.g. Yeung 2006, Simpson and Wu 2002), complementizers have been defined as a functional item (e.g. English *that*, *for*, *if* and *whether*) which embeds one clause inside another, and which head a complementizer phrase/clause (CP) (cf. Radford 1997). The

SAY verb to complementizer development therefore entails that in the resulting syntactic configuration, the grammaticalized SAY form occurs within the object clause complement of the matrix verb:

- (273) *'That'-complementizer*
 he [_{VP} shout [_{CP} say [_{TP} he will go]]]

The emergence of 'that'-complementizers from verba dicendi is widely held to involve the same mechanism of 'boundary shift' (Langacker 1977) or 'rebracketing' (Hopper and Traugott 2003) identified for complementizers derived from other sources, such as 'that' in English (Harris and Campbell 1995: 286-291). Thus Heine et al. (1991: 180, 215-6) illustrate this mechanism with the grammaticalization of a complementizer from the demonstrative in Faroese (a Scandinavian language). They show that a redefining of constituent boundaries occurred with respect to the position of the demonstrative-complementizer (cf. discussion in Chappell 2008: 56):

- (274) *(eg sigi tadh:) (hann kemur) > (eg sigi) (at hann kemur)*
 I say that: he comes I say that he comes

With regard to this change among verba dicendi, Heine et al. (1991: 216) argue that the development involves markers in the matrix clause used to introduce direct quotations, which are then reanalysed as part of the complement clause and used to introduce indirect speech. This is the process that they argue occurred for the SAY verb *bé* in Ewe (Kwa, Niger-Congo). From its lexical verb usage in (275), *bé* was reanalysed as a complementizer in the object clause, as shown in (276) where it has been displaced from its speech verb function by the alternative speech verb *gblɔ*.

- (275) *me-bé: mí-á-yi apé* [Ewe (Kwa, Niger-Congo)]
 1SG-say: we-SUBJUNCT-go home
 'I say we should go home.' (Heine et al. 1991)

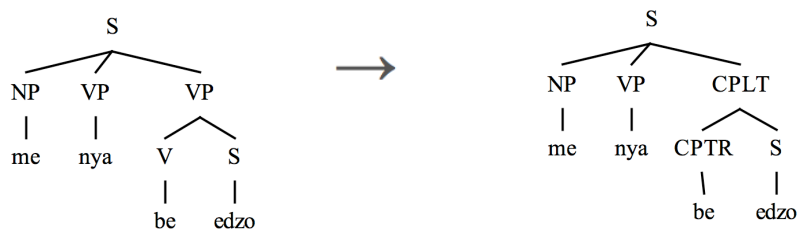
- (276) *me-gblɔ bé mí-á-yi apé* [Ewe (Kwa, Niger-Congo)]
 1SG-say say we-SUBJUNCT-go home
 'I say we should go home.' (Heine et al. 1991)

However, where the grammaticalization of verba dicendi into complementizers occurs from within serial verb constructions (as in the case of Ewe *bé*), the notion of boundary shift/rebracketing has since been argued to be unnecessary. Haspelmath (1998) and Whitman

(2012) argue that actually only 'category change' or 'relabelling' (Harris and Campbell 1995: 63) is involved in the change from SAY verb to complementizer. Thus although there is a change from the verb *bé* being within the matrix clause to being within a subordinate clause, the configurational relations remain the same. This can be seen in Lord's (1976: 182) early illustration of the reanalysis for *bé*, where the configurational relations (as well as the surface string) remain unchanged but there is a categorial change from V to C (or CPTR, in Lord's terms) and from VP to CP (Lord's CPLT):

(277) *me nyá bé édzo* [Ewe (Kwa, Niger-Congo)]
 I know *bé* he-leave
 'I know that he left.'
 (Lord 1976: 182)

(278)



Although these accounts diverge with regard to the mechanism of change, they are in agreement concerning the outcome of the change, and in particular that after reanalysis the SAY complementizer occurs within the complement clause.

However, although the emergence of SAY-complementizers in the above fashion is widely assumed to be the norm, the mechanism involved and the syntactic status of the resulting SAY complementizer must be evaluated on a case by case basis. Thus it has been argued that the above account is not what happens in Chinese dialects. Chappell (2008: 57), in the most extensive study to date of Sinitic complementizers grammaticalized from *verba dicendi*, argues that instead of SAY complementizers with the structural configuration shown in (273), an alternative structure is found in which the grammaticalized SAY forms achieves 'juxtaposition of the matrix construction with its linked proposition' (Chappell 2008: 50). After reanalysis, the complementizer remains outside the complement clause, as shown in (279) (from Chappell 2008: 57), and it functions as a 'clause particle complementizer' (Matisoff 1991: 398):

(279) *Emergence of a particle complementizer*

NP V_[quotative] (*intonational pause*): s[“Direct Speech”]

> NP (V₁[speech act]) V₂ [quotative] s[Indirect speech]

(+changes in prosody and pronominal
deixis)

> NP V₁[cognitive] - COMP (*intonational pause*) - [Complement clause[finite]]

The mechanism of change involves grammaticalization of the second verb in a serial verb construction, but crucially without constituent reanalysis. This kind of change is attested more widely in Chinese, for example in the emergence of the aspectual system. Sun (1998: 162-4) suggests that this was how the imperfective aspect marker *zhe* developed. From being an ordinary verb (as in (280)), *zhe* was used as the second verb in a serial verb construction where it was grammaticalized into a reduced directive verb and then further developed into a suffix-like aspect marker ((281) and (282) respectively).

(280) *Yi zan bu du zhuo shen.* [Chinese]
one hairpin NEG allow attach body
‘Not a hairpin is allowed to be close to (his) body.’ (Sun 1998: 162)

(281) *Fu mi yi dou, song zhe si zhong.* [Chinese]
burden rice one UNIT, send ZHE temple middle
‘(Someone) carried a UNIT of rice and sent (it) to the temple.’ (Sun 1998: 163)

(282) *Mo zhe wo chuang, yang bing bu qi.* [Chinese]
touch PROG/RES sleep bed, pretend ill NEG rise
‘Stroking/resting on the bed, (he) pretended to be ill and wouldn’t get up.’ (Sun 1998: 163)

Chappell's (2008) proposal for SAY complementizers therefore reflects a more common pattern found in the grammaticalization of V₂ in V₁V₂ serial verb constructions. The grammaticalized SAY complementizer forms 'a new complex unit attached to its preceding speech act or cognitive verb, thus forging a looser syntactic relationship of clause linkage with the complement clause which follows' (Ibid. 57). Chappell also notes that the use of this kind of complementizer to introduce reported speech has been found more widely among Asian languages, such as among the Southeast Asian languages studied by Matisoff (1991). With reference to this change in Thai, Matisoff (1991: 398) terms the complementizer a 'clause particle' (hence this designation in (279)): it is used at the end of a non-final clause to introduce a quotative clause selected by an utterance or cognitive verb. In Chappell's study,

the relatively loose relationship with the following complement clause is identified in the fact that an intonation break standardly intervenes between it and the complementizer. This is the case, for example, with *kóng* in Taiwanese Southern Min:

- (283) *lín ban-chek-à kah goá kóng kóng,* [Taiwanese Southern Min]
 2SG:PL youngest:uncle COM 1SG say SAY_{THAT}
goá oân-á ū chò siān-sū là
 1SG also have.PFT do good-deed PRT
 ‘Your youngest uncle told me that I had also done some good deeds.’ (Chappell 2008: 80)

Grammaticalization to a complementizer is thus defined by Chappell not in terms of reanalysis within the complement clause (i.e. as in (273)), but rather involves the tightening of the bond between the SAY complementizer and the preceding lexical verb. When grammaticalization is complete, the SAY complementizer resembles an ‘invariant particle’ that cannot be separated from the verb by any linguistic material (e.g. a direct object, particle, aspect marker) (Chappell 2008: 60-1).

In the following section (Section 6.3.2), I review the status of SAY complementizers in non-Mandarin Chinese dialects in light of the above distinction, before considering Mandarin dialects in Section 6.3.3. Section 6.3.4 introduces the Xining Mandarin data and discusses several complementizers grammaticalized from *fo* ‘say’ (cognate with Standard Mandarin *shuo*). It will be demonstrated that Xining Mandarin is an exception to the norm among Mandarin dialects in possessing a structure corresponding to (273) for a SAY complementizer rather than having only SAY forms which remain outside of the complement clause as in (279). After presenting the Xining Mandarin data (Sections 6.3.4.1-6.3.4.4), Section 6.3.4.5 discusses the embedded status of the complement clause in Xining Mandarin. After that, I consider the word order variation observed in light of a proposed typological universal, the Final-over-Final constraint (Holmberg 2000). Then the emergence of the complementizer function is considered in relation to language contact (Section 6.3.4.7). Finally, Section 6.3.5 concludes the discussion of SAY complementizers.

6.3.2 *SAY complementizers in non-Mandarin Chinese dialects*

Among Chinese dialects in general, a number of studies have argued that ‘that’-complementizers with the structure in (273) exist, although the strength of the empirical evidence presented differs across the languages concerned. In this section Taiwanese

Southern Min, Cantonese, and the Longhui dialect (a Xiang dialect of the Loushao subgroup) will be examined.

6.3.2.1 Taiwanese Southern Min

First, consider the case of *kong* in Taiwanese Southern Min. Simpson and Wu (2002: 76-7) assume that in (284) *kong* is a complementizer in the embedded clause on the basis of the fact that *kong* may occur with cognitive verbs and cannot be aspect marked (facts provided in Hwang 1998).

- (284) *A-hui siong kong(*koe) A-sin m lai* [Taiwanese Southern Min]
 NAME think KONG(ASP) NAME NEG come
 ‘A-hui thought that A-sin was not coming.’ (Simpson and Wu 2002,
 gloss adapted by DB)

However, these diagnostic tests only show that *kong* has been semantically bleached, no longer denoting a speech act, and is morphosyntactically decategorized, no longer behaving as a verb. They do not tell us anything about the syntactic position of *kong* i.e. whether or not it attaches to the complement clause or the preceding matrix verb (this issue was not addressed in Hwang's study). If, as Chappell's (2008) study suggests, *kong* does not form a constituent with the complement clause, then it naturally cannot be treated as a 'that' complementizer with the configuration in (273).

My preliminary inquiries, however, yielded mixed results.⁴⁹ In (285), *kong* can optionally appear in a conjoined clause, apparently providing evidence of constituency.

- (285) *A-hui jimui kong A-sin m lai iah-si (kong) A-bun m lai?*
 NAME think kong NAME NEG come or kong NAME NEG come
 ‘Does A-hui think that A-sin won't come or that A-bun won't come?’

But in (286), if the complement clause is fronted, *kong* cannot remain attached to it, failing the constituency test and in this respect differing from ‘that’ in English (and the SAY complementizer in Xining Mandarin).

- (286) **kong A-sin m lai, A-hui siong*
 kong NAME NEG come NAME think
 (intended) ‘That A-sin won't come, A-hui thinks.’

⁴⁹ I am grateful to Chyan-an Arthur Wang for the following data.

It should also be noted, though, that (286) does not improve if *kong* remains following the matrix verb instead of moving with the fronted clause. The status of *kong* awaits clarification by future research, but it falls short of the full range of syntactic properties possessed by the complementizer ‘that’ in English.

6.3.2.2 Cantonese

Evidence has been presented for a ‘that’-complementizer from SAY in Cantonese. Yeung’s (2006) study is based on natural speech from radio and phone-in programs, and Yeung argues that Cantonese *waa6* has become a ‘that’ complementizer. Beyond demonstrating loss of verbal properties (e.g. the ability to be aspect marked, occurrence with a cognitive verb), Yeung (2006) also applies constituency tests to demonstrate that *waa6* occurs in the complement clause. For example, clauses headed by *waa6* can be coordinated and selected by the verb *lam2* ‘think’, which indicates that *waa6* attaches to the complement clause rather than the matrix verb.

- (287) *ngo5 lam2_zyu6 [CP waa6 keoi5 m4 heoi3,] waak6ze2 [Cantonese]*
 1SG think_ASP [CP WAA 3SG NEG go,] or
[CP (waa6) ngo5 dak1haan4,] sin1 wui5 ceot1jin6
[CP (WAA) 1SG free,] only_when MOD appear
 ‘I think I will be there if (s)he doesn’t go or if I am free.’ (Yeung 2006: 17)

In addition, in Yeung’s (2006: 20) study, unlike in Chappell’s (2008), the Cantonese SAY complementizer can be found with a pause separating it from the verb rather than from the reported discourse, consistent with the analysis of *waa6* as an element attached to the complement clause.

- (288) *keoi5 waa6 <p> waa6 [IP m4 dak1haan4 lai4] [Cantonese]*
 3SG say <p> WAA [IP NEG free come]
 ‘(S)he said that (s)he was not free to come.’ (Yeung 2006: 21)

Nevertheless, this data from Yeung (2006) does not entail that *waa6* is only a ‘that’-complementizer. Tokens of *waa6* as a clause-particle complementizer attaching to the matrix verb are found in Chappell’s (2008) study, for example:

(289) 噉 嗰 個 裴生 呢, [Cantonese]

gam² goh² goh³ Pooi⁴ Sang¹ le¹,
so that CL NAME TOP

就 係 哩 個 丞相 面前 講 話 =,
jau⁶ hai² lei^{5_0} goh³ sing⁴seung³ min⁶-chin⁴ gong² wa⁶ =,
then be.at this CL chief:minister face-front tell SAYTHAT

<Q 你 千祈 唔 好 呀,

<Q *lei⁵ chin¹kei⁴ m⁴ ho² a³,*
2SG thousand:pray NEG good PRT

‘So he, Pooi Sang, said in front of the chief minister (that): “You mustn’t do this ...’

(*Tale of the reborn lady at the red flowering plum* 222-224, Chappell 2008: 78,

glossing adapted by DB)

This suggests that actually Cantonese *waa6* can function as both types of complementizer (a situation which is also not impossible for Taiwanese Southern Min, although we would need to see more evidence for this than is provided in Hwang 1998). The synchronic existence of both types of device is expected on accounts that posit reanalysis of SAY from being a marker attached to the matrix verb to occurring within the complement clause (e.g. as in Fang's 2006 argument concerning Beijing Mandarin, discussed below).

6.3.2.3 Xiang (Longhui dialect)

Before moving on to Mandarin dialects, there is suggestive evidence that a 'that' complementizer grammaticalized from a SAY verb exists in the Xiang dialect group. The Longhui county dialect (Hunan province) has grammaticalized the speech verb *jiang* to a 'that' complementizer. According to Ding (2014: 43), *jiang* has lost the morphosyntax of a verb, no longer accepting adverbial modification or aspect-marking. Ding also reports that *jiang* here no longer denotes a speech act. However, no examples of *jiang* occurring with a cognitive matrix verb are provided (all of the examples where *jiang* occurs as the complement of a matrix verb have speech verbs as the main verb), and so it is difficult to verify the extent to which bleaching of speech verb semantics has actually occurred in this structure.

- (290) *qi wen wo, jiang mege shihou dao* [Longhui dialect (Xiang)]
 3SG ask 1SG *jiang* what time arrive
Zhangjiajie qu hai heshi di
 NAME go PRT suit some
 'He asked me what time is appropriate to arrive at Zhangjiajie.' (Ding 2014: 43, my gloss)

Nevertheless, Ding reports that *jiang* attaches to the complement clause, in line with the structure in (273) rather than that in (279), and this is suggested by the position of the intonation break. Also, the clause marked by *jiang* is not able to stand alone as an independent clause (in this respect, reflecting *that*-marked complement clauses in English; cf. discussion of this criterion below). However, it would be helpful to see other evidence of constituency (e.g. coordination or fronting of the complement clause) to confirm this conclusion. In the following Mandarin dialects, it will be argued that *shuo* 'say' has only developed into a particle complementizer and not a 'that'-complementizer.

6.3.3 *SAY complementizers among Mandarin dialects*

Regarding Mandarin dialects, whilst *Putonghua* (Standard Mandarin) does not use *shuo* 'say' – the generic speech verb – as a complementizer (e.g. Chappell 2008: 64, 81-3), the Beijing and Taiwan dialect both possess a complementizer grammaticalized from *shuo*. With regard to its structure, in this section I follow Chappell (2008), Ding (2015) and Paul (2015) in rejecting the configuration in (273) for these dialects.

6.3.3.1 *Beijing Mandarin*

Three types of usage are identified by Fang Mei (2006) that are argued to form a pathway towards the development of a 'that'-complementizer in the Beijing dialect.⁵⁰ First, there are quotative marker uses, in which *shuo* is the second verb in a serial verb construction and is used to introduce direct and indirect speech ((291) and (292) respectively):

⁵⁰ Glosses for examples cited from Fang (2006) in this section are my own.

(291) *ni xian huiqu gaosu nimen laoye shuo wo mingerge dafa ren,*
 2SG first back.go tell 2PL grandfather shuo 1SG tomorrow send people,
ba yinzi song le qu ba. [Beijing Mandarin]
 BA silver give ASP go PRT
Na ge jiaren shuo mei fazi, jiu daying le yisheng hui qu le
 that CL relative say NEG way, just agree PFV one.sound back go PFV
 'You first go back and tell your grandfather, "I will send people tomorrow, send the
 money." That relative said there is no way. He just agreed and went back.' (Fang 2006:
 110)

(292) *ta jiu gaosu shuo, ta gugu lai le* [Beijing Mandarin]
 3SG just tell shuo, 3SG aunt come PFV
 'He just said his aunt has come.' (Fang 2006: 110)

Syntactically, as a quotative device in a serial verb construction, *shuo* remains adjacent to the preceding verb if the quotation is fronted:

(293) *tamen yijing you bannian duo mei you xiuxi ri le,* [Beijing Mandarin]
 3PL already have half-year more NEG have rest day CRS,
naxie nongmingong huiyi shuo
 those migrant worker recall shuo
 'It has already been more than half a year without a day off, those migrant workers
 recalled.' (Fang 2006: 111)

Secondly, there are what Fang (2006: 111) calls 'semi-complementizer' uses. Of the four criteria that Fang (2006: 112-3) adopts to identify the grammaticalization from quotative marker to a 'that'-complementizer, the semi-complementizer exhibits only (a) and (b), semantic bleaching and morphosyntactic decategorialization. It is therefore not treated by Fang as a fully grammaticalized 'that' complementizer.

- a) Indicates the relationship between clauses rather than denoting a speech act.
- b) Loss of verbal morphosyntactic properties (ability to be aspect-marked and modified by adverbs)
- c) *Shuo* is attached to the start of the clause (as opposed to the verbal complex)
- d) The clause that *shuo* is attached to is dependent, unable to stand alone in the discourse (cf. *that* clauses in English)

As a semi-complementizer, *shuo* does not form a constituent with the complement clause (criteria (c)). In addition, the clause that it marks is able to stand alone in discourse, unlike a clause containing a 'that'-complementizer in English (cf. criteria (d)).⁵¹ Instead, *shuo* is attached to the matrix clause verb, in line with Chappell's (2008) definition of a particle complementizer. When the semi-complementizer *shuo* occurs with cognitive verbs, Fang (2006: 111) notes that its quotative function can still be seen in that there is no deictic shift for pronouns:

- (294) *you henduo ren, tamen jiu renwei shuo,* [Beijing Mandarin]
 have very.many people, 3PL just think shuo,
zhe dei zhengfu gei women jiejie, women xiagang
 this must government for 1PL resolve, 1PL come.off.duty
bu shi women ziji de cuoer
 NEG be 1PL self POSS fault
 'There are many people, they just think, the government should resolve this for us,
 being laid off isn't our own fault.' (Fang 2006: 111)

However, an indication of its role as a clause-linking device is that unlike with the quotative verb usage in a serial verb construction (cf. (293)), the quotation introduced by semi-complementizer *shuo* cannot be fronted so as to leave the semi-complementizer attached to the matrix clause verb (Fang 2006: 111-2). That is, as a semi-complementizer, *shuo* must occur between the clauses that it is linking. Hence (296) (= Fang's (15')) is ungrammatical:

- (295) *ta yinggai lijie shuo, ni dui ta de zhe zhong yueshu shi*
 3SG should understand shuo, 2SG to 3SG POSS this kind restriction be
dui ta de yizhong guanxin [Beijing Mandarin]
 to 3SG POSS a.kind care
yizhong ai, er bu shi qiangzhixing de cuoshi
 a.kind love, CONJ NEG be controlling POSS measure
 'He should understand, the restrictions you are putting on him are a kind of care, a
 kind of love, and not controlling measures.' (Fang 2006: 111)

⁵¹ For example, the complement clause *I will go* in *he said "I will go"* can stand as an independent clause, but *that he will go* in *he said [that he will go]* cannot.

- (296) **ni dui ta de zhe zhong yueshu shi dui ta de yizhong guanxin*
 2SG to 3SG POSS this kind restriction be to 3SG POSS a.kind care
yizhong ai, er bu shi qiangzhixing de cuoshi [Beijing Mandarin]
 a.kind love CONJ NEG be controlling POSS measure
ta yinggai lijie shuo
 3SG should understand shuo (Fang 2006: 112)

Moreover, as Paul (2015: 902, note 198) notes, neither can *shuo* attach to the complement clause when the complement clause is fronted, indicating that constituent reanalysis has not occurred:

- (297) [*(*shuo) shenghuo li que -le dian shenme*], *wo zongshi juede (#shuo)*
shuo life in miss-PFV a.bit something 1SG always feel shuo
 'That something is missing in my life, I have always thought so.' (Paul 2015: 565, note 198)

In addition, as Paul (2015: 565, note 198) observes, it can be seen that grammaticalization to a 'that'-complementizer in the complement clause has not occurred because a pause is natural between *shuo* and the complement clause but not between the main verb and *shuo*. Thus *shuo* still occurs as the second item in a serial verb structure (although morphosyntactically and semantically reduced), rather than within the complement clause.

Finally, with regard to 'that'-complementizer uses, only one example of Beijing Mandarin *shuo* functioning as an 'object clause complementizer' is presented:

- (298) *dajia xiang wen nin de shi, shuo ruguo tamen xiang qu kekesili,*
 everyone want ask 2SG NMLZ is, shuo if 3PL want go kekesili,
tamen yinggai you shenme yang de zhunbei [Beijing Mandarin]
 3PL should have what kind POSS preparation
 'What everyone wants to ask you is if they want to go to Kekesili, what kind of preparation should they have?' (Fang 2006: 113)

However, as Ding (2015: 167-9) points out, this could represent a usage of *shuo* as a conditional clause marker rather than a 'that'-complementizer, since the use of *shuo* as a conditional marker is another usage that Fang shows is found in the Beijing dialect. When *shuo* is a conditional marker, it occurs at the start of the condition clause, as in (299).

(299) *ni ziji dei you zhuyi. shuo ni fumu shenme de jia li ren*
 2SG self must have care. shuo 2SG father what POSS family LOC person
dou bu zai ni shenbian, ni zenme ban na? [Beijing Mandarin]
 all NEG at 2SG side, 2SG how do PRT
 'You be careful. If your father and mother and relatives are not by your side, what
 will you do?' (Fang 2006: 115)

(298) is therefore akin to uses like (299), except that *shuo* and another conditional marker *ruguo* co-occur in a structure involving redundancy, which is not an uncommon phenomenon in languages (cf. Ibid., Wit and Gillette 1999). Ding (2015: 168) further notes that if *ruguo* is deleted in (298) then there is no change in meaning, and in fact the *shuo* marked clause can enter the discourse as a stand-alone utterance (contrary to criterion (d)).

(300) *shuo ruguo tamen xiang qu kekesili, tamen yinggai you* [Beijing Mandarin]
shuo if 3PL think go NAME, 3PL should have
shenme yang de zhunbei
 what kind POSS preparation
 'If they want to go to Kekesili, what kind of preparations should they make?' (Fang
 2006: 170)

However, perhaps most importantly nowhere else in Fang (2006) does *shuo* occur in the complement clause of a matrix verb of cognition or communication, which makes this analysis for (298) questionable, given that we know that *shuo* functions as a conditional marker.

Finally, Beijing Mandarin *shuo* can also be used as a 'noun phrase complementizer' (Fang (2006: 113), in which case *shuo* follows a noun and further expands upon its denotation. In these uses, *shuo* is separated from the preceding noun by a pause (orthographically, a comma).

(301) *zai ni gang xia hai de shihou, you mei you yi ge*
 at 2SG about down sea POSS time, have NEG have one CL
yuqi, shuo wo yao zhuandao duo shao qian [Beijing Mandarin]
 prediction, shuo 1SG will make how much money
 'When you are about to go to sea, do you or do you not have a prediction, say how
 much money will I make?' (Fang 2006: 113)

These uses are unlikely to be related to the proposed pathway from quotative to semi-complementizer to object clause complementizer because they occur in an entirely different

structure from the quotative and semi-complementizer. The latter are argued to have emerged from a serial verb construction, but these uses occur clause-initially following a noun. Therefore noun clause complementizer uses do not evidence a change from particle complementizer (structure (279)) to ‘that’-complementizer (structure (273)).

6.3.3.2 Taiwan Mandarin

Beyond Beijing Mandarin, in Taiwan Mandarin a SAY complementizer is also reported to have grammaticalized from *shuo*:

- (302) *Ta jiang shuo ni yao mai diannaoh.* [Taiwan Mandarin]
 3SG say shuo you want buy computer
 ‘She said that you wanted to buy a computer.’ (Wang et al. 2003: 479, my gloss)

Hwang (1998: 577) uses the same two diagnostic tests discussed above for *kong* in Taiwanese Southern Min to demonstrate the change in category from verb to complementizer. In particular, *shuo* can be used with a matrix cognitive verb and it cannot be aspect marked.

- (303) *Ben-lai hai xiang shuo (*le) ruguo ta jiang ko-shi...* [Taiwan Mandarin]
 originally still think shuo (*ASP) if he OM oral-test
 ‘Originally (I) still think that if he handles the oral tests...’ (cf. Hwang 1998: 577)

Su (2004) proposes a similar pathway of change to that just discussed for Beijing Mandarin, beginning with *shuo* as the second verb in a serial verb construction (as in (304), where it shares the same subject argument as the first verb).

- (304) *zhu taibei-xian de wang xiaojie lai xien shuo:*
 live NAME-county POSS NAME miss come letter shuo
wo you yige nanyou [Taiwan Mandarin]
 1SG have a.CL boyfriend
 ‘Letter from Miss Wang in Taipei County says: I have a boyfriend.’ (Su 2004)

Then, from a quotative function as in (304), Su (2004) treats *shuo* as developing into a complementizer:

(305) *ni hen keneng jiu buhui zai jianchi shuo zhexie zoupin*
 2SG very possible just NEG.can IPFV insist shuo these work
ping-dan-wu-qi le [Taiwan Mandarin]
 plain ASP

‘It is possible that you would no longer insist that these works are plain.’ (Su 2004)

According to Wang, Katz and Chen (2003: 458), Taiwanese Mandarin *shuo* acts as a complementizer like "that" in English', but as discussed for Beijing Mandarin it does not attach to the complement clause but to the preceding verb. This is indicated by the separation between *shuo* and the following complement clause consisting of an interjection and a pause:

(306) *Ta jiu faxian shuo aiya,* [Taiwan Mandarin]
 3SG ADV find shuo IRJ
 .. *ta xiansheng neng zai Taiwan zhe difang xinzhū oh,*
 3SG husband could in Taiwan this place accept.lord PRT
 .. *shizai shi shen jijide dailing.*
 actually be God actively guide

Y: ‘She found that the main reason why her husband could accept the

Lord (Jesus) is God’s guidance.’ (based on Wang et al. 2003: 467-8)

Nevertheless, many studies have assumed Taiwanese Mandarin SAY to have grammaticalized into a 'that' complementizer in the embedded clause (a.o. Cheng 1985: 366, Simpson and Wu 2002: 76, Wu 2004, Hsieh and Sybesma 2011). However, like for *kong* in Taiwanese Southern Min, the syntactic tests necessary to prove that *shuo* actually does form a constituent with the complement clause were not applied by Hwang (1998) or by the studies just cited. That is, inability to be aspect-marked and occurrence with a cognitive verb cannot determine the syntactic position of *shuo*, and so cannot distinguish a particle-like element attached to the matrix clause verb from a 'that'-complementizer. Also, a teleological perspective in which the grammaticalization of a 'that' complementizer is said to be underway is not necessarily tenable given that, as discussed above, it is not the case that constituent reanalysis always occurs for SAY complementizers in Chinese dialects.

The situation in Taiwan Mandarin therefore looks the same as in Beijing Mandarin. In both dialects, *shuo* introduces a complement clause as a particle-like marker within the main clause, and there is no evidence that it has been reanalysed as a 'that'-complementizer in the object clause (i.e. with the structure in (273)). By contrast, in Xining Mandarin SAY will be seen to function as a complementizer that occurs within the complement clause.

6.3.4 SAY complementizers in Xining Mandarin

The existence of a complementizer grammaticalized from SAY in Xining Mandarin has not gone unnoticed. A.-S. Zhang (2007) discusses the use of *shuo* and *shuoze* as quotative markers in the speech of the Hui ethnic group in Xining. Meanwhile, Zhao (2015) recently applied the term 'complementizer' to the SAY verb in his discussion of the Gangou dialect. In this section I discuss four complementizers derived from the speech verb *fo*, namely the head-final complementizer *fozho* (by far the most common in my corpus data) and head-final complementizer *fo*, both of which attach to the end of the reported discourse. Then I will discuss particle complementizer *fo* which precedes the reported discourse, and finally a variant of the head-final complementizer *fozho* which involves doubling of SAY.⁵²

6.3.4.1 Head-final complementizer *fozho*

The most striking difference between Xining Mandarin and other Chinese dialects with regard to the SAY complementizer concerns the word order. As illustrated above, complementizers among Chinese dialects elsewhere uniformly precede the clause that they introduce (Chappell 2008: 52), but the Xining Mandarin complementizer occurs to the right of the complement clause.⁵³ With matrix speech verbs, *fozho* functions as a quotative complementizer⁵⁴ attached to the end of the embedded clause (on the embedded status of the complement clause, see Section 6.3.4.5).

- (307) *ni bu jie ge fozho fo li ma*
2SG NEG lend CL CMP say FUT Q
'Will you say that you will not lend it?'

⁵² Recall that aside from in the speech of ethnically Hui speakers, who use the initial consonant [ʃ], the Xining dialect systematically replaces [ʃ] with [f].

⁵³ It is well-known that SAY verbs in Sinitic languages also grammaticalize into sentence-final particles that fulfil various discourse functions (e.g. as shown by Simpson and Wu (2002) for *kong* in Taiwanese Southern Min), and these are often termed C(omplementizer) heads in the generative literature, but here I am discussing complementizers as clause-linking/subordinating devices.

⁵⁴ Following convention (e.g. Heine and Kuteva 2002: 268), I will term *fozho* a 'quotative complementizer' when it occurs with a matrix speech verb. The term indicates that SAY is functioning simultaneously as a quotative marker and a clausal subordinator. When occurring with a matrix verb of cognition, I refer to it simply as a 'complementizer' or a 'general complementizer', because it no longer functions as a reported speech marker.

- (308) *shitou tai-zho zhe ge ban ge nian zhong-ha-zho fozho*
 stone lift-IPFV this CL half CL year swell-COMPL-IPFV CMP
mei fo-zho ma?
 NEG say-ASP Q
 'Haven't (I) said that due to lifting stones, for half a year (his finger) has been swollen?'

The SAY complementizer *fozho* (IPA: fətʂɔ or fvtʂɔ, consists of a fossilization of the speech verb *fo* (IPA: fɔ⁴⁴) and the IPFV marker *zho* (IPA: tʂɔ; cognate with Standard Mandarin *zhe*). Due to its fossilized status, *fozho* cannot be broken up by inserting any material between *fo* and *zho*, and *zho* no longer conveys imperfective meaning.

In addition to occurring with final matrix speech verbs as shown above, *fozho* can also mark complement clauses that follow rather than precede the matrix verb, although this was less common in the corpus data (17 tokens occurred with an initial matrix verb compared to 30 with a final matrix verb):

- (309) *ni de mama fo-zhe zai bu jin fozho*
 2SG POSS mother say-IPFV again NEG enter CMP
 'Your mother said, '(I) will not enter (there) again.'

Moreover, as well as with the matrix generic speech verb *fo*, *fozho* has generalized to occur with other speech verbs such as *chuan* 'spread' and *han* 'shout' (a full list of matrix verbs with which *fozho* occurred can be found in Appendix B):

- (310) *Qinghai daxue na haihao fozho chuan-zho zho*
 Qinghai university that not.bad CMP spread-ASP PRT
 '(They) spread around that Qinghai university is not bad.'

- (311) *gou a che-tuo, lang lai li fozho han lia ko*
 dog PRT bark-start, wolf come FUT CMP shout PRT PRT
 'The dog started barking. (S/he) was shouting that a wolf is coming.'

With regard to cognitive verbs, A.-S. Zhang's (2007) study of the Xining dialect of the Hui ethnic group did not include any examples of *shuo* and *shuo* (the Hui pronunciation of *fozho* and *fo*) marking the complement of a head-final matrix cognitive verb, though one example was presented with an initial cognitive matrix verb (A.-S. Zhang's (28)). Accordingly, A.-S. Zhang (2007) discussed SAY as a 'quotative marker' rather than a 'complementizer'.

But beyond speech verbs, in the corpus data for the present study *fozho* marked the complement of cognitive verbs *xiang* 'want', *yiwei* 'think' and *simen* 'think'. The use of *fozho* with cognitive verbs shows that *fozho* has been bleached of speech verb semantics, and can function simply with the grammatical function of a complementizer.

(312) *na no ha qu ha hai mai ge fuxi*
 then 1SG TOP go COND still buy CL revision
ziliao fozho xiang-zho zho
 material CMP want-IPFV PRT
 'I think that if I go, I will still buy revision materials.'

(313) *zai hai chi-huai li fozho simen-zhe*
 PRT still eat-broken FUT CMP think-IPFV
 '(I) think (I) will get sick through eating bad food.'

(314) *ni yiwei jia zhuan fozho ma*
 2SG think 3SG transfer CMP Q
 'You thought that he transferred?'

Zhao (2015) also includes examples with matrix cognitive verbs for the Gangou dialect:

(315) *wo ni jiantian gaoxing xie fozho xiang-zhai*
 1SG 2SG everyday happy some CMP want-IPFV
 'I want that you are happy everyday.' (Zhao 2015: 81)

The reported discourse marked by *fozho* can be direct as well as indirect speech. In the second sentence in (316)=(272)), *fozho* marks a direct quotation. This can be seen in that it takes as its reference point for the temporal expression the time of the original conversation (i.e. fourteen days from when the surgical operation occurred) and not the time when the speaker reports the utterance.

(316) *no fo yi xingqi ha chuyuan li a mei, shisi tian li ha*
 1SG say one week TOP exit.hospital FUT PRT NEG, 14 day LOC TOP
cai chou xian li fozho fo-zhe fo a
 only pull.out wire FUT CMP say-IPFV PRT PRT
 'I said, "Can you get out of hospital in one week?" (He) said that only after fourteen days will they take out the stitches.'

However, the example in (317) was elicited to provide an unambiguous illustration of *fozho* marking indirect speech (a shift in pronominal deixis has occurred for the subject of the complement clause):

- (317) *jia no ha jia Beijing qu lia fozho fo-zhe*
 3SG 1SG OBL 3SG Beijing go PRT CMP say-ASP
 'He said to me that he will go to Beijing.' (Elicited)

As discussed above, if *fozho* is able to occur as a 'that'-complementizer, then it should form a constituent with the clausal complement of the verb in the matrix clause. Evidence that *fozho* forms a constituent with the complement clause comes from its behaviour when the complement clause is fronted: *fozho* remains attached to the complement clause rather than occurring juxtaposed to the main verb:

- (318) *na ge yatou datie zho fozho fei fo-zhe*
 that CL girl stupid IPFV CMP who say-ASP
 'Who said that girl is stupid?'

Furthermore, a phonological indication of the tightness of the connection between *fozho* and the complement clause is that no intonation break intervenes between the reported speech and the complementizer. Thus even as a quotative marker, *fozho* (and *fo*, discussed below), attaches to the end of the complement clause and so syntactically is the head-final equivalent of a 'that'-complementizer (cf. (273)). That is, the structure for an example like (319) is something like that shown by the bracketing here:

- (319) *ni bu jie ge fozho fo li ma*
 2SG [[[[NEG lend CL] CMP_{CP}] say_{VP}] FUT_{TP}] Q
 'Will you say that you will not lend it?'

Before moving on to the next device, it should be noted that another (low frequency) usage found for *fozho* was as a quotation marker in naming constructions ((320), below), where it attaches to the complement of matrix verb *jiao* 'call' (2 tokens). This corresponds to quotation marker uses noted by Lord (1976: 180) for Ewe *bé*, as shown in (321). In this context, *fozho* and *bé* are not technically functioning as complementizers, since they do not mark a clausal complement.

(320) *ni ha amen jia jiao lia, zao zhierzi fozho jiao a mei*
 2SG TOP how 3SG call PRT PRT nephew *fozho* call PRT NEG
 'How do you call him? Should I call (him) "nephew"?'

(321) *me-yó vi-nyé-a bé adzó* [Ewe, (Kwa, Niger-Congo)]
 I-call child-my-the bé NAME
 'I called my child "Adzo".'
 'I called my child Adzo.' (Lord 1976: 180)

Another similar example of *fozho* marking a non-clausal complement is as shown:

(322) *en, hao fozho fo-zhe*
 PRT, good *fozho* say-ASP
 '(S/he) said "good".'

6.3.4.2 Head-final *fo* complementizer

A less frequently used variant of the SAY complementizer was bare *fo* (IPA: fɔ), which also occurs at the end of the clausal complement of a matrix speech or cognitive verb (12 tokens of this usage occurred). However, as noted by A.-S. Zhang (2007), bare *fo* can only occur with head-initial speech/cognitive verbs: with head-final matrix verbs, *fozho* must be used as the complementizer (cf. discussion in Section 6.3.4.7).

(323) *jia fo-zho jia bao-gei de shi senlin gongan fo*
 3SG say-IPFV 3SG apply-CAUS NMLZ be forest police CMP
 'He said that the one he applied for was the forest police station.'

(324) *no hai yiwei jiamen fang ha tui-dao-zhe fo*
 1SG still think 3PL room OBJ withdraw-COMPL-IPFV CMP
 'I still thought they had checked out of the room.'

This device attaches to the complement clause like head-final *fozho* discussed above, and remains attached to the complement clause if the latter is fronted.

(325) *tai nan-le fo, jia fo*
 too difficult-ASP CMP, 3SG say
 'Too difficult, he said.'

In the corpus data its distribution across verb types was much more restricted than found for *fozho*: *fo* only occurred with the generic matrix speech verb (*fo* 'say', 10/12 uses) and with

yiwei 'think' (2 uses). But based on elicitation using the sentence in (326), it was apparent that *fo* can also occur with other cognitive verbs (*xiang* 'think', *simou* 'think' *gumou* 'estimate/think/infer'):

- (326) *no* _____ *zhe*, *waimian de* *tianqi* *yinggai hao-zhe* *fo*
 1SG IPFV outside POSS weather should good-IPFV CMP
 'I _____, the weather outside is probably good.' (Elicited)

6.3.4.3 Particle complementizer *fo*

In addition, 4 tokens of a pre-quotation variant *fo* occurred in the corpus data (cf. A.-S. Zhang 2007: 349). This complementizer conforms to the usual pattern in Chinese dialects by not forming a constituent with the complement clause (cf. Section 6.3.2 - 6.3.3). In (327), *fo* is separated from the complement clause morphologically, by a particle, and phonologically, by an intonation break.

- (327) *na yi ge laoshi fo-zho fo me, zhe ge yatou houdao zho*
 that one CL teacher say-IPFV CMP PRT, this CL girl fearsome NMLZ
xuejia
 scholar
 'That teacher said, this girl is a fearsome scholar.'

Syntactically, this device resembles the Beijing SAY complementizer and reflects the properties typical of SAY complementizers across Chinese dialects as described by Chappell (2008): it precedes and is not integrated into the complement clause. Informants found that an intonation break cannot be inserted to separate the matrix speech verb from this usage of *fo*, but only between *fo* and the complement clause:

- (328) *jia fo-zhe (*,) fo(,) jia lai lia*
 3SG say-PFV CMP 3SG come PRT
 'He said that he will come.' (Elicited)

If the complement clause is fronted, then unlike the head-final complementizers discussed above, the the particle complementizer may not move with the quotation but remains after the speech verb:

- (329) *(*fo) jia de linju you ge maoniu Xiao Li fo-zhe (fo)*
 CMP 3SG POSS neighbour has CL yak NAME say-ASP CMP
 'His neighbour has a yak, Xiao Li said.' (Elicited)

Interestingly, in (330) the fronted complement clause is marked by the *fozho* complementizer, but bare *fo* also occurs and remains attached to the verbal complex. Similarly in (331), where no fronting occurs, the particle complementizer and the head-final *fozho* complementizer occur in the same reported speech construction, illustrating the fact that they are syntactically distinct devices:

(330) *ran-gei-le* *liang tian fozho* *hai* *jia fo-zho* ***fo*** *sa*
 dye-CAUS-PFV two day CMP still 3SG say-ASP CMP PRT
 'Still dyed it for two days, S/he said.'

(331) *na* *ge* *hangzhang* *fo-zho* ***fo,*** *zho* *ni-de*
 that CL bank president say-ASP CMP, PRT 2SG-POSS
yatou *zhijie* *lai* *gei* ***fozho***
 girl directly come CAUS CMP
 'That bank president said, "Have your girl come straight away.'"

The particle complementizer *fo*, which as noted above is a feature of SVO constructions, is likely to have emerged by the same mechanisms by which this device has emerged elsewhere among Chinese dialects. Elsewhere, its diachronic origin has been argued to be a (head-initial) verb serialization structure (e.g. as in Beijing Mandarin, discussed in Section 6.3.3). This suggests that rather than being a product of contact with the local SOV languages or a feature of the historic SOV dialect of Xining Mandarin, the particle complementizer is likely to be a relatively recent development associated with the New Xining dialect (cf. Chapter 2), because the latter makes greater use of SVO order under the influence of Standard Mandarin. Indeed, Peyraube (2016: 77-8) suggests that across Chinese dialects more generally, where it has occurred, the grammaticalization of SAY into a complementizer is a process which was only completed fairly recently, with true complementizer uses attested in Taiwanese Southern Min, Taiwan Mandarin and Beijing Mandarin only from the second half of the 20th century. Next, a complex SAY-SAY complementizer is considered.

6.3.4.4 Complex SAY-SAY complementizer

Complex complementizers involving two compounded speech verbs have been noted for some languages, such as Yoruba (Lord 1976: 184), and there is evidence of such a device in Xining Mandarin. In Yoruba, as well as the SAY verb *kpé* having been reanalysed as a complementizer, a complex complementizer unit exists (*wi-kpé*), composed of *kpé* and

another grammaticalized SAY verb, *wí*. When following a matrix speech verb *sɔ*, this results in a SAY SAY- SAY string:

(332) *ó sɔ kpé adé lɔ* [Yoruba]
 he say (say) NAME go
 'He said that Ade went.' (Lord 1976: 184)

(333) *ó sɔ wí-kpé adé lɔ* [Yoruba]
 he say (say-say) NAME go
 'He said that Ade went.' (Lord 1976: 184)

This diachronic development is described by Heine et al. (1991: 246-7) as an example of a 'recursive cycle' of grammaticalization, in which following the decline or disappearance of one form through grammaticalization, the same conceptual pathway of change begins again with another form of the same kind as was recruited in the first cycle. In Yoruba, firstly, *kpé* is grammaticalized from a SAY verb to a complementizer. Then the verb *wí* is recruited as a SAY verb in place of *kpé*, and grammaticalized to a complementizer in the same way as *kpé* was. Because *kpé* is not lost, the two forms are compounded into a complex complementizer. Thirdly, the verb to complementizer cycle is ready to begin again for another verb, *ní* 'say', with speakers often using *ní* instead of the complex complementizer:

(334) *ó ní adé lɔ* [Yoruba]
 he say NAME go (Lord 1976: 184)

In Xining Mandarin it is possible for a pre-quotation speech verb to occur in a sentence that also contains a grammaticalization of the speech verb following the quotation (1 usage of this type occurred in the corpus data, shown in (335)).

(335) *na jia Maping fo pao-zho liang tang fozho-fozho bei*
 that family NAME say run-PFV two trip CMP-CMP PRT
 'Ma Ping said (they) made two trips.'

In elicitation sessions with informants from Haiyan and Menyuan counties, structures like (335) were easy to elicit as stand alone utterances. In this structure, unlike with an ordinary final speech verb, it is not possible for negation or a manner adverb to occur between the post-quotation *fozho* and the final *fozho*:

- (336) *jia no ha fo-zho jia Beijing mei xiang qu gongzuo*
 3SG 1SG OBJ say-ASP 3SG Beijing NEG want go work
*fozho (*mei/ *qiaoqiao-de) fozho*
 CMP NEG quietly-DE) CMP

‘He said to me, “He doesn’t want to go work in Beijing.”’ (Elicited)

In this structure the final SAY form therefore lacks the properties expected of a verb, and cannot be separated from the preceding SAY complementizer. This same pattern is found in A.-S. Zhang's (2007: 348) study of the speech of the Hui ethnic group in Xining, but in addition, A.-S. Zhang shows that the complement clause can be fronted with the ‘complex complementizer’ attached, indicating that it forms a constituent with the reported speech clause:⁵⁵

- (337) *jia xue li qu lia shuozhe shuozhe, jia no ha shuo-zhe*
 3SG school LOC go FUT shuozhe shuozhe, 3SG 1SG OBJ say-PFV
 ‘He said to me he will go to school.’ (A.-S. Zhang 2007: 348, my gloss)

A.-S. Zhang (2007: 348) calls the second of the two tokens of *shuozhe* a non-core verb (*fei hexin dongci*). However, these examples suggest that as described by Heine et al. (1991) the SAY to complementizer grammaticalization cycle is beginning again in sentences that already contained a complementizer grammaticalized from the speech verb.

6.3.4.5 *The embedded status of the complement of head-final complementizer fozho in cross-linguistic perspective*

In line with the various other non-Sinitic syntactic features found in the dialect (cf. Chapter 3), the Xining Mandarin complementizer *fozho* shows strikingly non-Sinitic properties and resembles instead complementizers grammaticalized from *verba dicendi* in the neighbouring Mongolic and Turkic languages and also in the local variety of Tibetan (Amdo Tibetan). This is seen firstly in its position: in Sinitic, complementizers precede the complement clause, often attaching to the matrix verb (cf. Section 6.3.2 - 6.3.3), whereas Xining Mandarin *fozho* attaches to the end of the complement clause like in Bodic, Turkic and Mongolic languages. (338) illustrates for the Mangghuer language spoken in Minhe county in Qinghai province:

⁵⁵ As mentioned above, in the Hui dialect the pronunciation for the complementizer is ʂo (A.-S. Zhang 2007: 343).

- (338) *tingsa jiutou yaomao r-a ge-ji* [Mangghuer (Mongolic)]
 Later nine:head ghost come-VOL QUOT-IPFV
dayingla-jiang.
 promise-OBJ:PERF
 ‘Then Nine-headed Ghost promised, saying “I’ll come.”’ (Slater 2003: 268)

Similarly, Lin’s (1985: 115-6) Salar data on reported speech constructions shows *de* ‘say’ marking the complement of post-quotation matrix speech verbs.

- (339) *zjŋ ifi-ndiyi avutŋux dʒumin a de zaGəra-dʒi* [Salar (Turkic)]
 well inside boy save PRT say shout
 ‘The boy in the well shouted, “Save me!”’ (Lin 1985: 116)

Meanwhile, in Amdo Tibetan,⁵⁶ a post-quotation SAY complementizer also exists: *zi* functions as a complementizer, grammaticalized from the speech verb *zer* (cf. DeLancey 2006: 284 on the cognate form in Lhasa Tibetan). The *zi* complementizer occurs in the clausal complements of speech and cognitive verbs.

- (340) *kʰasaŋ tɕʰi ŋa-la tɕʰu də-a gagə zi* [Amdo Tibetan]
 yesterday 2SG.ERG 1SG-DAT 2SG here-LOC like *zi*
ɕe kə
 say SFP
 ‘Yesterday you said to me, “You like it here”.’ (class notes)
- (341) *kʰərgi ɕiɔ tɕəŋ gə ju-a dʒu zi dʒan-gəu kə* [Amdo Tibetan]
 3SG NAME POSS house-LOC go.IPFV *zi* want-IPFV SFP
 ‘He wants to go to Xiao Zhang’s house.’ (class notes)

A further similarity between the Xining Mandarin *fozho* marked clauses with a final matrix verb and the scenario in the local Mongolic, Turkic and Tibetan languages is that there is no indication that the status of the reported discourse as direct or indirect speech correlates to a change in its syntactic status as a subordinate clause. In both cases, the reported discourse can be interpreted as embedded within the matrix clause. Slater (2003: 223) argues that direct quotations such as that in (338) are embedded, since they are surrounded by matrix clause

⁵⁶ Unless otherwise noted, the Amdo Tibetan data in this chapter comes from a speaker from Tongde county, Hainan prefecture, Qinghai province.

languages, when selected by a final matrix verb, the *fozho*-marked complement clause can be regarded as embedded irrespective of the status of the reported discourse as direct or indirect speech.

Arguments against the analysis of reported speech as the object complement of a transitive speech verb focus on differences between reported speech constructions and ordinary verb-object constructions. These differences include properties which indicate a lower level of integration into the matrix VP than found for ordinary nominal objects. Whilst there is not space to treat this issue in detail here (see Güldemann 2008: 224-44 for discussion), it can be noted that the *fozho* complementizer in verb-final structures can be relatively straightforwardly treated as occurring in an embedded complement clause. The level of integration of the complement clause within the main clause is visibly greater with final than with initial matrix speech verbs in Xining Mandarin. For example, a degree of independence is evident with an initial matrix speech verb in that sentence-final particles can intervene between the verb and its complement - which is not normally possible for other VO constructions (cf. also (327)).

(346) *Laoshi jia fo-zho lia zhe ge nian-ha hudie congming na*
 teacher 3SG say-ASP PRT this CL study-COND very clever PRT
 'The teacher says if (you) study this, (you) will be very clever.'

However, with a head-final speech verb, the only material which may intervene between the complement clause and the verb (that is, between the complementizer *fozho* which marks the end of the complement clause and the following main verb) is that which can intervene between an ordinary object and a following verb (e.g. a negation marker, as in (308) above, which resembles an (S)-O-Neg-V structure; cf. Wang and Dede 2016: 416). Therefore in this respect, the complement of head-final speech verbs behaves more like an ordinary object than the complement of a head-initial speech verb. Similarly, in the *fozho*-marked examples with an initial speech verb, the verb was usually separated from the following complement clause by a pause, as in (347), but no intonation break intervenes between a head-final complementizer and a final matrix verb.

(347) *no fo, jia li jin na fozho*
 1SG say, house LOC enter PRT *fozho*
 'I said, "Go into the house."'

Therefore unlike reported speech occurring with an initial speech verb (the syntactic status of which is more controversial), with a final matrix verb the reported speech clause does show a high level of integration within the matrix clause (cf. Lehmann 1988). Having now introduced the data concerning SAY complementizers in the Xining dialect, the next section considers the word order variation observed in relation to a proposed universal constraint on possible syntactic configurations.

6.3.4.6 *The Final-over-Final constraint*

The Final-over-Final constraint (Holmberg 2000, Biberauer et al. 2014), or FOFC, has been proposed as a syntactic universal delimiting possible structures among the world's languages, and in particular precluding a head-final structure from dominating a head-initial structure. In Figure 6-2 below, the fourth configuration, final-over-initial, is predicted by FOFC to be banned cross-linguistically.

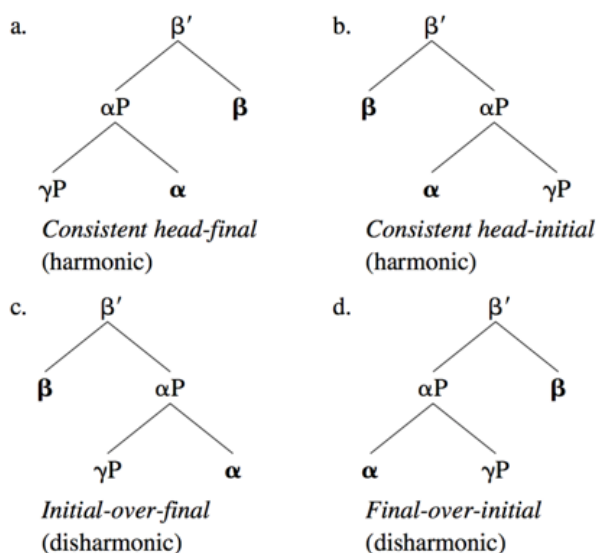


Figure 6-2 Possible and impossible configurations under the Final-over-Final constraint (reproduced from Biberauer et al. 2014: 171)

As Biberauer et al. (2014) show, the constraint has found support from attested and unattested configurations at different heights in the phrase structure (e.g. predicting the rarity of V-O-Aux), and also from clause-level syntax with regard to word orders found for complementizer marked clauses. Thus Biberauer et al. (2014) suggest that the constraint helps to explain the observation in the typological literature (e.g. Dryer 2009: 199) that initial complementizers are found in VO languages but not in OV languages (cf. Biberauer et al. 2014: 183ff.). The question arises, however, of whether the constraint will be obeyed even in circumstances of intense contact-induced change such as are observed in the Xining dialect, in which we find a

great range of possible word orders for SAY complementizers (i.e. despite the freedom of word order observed with OV and VO word orders both in active use in Xining Mandarin, and the existence of variants of the SAY complementizer which both precede and follow the reported speech).

In Xining Mandarin, we have seen that linear orders (i) to (iii) are attested for SAY complementizers, but order (iv) is not found:

- (i) [reported speech]-SAY_{CMP}-V_{matrix} (configuration (a); Section 6.3.4.1 and 6.3.4.2)
- (ii) V_{matrix}-SAY_{CMP}-[reported speech] (\neq configuration (b); Section 6.3.4.3)
- (iii) V_{matrix}-[reported speech]-SAY_{CMP} (configuration (c); Section 6.3.4.1 and 6.3.4.2)
- (iv) SAY_{CMP}-[reported speech]-V_{matrix} (configuration (d); unattested)

Order (i) is a harmonic final-over-final structure, which is permitted under FOFC. Order (ii) was the particle complementizer, which we saw remains in the verbal complex and has not undergone reanalysis as a marker within the complement clause (as has occurred in Cantonese, cf. Section 6.3.2.2). However, if reanalysis occurred to a head-initial ‘that’-type element occurring inside the complement clause, this would yield a FOFC-compliant initial-over-initial structure, because the matrix verb in this construction is also initial. Order (iii) is disharmonic, but is not prohibited by FOFC (cf. Figure 6-2). It is still noteworthy however, because, as observed by Dryer (2009: 199), VO languages with final complementizers are not attested (cf. Kayne 2000: 320-321), and so order (iii) is cross-linguistically rare. On Kaynean assumptions such as are adopted by Biberauer et al. (2014), in which syntactic configurations are head-initial and head-final orders are derived by complement fronting (cf. Kayne 1994), what the order in (iii) shows is that the complement clause in Xining Mandarin (an OV language) can remain in-situ, instead of fronting. That fronting is ordinarily involved in Xining Mandarin, on Kaynean assumptions, is suggested by the location of the manner adverbial in (348): taking the matrix verb to be head-initial, the complement clause has been fronted to derive complement-verb order.

- (348) *No Xiao Wang ha zhe zha haohao-de fozho manman-de fo zhe*
 1SG NAME OBL this place good-NMLZ CMP slowly-DE say ASP
 ‘I slowly said to Xiao Wang, this place is very good.’ (Elicited)

In structures like (349), therefore, it is simply a case of the complement clause not having moved to precede the matrix verb:

- (349) *ni de mama fo-zhe zai bu jin fozho*
 2SG POSS mother say-ASP again NEG enter CMP
 'Your mother said, '(I) will not enter (there) again.'

However, the FOFC-violating structure in (iv) ([[C quotation] V]) is not found. If it was possible, it might look like the following, but as indicated by the asterisk this order is not grammatical:

- (350) **jia fozho jia lai lia fo-le*
 3SG CMP 3SG come PRT say-PFV
 (intended) 'He said that he will come.' (Elicited)

The non-occurrence of this order is correctly predicted by FOFC, and so FOFC is upheld with regard to the word order variation possible for the SAY complementizer in relation to the matrix VP (despite the effects of contact on the dialect).

However, within the complement clause itself, apparent counterexamples to FOFC as an absolute universal are attested. FOFC also rules out the order V-O-...C, but this word order is possible, as in (351) below, and is not regarded as unnatural or awkward by informants, though it is recognised as mixing Standard Mandarin VO order with the historic head-final syntax of Xining Mandarin. Here the VP is VO, and yet the head-final subordinating complementizer may still occur.

- (351) *Jia erzi ha mai-le ge che fozho fo-zhe fo*
 3SG son OBL buy-PFV CL car CMP say-PFV HSY
 '(It is said) he quietly said that he bought his son a car.' (Elicited)

An explanation can be found in the fact that Biberauer et al. (2014: 199) modify FOFC, claiming that it holds within extended projections in the sense of Grimshaw (1991, 2001, 2005), taking the extended projection of V to be the clausal 'spine' (VP, vP, TP, CP) i.e. categories which possess the categorial feature +V, and the extended projection of N to be NP and DP (e.g. NumP, QuantifierP) as well as PP, which are taken to be -V elements:

- (352) * $[\beta P \dots [\alpha P \dots \alpha \gamma P] \beta \dots]$
 where

a. αP is immediately dominated by a projection of β , and

b. α and β have the same value for $[\pm V]$.

As such, if *fozho* is a -V or nominalizing C element, which nominalizes the clause that it dominates, then this would explain why violations like (351) are possible i.e. *fozho* is not part of the same extended projection as the embedded VP, and so not obligated to respect FOFC. An indication that *fozho* (in Hui speakers' pronunciation, *shuozho*) may be a nominal device comes from its use as a participle-like element to form relative clauses, as in Mongolic languages (cf. A.-S. Zhang 2007: 355):

- (353) *women jia li yi ge majun shuozho gawa you lia*
 1PL family LOC one CL NAME CMP boy have PRT
 'Our family has a son called Majun.' (A.-S. Zhang 2007: 355, note 1)

That is, *zho* here behaves like Standard Mandarin nominalizer *de* which is used in relative clauses, as the translation for this sentence shows (cf. A.-S. Zhang 2007: 355):

- (354) *women jia you yi ge jiao majun de erzi* [Standard Mandarin]
 1PL family LOC one CL call NAME DE boy
 'Our family has a son called Majun.' (A.-S. Zhang 2007: 355, note 1)

Meanwhile, there is independent evidence that preverbal clauses undergo nominalization in the dialect from the use of the postposition *ha* (cf. Chapter 2) in constructions like the following, which shows that the clause is a DP:

- (355) *jia ji dianzhong kai hui ha wang-diao-gei-le*
 3SG what time hold.meeting OBJ forget-COMPL-CAUS-PFV
 'He forgot what time (we) are having a meeting.' (Elicited)

On the formulation of FOFC in (352), therefore, if we assume that *fozho* is a -V rather than +V C element, then no violation arises. However, if this is the case, then FOFC no longer provides an explanation for the non-occurrence of order (iv) ([[C quotation] V]), because C and matrix V do not belong to the same extended projection, and so order (iv) is not predicted to be ruled out.

To summarize, therefore, the Xining dialect data do not violate FOFC, which is noteworthy in as much as some have suggested that contact can lead to typologically rare or unusual word orders, perhaps even violating typological universals (cf. Biberauer et al. 2009 for discussion).

Yet if *fozho* is nominal rather than verbal in terms of its categorial features then the compliance observed turns out to be trivial on the formulation in (352), suggesting that other factors might be involved in explaining the non-existence – cross-linguistically and where heavy structural interference is involved – of order (iv) (cf. Biberauer et al.’s 2014 appendix for discussion). In the next section, the role of language contact is discussed in further detail.

6.3.4.7 *SAY complementizer in the Xining dialect and the role of language contact*

With regard to the definition of 'contact-induced change', Thomason (2001:62) defines this as 'any linguistic change that would have been less likely to occur outside a particular contact situation'. The case for the development of the Xining Mandarin complementizer *fozho* being such a 'contact-induced' development will be argued to be very strong. Because the change from SAY verb to complementizer is a well-attested change in the absence of contact, even within Chinese dialects, criteria from Thomason (2006) will be methodically applied. The following steps must be satisfactorily performed in order to identify a change as plausibly contact-induced (Thomason 2006: 342):

1. Look at the whole picture, not just a single piece of the puzzle.
2. Identify a source language
3. Prove that language B has changed (no change, no evidence for interference)
4. Prove that the proposed interference features are old in language A (if they're innovative in A, then A is hardly likely to be the source of the features in B)
5. Consider the possibility of multiple causation and search for potential internal motivations as well

With regard to point (1), as discussed in Chapter 3, convergence upon the morphosyntax of the local head-final languages is evident across the Xining Mandarin grammar as a whole. The development of a head-final SAY complementizer, where Sinitic complementizers otherwise precede the complement clause, thus forms part of a wider pattern of convergence on the head-final morphosyntax of the substrate languages.

Secondly, in terms of the source language potentially responsible for inducing the development of the Xining Mandarin complementizer *fozho*, A.-S. Zhang (2007) suggests a Mongolic origin in his discussion of the Xining dialect spoken by the Hui ethnic group. Mongolic speakers began to settle in Qinghai in significant numbers perhaps as early as the mid 13th century (Slater 2003: 7). Also, along with Tibetans, they occupied the river valleys in which the provincial capital, Xining, is located at the time of the arrival of the Han settlers (Dede 1999b: 76). Evidence in support of a Mongolic origin is that the Xining Mandarin SAY complementizer formally resembles the Mongolic pattern in its internal composition - SAY +

IPFV (cf. Section 6.3.4.5). This is unlike Tibetan, which seems to have recruited the bare SAY form as the complementizer ((340)-(342)). Nevertheless Tibetan influence cannot be excluded, given that Tibetans were also among the inhabitants of the Xining area, and would have been similarly involved in imperfect learning of Chinese for trade and other purposes (cf. Chapter 2). A plausible contact origin is therefore identifiable, although in this case there may have been more than one source language.

Thirdly, the emergence of the complementizer *fozho* constitutes a genuine change from the original Chinese language that the settlers brought to the Qinghai region, because it is head-final, following the embedded clause that it marks, whereas no such head-final SAY complementizer is attested for Chinese dialects elsewhere. As discussed in Section 6.3.2 - 6.3.3, although the change from SAY verb to complementizer is not uncommon across Chinese dialects, elsewhere it results in a very different type of complementizer (a particle attached to the verbal complex, preceding the complement clause).

With regard to Thomason’s fourth point, the age of the SAY complementizer in the proposed source language, it is attested from the earliest records of the Mongolian language, in the *Secret History*. Given that the *Secret History* dates to the 13th century, it predates the arrival of Han Chinese settlers in Qinghai in the early Ming period (cf. Chapter 2). This text was written in a colloquial style of Mongolian, reflecting the Mongolian spoken language, which - rather than the literary or written language - was the medium of contact. In the *Secret History*, the quotative marker occurs with a variety of speech verbs (e.g. *ke(m)e-n asa-q-* ‘ask saying’, *ke(me)e-n durad-qa-* ‘suggest [that], advise [someone to]’ (Street 2013: 5).

(356) *Bodoncar algin-ci haul-ju duñda deeli-t.ey eme-yi*
 NAME scout ride:swiftly-ing middle belly-having:FEM woman-DEF
bari-ju “yau-jin güün ci” kee-n
 capture-ing “what-member:FEM person you:SG” CMP
hasa-ba
 ask-NONFUT

‘Bodoncar, riding swiftly [ahead] as a scout, captured a certain woman who was half-way pregnant, and asked her saying “of what tribe are you a member?”’ (Slater 2003: 309, after Street 1957: 38, gloss adapted by DB)

Moreover, the Middle Mongolian speech verb, most commonly written as *kee/keme* in 13th/14th century texts (Street 2013: 1) was also used as a complementizer (with the converb -

n) with cognitive verbs e.g. *ke(me)e-n sedki-jü* ‘thinking saying...’ or *ke(me)e-n mede-* ‘know saying’ (Street 2013: 5):

(357) “*Tere Qajar sayin[,] ed sayin*
 DEM.DIST land good things good
kee-gde-müy” *kee-n mede-jü* *Ögödey*
 say-PASS-IPFV CMP know-CV.IPFV NAME
qahan jarliq bol-urun... [Middle Mongolian]
 khan order become-CV.PRAEP

‘When Ögödei Qa’an learned that the land was reputedly good and the things [therein were also reputedly] good, he ordered as follows: “...” (lit: ‘knowing saying [the words] “that land [is] good, things [there are] good” are said’). (Street 2013: 70, my gloss)⁵⁷

The Secret History was later published with a colloquial Chinese translation and Chinese gloss at the end of the 14th century (cf. Halliday 2006). Accordingly, evidence for Xining Mandarin *fozho* being a calque on the Mongolic quotative marker comes from its use as an equivalent for the Mongolian quotative in the Chinese translation of *The Secret History*. A.-S. Zhang (2007: 355, note 3) reports that in *The Secret History*, Chinese imperfective *zhe* is used as the translation for Mongolian *ju/čü* (imperfective converb), and that the Chinese SAY verb *shuo* + imperfective *zhe* (*shuo-zhe*) is used as the translation for Mongolian SAY + imperfective *ke'e-ju/čü*.⁵⁸

With regard to the complex head-final complementizer, a similar form has not developed by language-internal mechanisms among Chinese dialects in other parts of the country. However, this structure in Xining Mandarin reflects a productive pattern found for a variety of verbs in 13th century Mongolian: a preparatory converb introducing a quotation recurs after the quotation, following the SAY quotative. For example, in (358), the verb *asaq* ‘ask’ is repeated following a quotation marked by the quotative *kee-n*:

⁵⁷ Street’s (2013: 70) literal translation (‘are said’) seeks to reflect the use of the passive quotative *kee-gde-müy*. In glossing this example, and (358) below, I followed some of the glosses in Brosig (2014).

⁵⁸ Unfortunately, A.-S. Zhang (2007) does not provide any examples.

- (358) *Basa Tayanj qan Jamuqa-daca asaḡ-urun* “*Basa tere*
 also NAME khan NAME-DAT ask-CVB.PRAE also DEM.DIST
qoyina-ca jujaan-a ayisu-qu-n ken
 back-ABL thick-DAT approach-FUT who
bu-yu?” *kee-n asaḡ-ba*
 COP-GN CMP ask-PST
 ‘Again Tayang Qan asked Jamuqa, “And who is the one that is approaching from the rear [as if] in a compact mass?”.’ (*lit.*: ‘Again Tayang Qan asking from Jamuqa, asked saying “...”.’) (Street 2013: 24, gloss by DB)

Its existence in Xining Mandarin is thus plausibly due to the influence of this pattern in Mongolian.

Finally, with regard to Thomason's fifth point concerning complex causation, even accepting a role for calquing or transfer during second language use, as discussed in Chapter 3, it is well-known that reanalysis of a serial verb construction is a common mechanism by which SAY complementizers grammaticalize in Chinese and cross-linguistically, and in Chapter 3 evidence was presented to suggest that this mechanism could plausibly have been employed during bilingual first language acquisition. Findings from Matthews and Yip's (2009) study of Cantonese-English bilingual children were highlighted, where functional transfer from Cantonese grammatical markers to English lexical items did not happen abruptly, as expected in calquing, but proceeded developmentally along the same pathways of change familiar from studies of grammaticalization in diachronic change. As such, it was argued that in bilingual first language acquisition in the Xining area, the catalyzing effect of language contact could plausibly have operated in such a way that Monguor-Chinese bilingual children would have developed a SAY complementizer in Chinese according to the same grammaticalization pathway found cross-linguistically in endogenous change. In addition, it was also noted that the SAY complementizer would still have undergone a usage-based process of conventionalization as a feature of the regional variety of Mandarin developing in the area.

In Xining Mandarin, the fact that *fozho* is head-final means that in order to derive [reported speech]-complementizer order rather than complementizer-[reported speech] order, the linear string from which *fozho* emerged by ‘rebracketing’/reanalysis of SAY as C must specifically have been a head-final VP serialization structure like in (359), below, and not a head-initial construction (360):

(359) Head-final: [quotation] say shout → [quotation C] shout

(360) Head-initial: shout say [quotation] → shout [C quotation]

This is because no change in linear order occurs following reanalysis: in SVO languages, the newly grammaticalized complementizer precedes its clausal complement, and in SOV languages it follows its clausal complement (Simpson and Wu 2002: 75). In view of (359), the type of serialization structure from which the *fozho* complementizer could have arisen via reanalysis would therefore have been [OV-*zho*] [(O)V], a serialization of VPs with OV order, such as is still used today. Of course, in order for reanalysis of *fozho* as a complementizer to occur, the verb in the leftmost VP must have been *fo* ‘say’, whilst with regard to *zho*, in Xining Mandarin, *zho* can be used as a non-final VP marker (cf. A.-S. Zhang 2007: 344), and so the adjacency of the SAY verb and *zho* would have facilitated their reanalysis as a single complementizer form. A.-S. Zhang (2007) illustrates this VP connective use as follows:

(361) *Laoshu dong li jie pa-shang zho chulai*
Rat hole LOC ABL climb-up *zho* out.come

‘The rat climbed out of the hole.’

(A.-S. Zhang 2007: 345)

Therefore the string directly preceding reanalysis would have needed to be like that in (362) below, with the structure of a simple serial verb construction. This structure is shown in (363), in which the object in the first VP was the quotative complement of the speech verb and *zho* was the VP connective:

(362) *jia chi fan lia fozho han-zhe*
3SG eat food PRT CMP shout-ASP

‘He shouted, saying he wants to eat.’

(Elicited)

(363) [[[reported speech_{TP}] V-*zho*_{VP}] V-*zhe*_{VP}]

That is, as in Lord's (1976) tree diagrams above ((278)), reanalysis could have naturally occurred from serialized VPs in a complementation relation (cf. Larson 1991), such that the structural configuration does not change. In Xining Mandarin, the first VP undergoes reanalysis as a CP selected by the verb in the following VP, and the final V of this first VP is reanalysed together with the non-final VP marker as the complementizer:

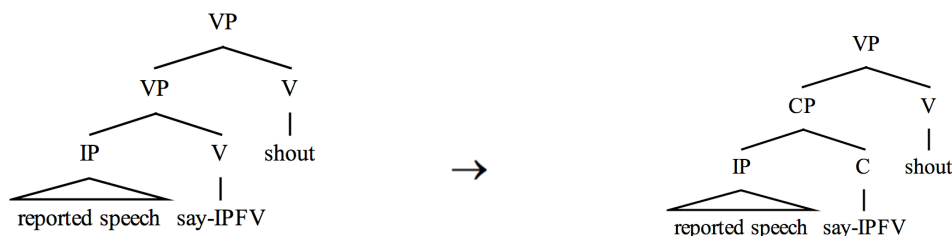


Figure 6-3 Reanalysis from serial verb construction to SAY complementizer

Further evidence that the complementizer emerged from an OV structure comes from A.-S. Zhang (2007: 352), who compared locations in Qinghai province and argued for an implicational hierarchy such that it is not only much more widespread with OV word order (i.e. quotation-*fozho*-matrix verb), but in the relatively few locations where *fozho* exists with VO order (i.e. V-quotation-*fozho*), the OV order also exists, whilst the converse is not true. This too suggests that the emergence of the head-final complementizer is associated with OV word order. Lastly, the facts in Xining Mandarin are consistent with typological research reporting that head-final subordinating complementizers are very rare or unattested in VO systems, but occur with OV word order (cf. Hawkins 1994: 326; Dryer 1992: 102). Therefore the syntactic change from head-initial to head-final in the dialect's clausal syntax is likely to have proceeded bottom up, affecting the VP first (yielding OV order), and making possible the reanalysis of Xining Mandarin SAY from V → head-final complementizer.⁵⁹

Meanwhile, with regard to the head-final complementizer *fo*, this is not likely to have emerged via reanalysis of a verb serialization structure because to yield the word order [quotation *fo*]-V_{speech}, a serialization structure would be required with the word order [quotation]-*fo*_{lexical verb}-V_{speech} (cf. (359) - (360); Simpson and Wu 2002: 75). However, as noted in Section 6.3.4.2 above, *fo* does not occur in structures with this word order, but only with an initial matrix verb. A plausible explanation therefore is that head-final *fo* emerged via simplification of a biclausal structure into a monoclausal structure, which is also a common type of diachronic change (Harris and Campbell 1995). In stage 1, *fo* is a lexical verb following its clausal complement, but as the two clauses collapse into one *fo* is reanalysed as a marker within the new monoclausal structure. (364) is adapted from Simpson and Wu's (2002: 83) account of the grammaticalization of *kong* in Taiwanese Southern Min as a complementizer:

⁵⁹ This 'bottom-up' restructuring is in line with the predictions of syntactic models of language change (e.g. Biberauer, Newton and Sheehan 2009) which predict that diachronic change (endogenous and contact-induced) proceeds bottom up on the basis of the Final-over-Final constraint (Holmberg 2000, Biberauer, Holmberg and Roberts 2014). Because FOFC prohibits a head-final structure from dominating a head-initial structure, it predicts that the VP must become head-final (OV) before a head-final CP can emerge (cf. Section 6.3.4.6 above).

(364) *Stage 1*: 2-clause structure, *fo* a real verb meaning ‘to say’
with an NP subject and a clausal complement:

[NP_{subject} [IP . . .] *fo*]

Stage 2: the 2-clause structure re-analyses as a single clause;
fo deverbalizes and loses its NP subject, *fo*
grammaticalizes as a new matrix clause C₀

[CP [C [IP . . .] *fo*]]

This is supported by the existence of matrix clause uses of *fo* as a sentence-final particle with a quotative meaning, which correspond to Stage 2 of this process (on this usage, cf. Section 6.4 below).

(365) *jia ha ku lia fo*
3SG TOP cry FUT QUOT
'He said he will cry.'

After reanalysis as a clause-final particle with quotative meaning (a residue from the lexical semantics of SAY), the *fo*-marked clause is able to be selected by a matrix speech verb, yielding the kind of biclausal structures discussed above ((366) = (323)).

(366) *jia fo-zho jia bao-gei de shi senlin gongan fo*
3SG say-ASP 3SG apply-CAUS POSS be forest police CMP
'He said that the one he applied for was the forest police station.'

This could be motivated by a need for reinforcement or to be specific concerning the identity of the speaker subject by adding a higher clause containing a matrix subject. In this context, the quotative complementizer *fo* could then be grammaticalized to a generalized complementizer which can also occur with cognitive matrix verbs. In principle, this latter mechanism could also partly explain the *fozho* complementizer, because *fozho* is also found as a quotative marker that attaches to matrix clauses (see below), and so could have emerged through the collapsing of a biclausal construction as just described. After this occurs, the *fozho*-marked quotative clause could then be selected by a matrix verb, and so could acquire the complementizer function just as described for *fo*. However, this pathway of development is somewhat more complex than reanalysis of a serial verb construction, because it depends on SAY first being grammaticalized as a matrix clause sentence-final particle, whereas the only structural prerequisite for reanalysis from within a serial verb construction is OV word order. For this reason, reanalysis from within a serial verb construction is preferable due to

being the simpler hypothesis, and can be assumed to have been more widely available as a strategy, even where SAY was not yet used as a matrix clause sentential particle.

6.3.5 Conclusion: complementizer uses of SAY in the Xining dialect

This section has considered *fozho*, the most commonly used SAY complementizer in the corpus data, and other complementizers grammaticalized from the SAY verb. As a head-final subordinating complementizer grammaticalized from a verb of 'saying', *fozho* (and its variant, *fo*) is a typological anomaly among Chinese dialects, where complementizers marking clausal complements are uniformly head-initial (Chappell 2008: 52). Likewise, the complex SAY-SAY complementizer is apparently unattested in other Chinese dialects. However, these features find an explanation in terms of the first of the two stages of language contact identified by Dede (2003) and Slater (2003) as characterizing the history of the Qinghai-Gansu region (cf. Chapter 2). That is, they are a product of the early period of contact in which the dialect converged upon the head-final morphosyntax of the local head-final languages. Finally, the typically Sinitic particle complementizer *fo*, which occurs in constructions formed with a head-initial matrix VP, was suggested to be a relatively recent feature associated with the New Xining dialect, the head-initial syntax of which more closely resembles that of Standard Mandarin.

6.4 Evidential and discourse functions of SAY

6.4.1 Background

Beyond the development of the complementizer function, another common grammaticalization pathway for speech verbs in Chinese dialects is to markers of reported speech and hearsay and further into discourse markers expressing a range of modalities (e.g. Wang et al. 2003, Chappell 2012, J. Wang 2013, Han and Shi 2014). This will be briefly illustrated with regard to some Southern varieties of Chinese, Taiwanese Mandarin and Tangwang, a Chinese dialect within the Qinghai-Gansu Sprachbund. J. Wang (2013) examines Southern varieties - several Wu dialects, Taiwanese Min and Cantonese - and identifies the following pathway of change:

(367) *quotative verb* → *reported speech/hearsay marker* → *mirative marker*

The quotative verb function is illustrated for Shanghainese by the speech verb *jiang*:

- (368) *yi jiang*: "waitou luo xue le" [Shanghainese Wu]
 3SG *jiang* outside fall snow ASP
 'He said, "It is snowing outside."' (J. Wang 2013: 116, my gloss)

Following its use as a quotative verb, extension to evidential functions occurs. The particular mechanism by which this occurs shows some variation across the languages concerned. In Shanghainese (Wu), *yijiang* (IPA: $ɦi^{23}k\tilde{a}^{34}$), a fossilization of the third person pronoun *yi* plus the speech verb *jiang*, has been grammaticalized into a marker of hearsay that occurs clause-finally (J. Wang 2013: 116, Han and Shi 2014).

- (369) *nong zuori chidao-le yijiang* [Shanghainese Wu]
 2SG yesterday arrive.late-ASP *yijiang*
 'It is said you were late yesterday.' (J. Wang 2013: 116, DB's gloss)

Han and Shi (2014) suggest that this involved reanalysis of *yijiang* following right-dislocation, combined with 'semantic obscuring' such that *yi* is obscured as 'one' or 'someone' and thereby comes to denote hearsay. However, in Cantonese, the SAY verb *waa* alone has grammaticalized into a hearsay marker:

- (370) *Keoi5dei6 jau6 bun2 uk1 wo5.* [Cantonese]
 they again move house PRT
 "They're moving house again (they say)." (Matthews 1998: 10)

The next step involves an extension from evidential to mirative marking, which is a common development for reportative evidentials cross-linguistically (Aikhenvald 2004). Dimensions of mirativity include surprise, counterexpectation, unpreparedness of mind, new information and sudden discovery (Aikhenvald 2012, cf. DeLancey 1997). In the Changshu dialect (Wu), composite forms have been recruited for mirative marking such as *jiaosha* or *huasha* (*jiao* 'call' / *hua* 'word' + *sha* 'what') or *huadao* (*hua* 'word' + *dao* 'word') as in (371).

- (371) *wo jiaosha/huasha/huadao/jiaosha huadao dupi* [Changshu dialect (Wu)]
 1SG *jiaosha/huasha/huadao/jiaosha huadao* stomach
teng lai
 painful PRT
 'To my surprise my stomach was really painful.' (J. Wang 2013: 117, DB's gloss)

This reflects the composite form *yijiang* (IPA: $ɦi^{23}k\tilde{a}^{34}$) in Shanghainese, (372). But in Cantonese it is the bare form *wo3* which marks mirativity ((373), differing tonally from the

evidential marker *wo5*. *wo3* indicates something that is 'surprising' or 'notable' (Matthews 1998).

(372) *və²¹²hə³⁴ fi²³kā³⁴* [Shanghainese Wu]
 no PRT
 'Unexpectedly, there is a NO!' (Han and Shi 2014: 480)

(373) *Keoi5dei6 jau6 bun2 uk1 wo3.* [Cantonese]
 they again move house PRT
 "You know, they're moving house again (believe it or not)." (Matthews 1998: 11)

With regard to Mandarin dialects, Taiwan Mandarin displays evidential/discourse functions for *shuo* 'say'. Wang et al. (2003: 470-1) analysed corpus data containing BBS (bulletin board system) text interactions and conversation data and found that *shuo* sentence-initially can function simultaneously as a hearsay marker and a marker of counterexpectation. Wang et al. (2003: 470-1) claim that both of these meanings are denoted by *shuo* in speaker A's second utterance:

(374) (Speakers A and B are talking about a cosmetic product [called SK-II], which is very expensive.)

A: .. *Zuijin wo chang aoye ye,* [Taiwan Mandarin]
 recently I often burn the midnight oil SFP
 .. *doudou dou mao chulai le, zenmeban ne?*
 acne all appear come PFV how to do Q
 'Recently, I have often been burning the midnight oil. Acne has appeared on my face. What should I do?'

B: .. *SK-II ah.*
 SK-II SFP
 'SK-II!'

A: .. *SK-II, shuo meitian zhi shui yi ge xiaoshi,*
 SK-II shuo everyday only sleep one CL hour
 .. *ni xiangxin ma?*
 you believe Q
 'SK-II. It is said that you only need to sleep for one hour with SK-II; do you believe it?' (Conversation; Wang et al. 2003: 470)

In terms of how mirative distinctions arise from evidential markers, Wang et al. (2003: 471) note that the counterexpectation meaning can arise from the hearsay meaning via a pragmatic

inference, since information obtained by hearsay is generally outside of the speaker's knowledge.

Within the Qinghai-Gansu Sprachbund, evidential functions of SAY are found widely across Sinitic varieties in the region. For instance, Djamouri (2013) discusses speech verb grammaticalizations in Tangwang, a Sinitic language in Gansu province that has been heavily influenced by Santa (Mongolic). Tangwang *shuozhe* (< *shuo* 'say' + IPFV) and *shuo* 'say' have been extended from introducing a quotative clause to an evidential particle usage. In addition, further extension has occurred to denoting alethic modality (expressing probability). The evidential, which is syntactically a complementizer (Djamouri 2013: 251), and the alethic use are shown below respectively.

- (375) *nə fẽ-xa tʂʰɿ-lʷ *(ʂʷɔ tʂə) ʂʷɔ-lʷ* [Tangwang]
 he food-ACC eat-PFV EVID say-PFV (evidential)
 'He/One said that it is said that he has eaten his meal.' (Djamouri 2013: 251)
- (376) *nə fẽ-xa tʂʰɿ-tʂə tsʷɔ-tʂɛ ʂʷɔ (/ʂʷɔ tʂə)* [Tangwang]
 he food-ACC eat-AUX at-IPFV (ALETH) (alethic)
 'He is probably eating.' (Djamouri 2013: 255)

With regard to Xining Mandarin, the hearsay evidential function is discussed in the next section (Section 6.4.2), and then the contact origin of this function is considered with regard to the local non-Sinitic substrate languages (Section 6.4.3). Thereafter, extension to a discourse marker is considered (Section 6.4.4).

6.4.2 Reported speech and hearsay marking in Xining Mandarin

Above, the use of *fo/fozho* as a complementizer in the complement clause of matrix verbs of speech and cognition was discussed. In Xining Mandarin, such uses can occur with first person speaker subjects (as well as third person subjects), and so do not necessarily fulfil an evidential function of marking information derived via a verbal report (cf. Tangwang example (375), where the SAY complementizer is noted to be an evidential).

- (377) *Na no fo-le, na nomen mingtian pa shan zou fo*
 then 1SG say-ASP, then 1PL tomorrow climb mountain walk CMP
 'I said, "Tomorrow we will go to climb the mountain".'

However, *fozho* and *fo* also occur in matrix clauses, where they can fulfil a reported speech marking function, indicating the information source as the verbal report of another. The fact that, as well as bare *fo*, the composite marker *fozho* (from SAY + IPFV) can also fulfil this quotative/hearsay marking function was noted by A.-S. Zhang (2007: 348). The context can distinguish a hearsay and secondhand reported speech reading, as in (378) and (379) where the hearsay reading was derived. In these examples, *fo* and *fozho* indicate that the information came from the verbal report of an unspecified speaker.

(378) *ni dai Li Mei lia, ni tan-zho fo me*
 2SG and NAME COM 2SG date-IPFV HSY PRT
 '(It is said) you and Li Mei, you are dating.'

(379) *jiu Langwan li de na ge gawa ha yao-ha-le ge xifu fozho*
 just Langwan LOC NMLZ that CL boy TOP want-COMPL-PFV CL wife HSY
 'It is said that boy from Langwan found a wife.'

In addition to marking hearsay, *fo* and *fozho* can occur when the speaker is simply relaying word for word what someone said directly to him/her i.e. as a quotation marker, where the identity of the original speaker is clear from the discourse context. This can be seen where pronominal shift has not occurred.

(380) *jia ye xian-zho zho, jiner no gang-dao qu fozho*
 3SG also free-IPFV PRT today 1SG work COMPL go *fozho*
 'He is also free. (He said) "I will go work today.'

(381) *bie de shi ni bie caoxin fo*
 other NMLZ matter 2SG do.not worry QUOT
 'Don't you worry about other things ((she) said).'

The quotation marker usage is also possible in self-quotation when speakers narrating past events are quoting what they said on a previous occasion. (382) was uttered as the speaker recalls what he said to someone who came and secretly ate the speaker's food while the speaker was working.

(382) *jiu ni ranfan chi fozho*
 only 2SG stew eat *fozho*
 '(I said) "You (dare to) eat (our) stew".'

These uses as a quotation marker are taxonomically distinct from the complementizer uses discussed above where *fozho* marks embedded reported speech clauses, because they occur in a matrix rather than embedded clause, and they differ formally in instantiating root CP rather than embedded CP. However, they are functionally alike in that in both contexts – whether matrix or embedded – *fozho* and *fo* mark off the end of a portion of reported speech.

6.4.3 Reportative/hearsay evidentials in neighbouring languages

As discussed in Section 6.4.1, reported speech markers exist across Chinese dialects, including in Mandarin dialects such as Taiwanese Mandarin (Wang et al. 2003). Moreover, unlike in Taiwanese Mandarin where the hearsay marker is clause-initial, Cantonese has developed a clause-final hearsay marker which matches the position of this device in Xining Mandarin, and has apparently done so as an entirely language internal development.⁶⁰ However, in Xining Mandarin, a language contact explanation for the clause-final reportative/hearsay marker is arguably more plausible, as was mentioned by Cheng (1980) and Dede (1999b). That reportative evidentials, also derived from SAY verbs, have a historic presence in all of the language families represented in Qinghai, and the striking formal similarity between these devices and those in Xining Mandarin, are facts which are unlikely to be due to chance.

Indirect reportative evidence in Amdo Tibetan is marked via a grammaticalization of the SAY verb *se* (from Old Tibetan *zer*), which co-occurs with the sentence-final particle *kuu* (according to Shao 2015, a marker of mirativity). (383) below shows *se-kuu* marking a thirdhand verbal report, in which there is no particular speaker whose words are being reported, whilst (384) illustrates its use with a secondhand verbal report (examples from Shao 2015: 77):

(383) *kho petɕum-na njo-dzu-re se-kuu* [Tibetan]
 he:ABS Beijing-DAT go:IPFV-FUT-NEGO REP/HSY-MIR
 '(Someone_i) said he_j will go to Beijing./It is said he will go to Beijing.'

(384) *khu wɕa-na kho ɬasa: njo-dzu-re se-kuu* [Tibetan]
 he:ERG say-CMP he:ABS Lhasa:DAT go:IPFV-FUT-EGO QUOT-MIR
 'He_i said he_j will go to Lhasa.'

⁶⁰ In the case of Taiwanese Mandarin, however, contact influence from Taiwanese cannot be excluded (cf. Wang et al. 2003, Su 2004).

Reportative evidential marking is also found in the other language families of the Sprachbund. For example, the use of the quotative verb in hearsay structures is attested in Middle Mongolian, which predates the large-scale arrival of Han settlers in Qinghai in the early Ming period. (385) is from the *Secret History of the Mongols* (13th century):

- (385) *köü-d minu qa-d bol-juu kee-gde-müy* [Middle Mongolian]
 son-PL 1SG.POSS qan-PL become-PST.2H say-PASS-IPFV
 ‘My sons are said to have become Qans.’ (Brosig 2014: 26, after Street 2013: 59)

Likewise, in modern Qinghai Mongolian, thirdhand verbal report marking via SAY verb grammaticalizations may be performed by, for example, *gəne* (‘say’ + non-past marker NA):⁶¹

- (386) *çiniŋ bol negə saxə gatsə gəne* [Qinghai Mongolian]
 Xining be one good place HSY
 ‘(It is said) Xining is a good place.’ (Lesson notes)

In Salar, a Turkic language spoken in Qinghai province, both second and thirdhand verbal report marking can include the SAY grammaticalization *edbar* (derived from SAY + IPFV):⁶²

- (387) *u jaç-ba izə e? bir el-dzə edbar* [Salar (Turkic)]
 3SG say-ASP self horse one buy-PFV QUOT
 ‘He said he bought a horse.’ (Lesson notes)

- (388) *a-la-ni habago gaç-miç edbar* [Salar (Turkic)]
 3-PL-POSS dog run-PFV HSY
 ‘It is said their dog ran away.’ (Lesson notes)

Reported speech marking by Xining Mandarin SAY (bare *fo* and *fozho*) thus formally resembles the local languages in its clause-final position. With regard to Xining Mandarin *fozho*, the internal composition of this device (SAY + imperfective) reflects similar composite forms in Mongolian and Salar. In the next section, I consider discourse marking by SAY.

⁶¹ The Qinghai Mongolian data (an Oriad Mongol dialect) labelled ‘Lesson notes’ came from informants from Wulan county, Haixi prefecture.

⁶² The Salar data is from an informant from Xunhua county, Haidong prefecture.

6.4.4 *SAY as a discourse marker*

6.4.4.1 *Background*

Discourse functions of SAY are attested in a number of Chinese dialects, including Cantonese (Matthews 1998), Taiwan Mandarin (Wang et al. 2003), Southern Min (Chappell 2012) and in Beijing Mandarin (Gao 2014). Traugott's (1989, 1995) notion of 'subjectification' has been helpful in illuminating how speech verbs in Sinitic come to be discourse markers (e.g. Su 2004, Chappell 2012), and below this will be seen to be the case in Xining Mandarin. The term refers to 'a pragmatic-semantic process whereby meanings become increasingly based in speaker's subjective belief state/attitude toward the proposition' (Traugott 1989: 35). The subjectification of SAY involves a shift from propositional meaning for the speech verb (i.e. asserting the occurrence of a speech act in the external world) to an expressive function, where the erstwhile verb becomes a 'grammatically identifiable expression of speaker belief or speaker attitude towards what is said' (Traugott 1995: 32). According to Traugott (2003: 124), subjectification may further lead to intersubjectification, the 'development of meanings that encode speaker/writers' attention to the cognitive stances and social identities of addressees'. That is, beyond meanings that are rooted in the speaker's subjective attitude/belief state, the intersubjectification of SAY involves the speech verb developing meanings which are addressee-orientated. Intersubjective functions include turn-giving, agreement-seeking, and various means of tailoring the utterance for the intended audience, such as attending to the 'face' of the addressee as in the development of honorific forms (Traugott 2003, 2010).

To illustrate for *verba dicendi*, Chappell's (2012) study of Southern Min analyses *kong* as expressing the following four types of illocutionary force, which each involve dimensions of intersubjectivity: assertions, suggestions, threats and rebuttals. In an assertion, Chappell (2012) notes that *kong* marks the newsworthiness of the proposition, calling the listener to attend to the fact presented because it is contrary to the hearer's previous presupposition:

(389) 彼陣仔 着去 [Southern Min]

hit chun-à toh khi = - -!

that time then go

去 講 喔!

khi kong oh!

go SAY_{DM} PRT

‘So then I went. Of course, I went!’ (Chappell 2012: 97)

(Illocutionary force: I’m telling you → I want to bring this to your attention.)

The flexibility of *kong* as a discourse marker without propositional meaning can be seen in the fact that the same utterance can express more than one type of illocutionary force, depending on the context and intonation. Thus the utterance in (390) could be a suggestion, as in reading A, or a threat, as in reading B (cf. Chappell’s 2012: 98 (27) and (28)).

(390) 去 講! [Southern Min]

Khi³ kong¹!

go say

A. ‘How about you go!’

(Illocutionary force: I’m telling you: I think it’s a good idea for you to do it.)

B. ‘Just you dare go!’

(Illocutionary force: I’m telling you: If you go, you’ll find out the consequences! (I think you know that I don’t want you to go.)) (Chappell 2012: 98)

Kong is used to establish a certain kind of relation with the addressee: an ‘amicable, non-hierarchical relationship’ relation in the case of A, and a relation of dominance on reading B (cf. Chappell 2012: 97). Similarly, clause-final *kong* in *wh*-interrogatives can ‘express scorn or contempt and can be used to mock the addressee’, a usage which results in a rebuttal of the interlocutor’s preceding assertion (Chappell 2012: 98).

(391) A. 你 讀暝 讀日 才 考 60 分 喔 [Southern Min]

Li² thak⁸ mi⁵ thak⁸ jit⁸ tsiah⁴ kho² lak⁴ tsap⁸ hun¹ o!

2SG study night study day only test 60 point PRT

B. 你 考 幾 分 講

Li² kho² kui² hun¹ kong¹

2SG test how:many point say

A: 'You were studying night and day but only got 60 in your exams!'

B: '(So don't make fun of me:) How high a grade did you get then?' (Chappell 2012:

99, after Liu 1996,

ex. 55)

According to Chappell (2012: 103), the assertion, threat and rebuttal usage all involve correction of a previous presupposition, referring back to the previous discourse and presenting 'a case of intersubjectivity *par excellence* connecting the roles of speaker and addressee in their joint construction of a cohesive discourse'.

With regard to Mandarin, Wang et al. (2003: 479) show that Taiwan Mandarin *shuo* can function as an expressive marker to indicate the emotional state or attitude of the speaker (i.e. a subjective rather than intersubjective function). In Wang et al.'s (2003: 472) data, the expressive function of *shuo* is seen in its use to mark counterexpectation:

(392) *You kan guo [naicha] de xin guanggao ma?* [Taiwan Mandarin]

Have watch ASP milk-tea DE new advertisement Q

'Have you ever seen the new advertisement for milk-tea?'

Dui a! Ta guanggao de yiangzi yidian dou bu haokan!!

Right SFP she advertisement DE manner a little all NEG good-looking

Yidian dou bu xiang ta shuo . . .

A little all NEG like she shuo

'Right! She doesn't look as good as she does in that new advertisement!

She is not like herself at all *shuo*.'

(Wang et al 2003: 472)

In addition, Taiwan Mandarin *shuo* can function as an intensifier, which is used to impart strong feeling to the utterance (Wang et al. 2003: 475-6). In line with the flexibility in the usage of *kong* in (390), the actual meaning conveyed by *shuo* is determined by the subjective

belief state of the participant/speaker. In (393), the emotion intensified is the feeling that the person under discussion (Haoxiaowen) is ridiculous.

(393) (A and B comment on a boy actor in Taiwan who is enjoying a spell of good luck beyond anyone's comprehension.)

Subject: *Naxie yiren hong de momingqimiao?* [Taiwan Mandarin]
which entertainer red NOM ridiculous

'Which entertainers are enjoying a spell of good luck beyond anyone's comprehension?'

A: *Haoxiaowen ba... buguo youshihou ta ye man keaide a.*
NAME SFP but sometimes he also very cute SFP

'Maybe it's Haoxiaowen. Yet sometimes he is also quite cute.'

B: *Haoxiaowen... zhende momingqimiao shuo... he...
NAME really ridiculous shuo oh
gao bu qingchu la... gaoxiao... giaoguai... gaopi*

make NEG clear SFP make fun of be mischievous fart

'Haoxiaowen is very ridiculous *shuo*. He always makes fun of others and is always mischievous.' (BBS, Wang et al. 2003: 475-6)

Elsewhere, *shuo* in Taiwanese Mandarin is used to indicate that the speaker is expressing his/her own subjective opinion (Su 2004: 26):

(394) *zhe jia mianbao-dian de xidian hen haochi shuo* [Taiwan Mandarin]
this CL bread-shop POSS shop very delicious *shuo*

'The cakes of this bakery are rather delicious *shuo*.' (Su 2004: 26, my gloss)

Having provided an overview of some of the discourse functions of SAY in Chinese dialects, in the next section Xining Mandarin SAY will be seen to have similarly undergone both subjectification and intersubjectification.

6.4.4.2 Discourse marker uses of Xining Mandarin *fozho*, *fo*

6.4.4.2.1 Previous studies on discourse marker *fo*

Xining Mandarin *fo* has long been known to have developed into a *yuqici* 'sentence-final particle' (Cheng 1980). Beyond its use for reported speech/hearsay marking (discussed in Section 6.4.2), Cheng (1980: 149) claims that there is a further usage of *fo* in the Xining dialect, namely as an *yiwen yuqi ci* ('interrogative mood marker'/'question particle'), illustrated in (395), and this analysis has been adopted in many other studies since (e.g. Zhang and Wang 2012).

- (395) *Gangbi amen huai-le fo*
 Pen why broken-ASP *fo*
 ‘Why is the pen broken?’ (Cheng 1980: 149, my gloss)

However, Wang and Wu (1981: 53) question this treatment, claiming that the meaning of (395) is not ‘Why is the pen broken?’, but rather ‘(He) said ‘Why is the pen broken?’ i.e. a reported speech marking usage, discussed above. There is evidently speaker variation in interpretation here, but Cheng’s (1980) translation is certainly a possible reading, accepted in various other studies and also evident in my corpus data (see below). With regard to the ‘interrogative mood marker’ analysis of *fo* in such sentences, the important fact is that, as Wang and Wu (1981: 53) note, the presence of the *wh*-word is what actually determines that the mood is interrogative, and not *fo*. That is, Cheng (1980: 148) claims that here *fo* resembles the particles *ma* or *ne* in Standard Mandarin. However, it is evident that *fo* is not an interrogative mood marker in the same way that *ma* is, because *ma* actually contributes interrogative force (in particular, creating a yes/no question), and cannot occur in sentences with *wh*-words. By contrast, (395) remains acceptable as an interrogative sentence due to the *wh*-word, even if *fo* is removed. In this respect it is helpful to make a distinction, following Zeshan (2013), between particles which are question markers as their main function, and ‘pragmatic question markers’ which mainly fulfil a pragmatic function such as expressing speaker attitude. The Chinese question marker *ma* belongs to the former type, whilst, to the extent that *fo* is a question marker at all, it belongs to the latter type, and as such we will see that it can also show a range of non-interrogative uses. However, it will be seen that *fo* does show similarities with the particle *ne*, in line with Cheng’s (1980) intuition, in the sense that like *ne* it can affect the pre-existent illocutionary force of questions, for example by reducing their forcefulness, a politeness strategy with a face-saving effect for the addressee (Lee-Wong 1998).

More recently, Zhao (2015: 83-4) has argued that discourse marker SAY in the Gangou dialect (Minhe county, northeast of Xining) expresses certainty. According to Zhao (2015), SAY in the Gangou dialect is used to express the speaker’s subjective judgement concerning the certainty of the marked proposition.

- (396) *Jinnian zhuangjia hao-zhe hen, chi-zhe gou li shuo*
 This.year crop good-IPFV good, eat-IPFV enough PRT shuo
 ‘This year’s crops are good, there is (certainly) enough to eat.’ (Zhao 2015, my gloss)

According to Zhao, SAY here is opposed to the particle *ba*, which indicates a low degree of certainty. This function of definiteness marking has not been reported for the Xining dialect. However, if this function exists in the Xining dialect, then evidently neither Cheng's (1980) nor Zhao's (2015) description is exhaustive, because they account for non-overlapping sets of data: in interrogative contexts it is clear that speaker certainty is not the meaning denoted, whilst when expressing certainty, interrogative mood is not conveyed.

In addition, Z.-Q. Wang (1983) identified some further pragmatic functions of SAY. Z.-Q. Wang (1983: 40) notes that SAY can mark propositions expressing facts based on one's personal experience, or which are common knowledge (*gu yi you de renshi* 'knowledge passed down from past generations').⁶³

(397) *huafei duo [bao] yong, zhuangjia shao-si li shuo*
 fertilizer more use crop burn-die PRT shuo
 'If one uses too much fertilizer, the crops will be burned to death.' (Z.-Q. Wang 1983: 40, my gloss)

(398) *zao qi la wu, wanxi xia yu li shuo*
 early rise pull fog evening fall rain PRT shuo
 'If it is foggy in the morning, it will be rainy in the evening.' (Z.-Q. Wang 1983: 40, my gloss)

However, Z.-Q. Wang does not elaborate on whether speaker attitude, for example certainty, is expressed here. Z.-Q. Wang (1983: 40) further claims that SAY can be used for rebuttals, to forcefully express disagreement with a previous remark by the addressee.

(399) *ni ting, zhuwa ba xiyifen chi-shang-le,*
 2SG listen, piglet ba washing powder eat-COMPL-ASP
zhangbiao shuo?!
 get.fat shuo
 'Listen, pigs can get fat by eating washing powder, is that really true?!' (Z.-Q. Wang 1983: 40, my gloss)

Examples similar to this latter use, which is a rhetorical question expressing incredulity, will be discussed below as illustrating aspects of the intersubjectification of the erstwhile speech

⁶³ Z.-Q. Wang (1983) does not specify the exact source of his data, only that it is from Qinghai.

verb. In addition, previous studies on discourse marking by SAY have only mentioned the bare SAY verb, but it will be demonstrated that the composite form *fozho* has also been extended beyond the quotative marking function noted in A.-S. Zhang (2007) (discussed in Section 6.4 above) to a discourse marker, with similar functions to bare *fo*.

Applying the notion of subjectivity/intersubjectivity, Xining dialect *fo/fozho* will be seen to have been grammaticalized to convey the speaker's subjective attitude/emotion, as well various intersubjective functions centred on the addressee. The use of *fozho/fo* to express the following illocutionary forces will be exemplified from the corpus data, where the first four functions are intersubjective and the final function illustrates subjectification:

1. Information-seeking
2. Confirmation-seeking
3. Agreement-seeking
4. Softener (face-saving device)
5. Intensifier

With regard to frequency, discourse markers *fo/fozho* are high frequency, and in this respect unlike the better-documented discourse marker usage of *kong* in Southern Min, which seems to be scarce in natural speech corpora (Chappell 2012: 96). Similarly, discourse uses of *shuo* in Taiwanese Mandarin were also rare in conversation (Wang et al. 2003: 465).⁶⁴ In the Xining Mandarin corpus data, *fo/fozho* occurred as a clause-final marker in an independent, non-embedded clause) considerably more frequently than it was used as a quote marker/complementizer in embedded clauses (cf. frequency data in Appendix B). In terms of the phonetic form for the particle *fo*, as well as [fɔ], [fa] was also an attested realization (conceivably a merger of [fɔ] + sentence-final particle *a*).

6.4.4.2.2 *Information-seeking*

First, consider the information seeking function, in which *fozho/fo* is used with attention to the addressee to elicit his/her viewpoint. The relevant portion of a conversation is shown below, and *fozho* appears in speaker A's second utterance:

⁶⁴ However, in BBS data, Wang et al. (2003: 465) found that discourse uses of *shuo* were very frequent.

(400) A. *na ge yatou datie-zho fozho fei fo-zho*
 that CL girl scatter-brained-IPFV CMP who say-ASP
 'Who said that girl is scatter-brained?'

B. *Mei, no fo na jiamen fo-zho ha*
 NEG 1SG say PRT 3PL say-ASP PRT
 'No (i.e. not me), I said that they said (it)...'

A. *hao zho a mei hao-zho fozho*
 good IPFV PRT NEG good-IPFV *fozho*
 'Is she alright or not?' (Illocutionary force: You just tell me, in actuality is she OK or not?)⁶⁵

B. *Na ge yatou mei datie-zho bei, no kan ha,*
 That CL girl NEG scatter-brained-IPFV PRT 1SG look PRT
datie-zho de lia bu xiang bei
 scatter-brained-IPFV NMLZ PRT NEG resemble PRT
 'That girl isn't scatter-brained, I think she doesn't look scatter-brained.'

It is clear from speaker B's reply that *fozho* here does not convey a quotative/reported speech meaning, but rather is addressee-orientated i.e. eliciting the addressee's opinion rather than that of a third party.

Likewise, bare *fo* can also be used for information-seeking, as in the following *wh*-question which straightforwardly elicits an answer to the question asked.

(401) A. *Zhang aye amen mei-dao-le fo*
 NAME grandpa how NEG-COMPL-PFV *fo*
 'How did grandpa Zhang die?'

B. *zai tangniaobing na*
 PRT diabetes PRT
 'Diabetes.'

⁶⁵ The illocutionary force of speaker A's utterance, conveyed in English here with 'in actuality', in Standard Mandarin could use *daodi* 'in the end, when all is said and done', which has a somewhat stronger expressive meaning.

In view of Traugott's (2010, 2012: 21) proposal of turn-uptake as a diagnostic for intersubjectification, these uses of SAY are prototypical cases of intersubjectification in that they function to elicit a response from the addressee.

6.4.4.2.3 Confirmation seeking

fozho/fo are also used for confirmation-seeking – that is, to ask a question to confirm the accuracy of a point already raised in the previous discourse or evident in the real-world context. In this respect, *fo/fozho* can play a role in creating discourse cohesion by referring back to the previous speaker's utterances, as well as opening up a turn for the addressee (cf. the intersubjective use of French *alors* for confirmation-seeking, noted by Traugott 2012).

In (402), the speaker is referring to a dirty place that seems like it might be used for raising chickens, and so he asks the *fozho*-marked question in (402) to confirm his suspicion, and receives a straightforward answer like in the information-seeking uses above.

(402) A. *Zhe dai shang yang sha zho zho,*
 This area on raise what IPFV PRT
yang shang dian jier fozho a
 raise up some chicken *fozho* PRT
 'What is raised here? Chickens?'

B. *fang qiaohua*
 Put *qiaohua*
 '(That's where they) put the *qiaohua* [a type of pig's feed].'

Similarly, below, in (403), shortly after being informed by speaker A that his great grandfather had got angry, speaker B responded by using *fozho* to seek confirmation.

(403) A. *ni de taiye fan-dao-zho zai jiu jiamen*
 2SG POSS great.grandfather rebel-COMPL-PFV again just 3PL
jia li mei qu-guo a
 house LOC NEG go-ASP PRT
 'Your great grandfather got angry. He didn't go to their house again.'

B. *qisi-le* *fozho* *o*
 be.very.angry-PFV *fozho* PRT
 '(He) became really angry, right?'

A. *En*
 PRT
 'Yes.'

6.4.4.2.4 Agreement-seeking

In addition, *fozho* can be used to engage the attention of the addressee and seek his/her agreement with the speaker's point. The rhetorical question marked by *fozho* in (404) is part of a monologue in which the speaker is telling the addressee, in answer to her previous question, about the nature of his exam preparations. He is questioning the value of revising for the entrance examination for a position in the Qinghai government civil service when one could prepare for the national civil service examination (i.e. a harder exam, preparing for which requires more in-depth knowledge and so would cover the material in the Qinghai exam anyway).

(404) *Guojia de zhe ge ha kan-zho kan-zho bi no yi ci shen me*
 Country POSS this CL TOP look-IPFV look-IPFV BI 1SG one time deep PRT
 '(I'm) studying the national exam in more depth.'

Qinghai de gongwuyuan xian mei kan-zho, no xian
 Qinghai POSS civil service first NEG look-IPFV 1SG first
 'At the moment I'm not preparing for Qinghai's civil service exam.'

ni Qinghai de suan ge sha fozho
 2SG Qinghai POSS count CL what *fozho*
 'What does the Qinghai (exam) count as?'

pa a zho yanjiu zho me, shenlun zhe ko
 crawl PRT IPFV research IPFV PRT detailed.exposition PRT PRT
 '(I have been) hunched over the desk studying detailed exposition [a type of examination question].'

In this context, *fozho* has no propositional meaning, and does not denote anything in the external world, but the speaker uses it to build agreement with the addressee in a friendly and non-threatening manner, similarly to *you know* in English which is used to 'emphasize

solidarity and implicit shared understanding' (Stubbe and Holmes 1995: 85). That is, depending on the addressee's attitude towards revising for the Qinghai exam, the *fozho*-marked question could be potentially face-threatening (see next section). Unlike in the information seeking/confirmation seeking use discussed above, here the *fozho* marked utterance is a rhetorical question in which the speaker is asserting his own viewpoint and seeking agreement, rather than seeking to actually elicit the speaker's opinion, and as such, the speaker does not receive a response in answer to the *fozho*-marked question.

6.4.4.2.5 Face-saving device / softener

As just mentioned, it can be seen that *fozho/fo* is used to soften the tone of potentially offensive questions, which illustrates the face-saving dimension of intersubjectivity and attention to the addressee's self-image (cf. Traugott 2010: 21). In (405) *fozho* fulfils this softening function in a question that is implicitly face-threatening:

- (405) *ni zheme ge bu ko gei zho amen ge zho fozho*
 2SG this.kind CL NEG PRT give PRT how PRT MOD *fozho*
 'You won't do this little bit of work, what's going on?'

Similarly, the softening effect is also seen in the use of *fozho* in commands. In (406) the imperative mood comes from *gei go* (cf. Cheng 1980), rather than from *fozho*. The effect of adding *fozho* here is likewise to prevent the utterance sounding too abrupt or rude whilst the speaker tries to persuade the addressee to help with some work.

- (406) *zair ren bu gou a, ni zhuan gei go fozho*
 now person NEG enough PRT 2SG transfer IMP *fozho*
 'Now there are not enough people. You transfer and help them.'

This is functionally similar to the use of Standard Mandarin sentence-final particles *ne*, *a* and *ba* which according to Lee-Wong (1998) reduce the illocutionary force of direct requests, mitigating the threat to the face of the addressee. (407) illustrates for *ba*:

- (407) *Shifu, chuanguhu ba ta dakai yixia ba.* [Standard Mandarin]
 Master, window BA⁶⁶ it open a.bit PRT

'*Shifu*, open the window for a little while BA.'

 (Lee-Wong 1998: 400, my gloss)

⁶⁶ This BA refers to that of the BA construction used with pre-verbal objects and is not the particle under discussion here.

Similarly, although not sentence-final like *fozho*, *ne* can be seen in the example below being used to avoid sounding confrontational when requesting money from a friend:

(408) A friend approaches another close friend to ask for a loan [Standard Mandarin]

Wo haizi yao dao Aozhou qu qiu xue, dan hai que shao yidian qian.

my child wants to go to Australia for studies, but still short of a little money.

Bu zhi dao ni shoutou you mei you? Ruguo you de hua, . NE.. ni

Don't know you have or not with you? If you have, NE.. you

shi bu shi jie gei wo yong? Wo NE.. Zai shenme shi hou keyi huan gei ni.

Is it not possible let me use? Wo NE.. at what time can return give you

Is it (not) possible let me use? I NE will at a certain time return the money to you.

'My child wants to further his studies in Australia, but we're still short of a little cash.

I was wondering if you happen to have some. If you have, NE.. would it be possible for you to lend it to me? I NE .. will return it sometime (specific date).' (Lee-Wong 1998: 397)

6.4.4.2.6 Intensifier

Finally, *fozho* can be used as an intensifier to convey the speaker's attitude, illustrating the subjectification of the erstwhile speech verb. (409) is a conversation about a restaurant; the speaker asks whether the restaurant concerned still fries frogs, and upon receiving an affirmative answer, swears in disbelief and uses *fozho* to express his subjective attitude of disbelief/surprise (thus fulfilling a mirative function in this example). The conversation is then taken forward by another speaker with an unrelated statement.

(409) A. *na ge li hai chao-zho dian tianji zho*

That CL LOC still fry-IPFV some frog PRT

'They still fry frogs there?'

B. *En*

PRT

'Yes.'

A. *ritama no hai zhende jing-ha-le*
 damn.it 1SG ADV really shock-COMPL-ASP
o, Haiyan hai chao-zho de tianji ma fozho
 PRT, Haiyan still fry-IPFV NMLZ frog Q *fozho*
 ‘Damn it! I’m shocked, Haiyan county still fries frogs!’

6.4.4.2.7 On the composite marker *fozho*

Finally, it should be mentioned that the function of the composite discourse marker *fozho* resembles the use of bare *zho* [tʂo] sentence-finally as a mood marker, which is retained in the Xining dialect from early Mandarin (cf. Chen 1998). Du (1993: 48) provides the following example from the Xining dialect of *zho* used in an exclamatory function as a mood marker, where it is also preceded by *zhe* [tʂe]. According to Du (1993: 48), *zho* here is used to express the speakers’ dissatisfaction with the addressee.

(410) *bu qiaoqiaoer-zho, hai shuo sha zhe zho*
 NEG quietly-DE, still say what *zhe zho*
 ‘Not quiet, what else will you say?!’ (Du 1993: 48, my gloss)

This example shows that *zho* is used as an attitudinal marker to express the speaker’s emotion, and so sentential *zho* itself could perhaps be analysed in terms of (inter)subjectivity, similarly to how SAY has been treated here. One may therefore wonder whether what I have called a composite discourse marker *fozho* might actually be a case of the combination of the independent particle *fo* + modal *zho*, rather than a composite form. However, this does not seem to be the case because modal *zho* can co-occur with *fozho/fo*, as in (411) and (412) below (also (405) above), but modal *zho* is not normally iterated when used as a clause-final particle.⁶⁷

⁶⁷ If modal ZHE in the Xining dialect could be iterated, we might expect it to be possible to combine aspectual ZHE with two further tokens of modal ZHE, but the combination of three ZHEs is not attested in my data. However, what is found is the combination of aspectual ZHE and modal ZHE, as in (5).

(5) *No xiang zhe zho*
 1SG think IPFV MOD
 ‘I am thinking.’

(411) *Wang baba de na ge amen ha zho fozho, aye*
 NAME uncle NMLZ that CL how PRT *zho fozho*, grandpa
 ‘Grandpa, how is uncle Wang’s sickness?’

(412) *Amen zho fo a?*
 how PRT *fo* PRT
 ‘What is going on?’

Particles are also not repeated clause-finally in the same utterance in Standard Mandarin, and so have sometimes been assumed to occupy distinct functional projections in an articulated CP (e.g. Paul 2015). In addition, as shown in (411) and (412), modal *zho* elsewhere precedes rather than follows the sentence-particle *fo*, which also suggests that the *zho* in the discourse marking uses of *fozho* is not an independent occurrence of modal particle *zho*. More generally, however, the status of *fozho* as a composite device appears from its use to fulfil a wide variety of different functions, as discussed in this chapter, such as as a complementizer, evidential/quotative marker, clause connective in adverbial clauses, and volitional mood marker (showing that *fozho* is functionally non-identical to the sum of its parts, *fo* + *zho*).

6.4.4.2.8 Section summary

To summarize, we have seen that *fo/fozho* illustrate the intersubjectification of SAY, which in the examples in this section no longer has propositional meaning, denoting a speech act, but rather has been ‘recruited to encode meanings centered on the addressee’ (Traugott 2010: 35), or else to intensify the expression of the speaker’s subjective attitude (illustrating subjectification). It was not possible to find evidence showing that the intersubjectification of SAY in the Xining dialect is a result of contact-influence (e.g. studies showing that SAY is also used for attitudinal/interpersonal functions in the potential model languages – the region’s Mongolic varieties and Amdo Tibetan).⁶⁸ But in the next section it will be shown that SAY has undergone *subjectification* in these varieties, being used to express volitional mood, and so it will be argued that at least with regard to the volitional function there is likely to have been contact influence on the Xining dialect.

⁶⁸ Cheng (1980: 149) does not identify contact influence as a factor in the use of *shuo* to mark interrogative mood (treated here as a case of intersubjectification), even though he attributes the reportative uses (Section 6.4.2 above) to Tibetan influence, which might suggest that he sees a lack of contact influence with regard to the intersubjective usage.

6.5 Volitional modality

6.5.1 Background

The grammaticalization of speech verbs to grammatical markers of volition or proximative/future is not unusual cross-linguistically, but it is not common in Chinese dialects (it is not reported, for example, among the non-lexical functions of SAY listed in Chappell 2012). What seems to be more common in Chinese is the use of SAY as a verb with a cognitive meaning, rather than as a grammatical marker with this function (cf. Li 2003). However, the extension of a SAY verb to express intention and further to a proximative and future marker can be illustrated with the following examples from Güldemann's (2008) study of African languages, which focused largely on those of Sudanic, Afroasiatic and Niger-Congo stock.

In Dongola (East Sudanic), the quotative verb incorporates into compound verb forms to express a proximal future:

- (413) *nog-ε-dól-li* [Dongola, Nubian, East Sudanic]
go-QV-want-PRS:1S
'I am about to go.'
(Güldemann 2008: 430, after
Armbruster 1960: §4022)

Meanwhile, in Ewe (Niger-Congo), the quotative verb *bé* systematically denotes intention with animate subjects, and proximal future with inanimate subjects:

- (414) *wo-be ye-wo-a-ɖu nu* [Ewe, Kwa, Niger-Congo]
3PL-QV LOG-PL-FUT-eat food
'sie wollen essen [they want to eat]'
(Güldemann 2008: 433, after
Westermann 1905: 7)
- (415) *tsi bé ye-á-dzà* [Ewe, Kwa, Niger-Congo]
rain QV LOG-FUT-drop
'Wasser sagt, es wolle tropfen: es sieht aus als ob es regnen wolle
[water says, it wants to rain: it seems that it is going to rain]' (Güldemann 2008: 433,
after Westermann 1954:
11)

Similarly, in Bedauye (Cushitic (North), Afroasiatic), the generic speech verb *di* 'say' expresses both intention and future.

- (416) *'uu-ták* {*ṣaa-t* *tam-i*} *'i-ndi* [Bedauye (Cushitic (North), Afroasiatic)
M.DET-man {meat-F eat-1S:HORT}3M.S-IPFV:say
'the man will eat meat [lit.: the man says, 'let me eat meat']' (Güldemann 2008: 431,
after Hudson 1974: 117)

Nevertheless, cognitive uses of verba dicendi have been reported for at least one Sinitic variety within the Qinghai-Gansu Sprachbund. Tangwang can use *shuozhe* with a cognitive meaning to express a desire/intention:

- (417) *tɕja-tě-tʂɛ* *ʂʷɔtʂɔ,* *ʃu-ki-tʂɛ* *xa,* [Tangwang]
burn-coal-IPFV EPIS burn-give-IPFV down
tsɿ ʃu-tʂɛ *pala*
self burn-IPFV PRT
'(I) want to burn coal, and warm myself up.' (Djamouri 2013: 255)

However, as far as I am aware, volitional mood marking has not been previously observed for SAY in Xining Mandarin.

6.5.2 Volitional modality and Xining Mandarin SAY

As mentioned above, the extension of SAY to express intention can be regarded as another dimension of subjectification, involving a change from denoting a speech act in the external world, to a meaning related to the speaker's cognitive state (cf. Krug 2000: 150-1). Even though its use does not entail that a speech act has taken place, a speech act may be implied (e.g. (418)).

- (418) *o baba zhe ge ha ling-shang ha Haiyan qu li fozho*
PRT father this CL PRT lead-COMPL PRT Haiyan go FUT VOL
'Father intends to take this to Haiyan.'

For this reason the volitional semantics are clearer in uses with a first person subject (e.g. (419)).

(419) *jiner ha, no hai tianye qing-zhe ha, no bu*
 today TOP, 1SG still weather clear-IPFV COND, 1SG NEG
tiao qu fozho, zuo huo qu-le fozho
 do go VOL, do work go-ASP VOL
 'Today, if the weather is clear, I still don't want to come. I intend to go work.'

A further example is (420), where the speaker says that s/he wanted to transfer to the prefecture, although in the subsequent discourse it is apparent that s/he did not manage to do so, and so an intention in the past is denoted.

(420) *zhuan shang ha zhou shang shanglai li fozho*
 transfer up TOP prefecture on up.come FUT VOL
 '(I) intended/wanted to transfer to the prefecture.'

Evidence of a loss of speech verb semantics on the volitional use is that an intention meaning of *fozho* is possible even with animal subjects. This utterance is already future-denoting because of the marker *lia* (cf. Chapter 5), but *fozho* adds the volitional sense.

(421) *gou, niurou ha chi lia fozho*
 dog beef OBL eat FUT VOL
 'The dog wants to eat beef.' (Elicited)

During informal consultation of speakers made from various locations, I found that such volitional uses of *fozho* were possible for speakers from Ledu district and Xunhua county, as well as Xining city; that is, across the three Xining Mandarin dialect groups discussed in Chapter 2. But Xining Mandarin *fozho* does not seem to have been extended from a marker of intention to a general future marker, as has occurred in Dongola, Ewe and Bedauye. As can be seen in examples like (421), *fozho* occurs with the future marker *lia*, and adds a sense of desire that was previously absent. However, this could be an extension that is in its early stages in contexts where the future marker is absent.

In terms of its syntactic position, *fozho* occurs clause-finally, like the SAY evidential discussed in Section 6.4.2. The extension from SAY verb to a verb with a cognitive meaning is attested in the history of Chinese (Li 2003). However, lacking properties of a lexical verb, Xining Mandarin volitional *fozho* is best regarded as a grammatical marker: it lacks the morphosyntactic properties of a lexical speech verb such as compatibility with negation or aspect markers.

- (422) *no Beijing qu lia (*mei) fozho (*le)*
 1SG Beijing go PRT NEG VOL ASP
 ‘I want to go to Beijing.’ (Elicited)

In this respect it resembles the use of complementizer-headed main clauses for the expression of a range of modal meanings in the Balkan languages, as described in Ammann & van der Auwera (2004). (423) illustrates for Romanian, where the complementizer is used to express a wish.

- (423) *Să ne vedem sănătoși!* [Romanian]
 that.MOD us see.PRES.1PL healthy.M.PL
 ‘May we see each other healthy!’ (Ammann & van der Auwera 2004: 342
 after Vasiliu 1972: 219)

However, the volitional usage of *fozho* is semantically narrower than is found for these complementizer-headed main clauses in the Balkan languages, being limited mainly to expressing intention rather than allowing a range of volitional moods.⁶⁹

6.5.3 *The role of language contact in the development of intention fozho*

A contact explanation for volitional mood marking by SAY in Xining Mandarin is likely given the absence of this function across other Chinese dialects, and the fact that this function is widespread among the local Mongolic, Turkic and Bodic languages in contact with Xining Mandarin.⁷⁰

First, it is known that volitional uses of SAY exist among Mongolic languages beyond Qinghai province. Regarding the Kalmyk dialect of Mongolian, Baranova (2015: 70) identifies the following examples where the present progressive form of SAY + *-n* (the simultaneous converb) denotes intention. It has also been extended to a more general prospective marker able to mark negative/undesirable events, as in (426), although according to Baranova this latter change has not occurred in other Mongolian dialects (Baranova 2015: 71).

⁶⁹ Ammann & van der Auwera (2004) report five moods for complementizer-headed main clauses in the Balkan languages: optative, imperative, exhortative, cohortative, and hortative. A further difference is that those complementizers are not derived from *verba dicendi*.

⁷⁰ I did not find volitional uses reported for SAY reported in the literature for the local languages discussed here. The examples from the local languages were collected during one-to-one language lessons with native speakers of these languages.

- (424) *bi örü-n ert Elista ora-n* [Khalka, Mongolian]
 1SG.NOM morning-GEN early Elista go.in-CVB.MOD
gi-zü-nü-v
 say-PROG-PRS-1SG
 ‘I’m going to enter Elista early in the morning.’ (Baranova 2015: 70)
- (425) *mini egčə japon kelə surə-n* [Khalka, Mongolian]
 1SG.GEN elder.sister japan language learn-CVB.MOD
gi-zä-nä
 SAY-PROG-PRS
 ‘My elder sister wants to learn Japanese.’ (Baranova 2015: 70)
- (426) *mörən ük-čə odə-n gi-zü-nü* [Khalka Mongolian]
 horse die-CVB.IPFV go.away-CVB.MOD say-PROG-PRS
 ‘The horse is close to death.’ (Baranova 2015: 71)

In Qinghai Mongolian and Salar (Turkic), SAY + IPFV can be used to express intention, matching the pattern found in Xining Mandarin.

- (427) *bi petciŋ-də jaw-i gə-dze* [Qinghai Mongolian]
 1SG Beijing-DAT go-VOL say-IPFV
 ‘I intend to go to Beijing.’ (Lesson notes)
- (428) *me tʃəzə bir el-ɣa ed-ber* [Salar]
 1SG car one buy-FUT say-IPFV
 ‘I intend to buy a car.’ (Lesson notes)

Similarly in Amdo Tibetan, *zi-gejəu* (SAY + the conjunct imperfective auxiliary) can express intention, and like Xining Mandarin *fozho* it shows signs of decategorization in that it may not be negated or host the interrogative enclitic:

- (429) *ku neŋkæ petciŋ-na dzu dzə* [Amdo Tibetan]
 3SG tomorrow Beijing-OBL go.IPFV FUT.CONJ
 (*ə=/*ma) *zi-gəjəu*
 (Q=/NEG) say-IPFV.CONJ
 ‘He intends to go to Beijing tomorrow.’ (Lesson notes)

The development of volitional modal *fozho* thus reflects an extension found across the language families in the Sprachbund with matching internal composition (SAY + imperfective) and structural position (clause-finally). In view of the contact scenario discussed in Chapter 2, this, together with the absence of a similar volitional mood marker from SAY in other Chinese dialects, suggests that the device arose through contact influence from these local languages.

6.6 SAY as a conjunction

According to Saxena (1995), after the initial grammaticalization of the SAY verb to a quotative marker and/or complementizer, the following stage involves extension to clause-linking functions. She proposes an implicational hierarchy in which if the latter are present then so are the former. The four-stage process involves grammaticalization from a quotative verb → complementizer → reason/purpose marker → conditional → comparative marker. Xining Mandarin concurs with the predictions of this hierarchy, having reached the fourth stage, using SAY as a conditional marker, as well as for the previous three functions.

In Chinese dialects, subordinate clauses precede main clauses in complex clauses of cause and condition (Chappell 2001) and this order is retained in Xining Mandarin. Reason clause marking using *fozho* (SAY + IPFV) can be seen here, where *fozho* occurs clause-finally in the reason clause:

(430) *jia bing-ha-le fozho, jiaoshi li mei lai*
 3SG sick-COMPL-PFV CNJ classroom LOC NEG come
 ‘Because he was sick, he did not come to the classroom.’ (Elicited)

(431) *zhe ge rou neng chi lia fozho, bingxiang li fang-ha-le*
 this CL meat can eat PRT CNJ fridge LOC put-COMPL-PFV
 ‘This meat can be eaten, so put it in the fridge.’ (Elicited)

Likewise, purpose clause marking can be achieved using the same device:

(432) *jia xue-zhe geng hao fozho no gei jia mai le*
 3SG study-DE more good CNJ 1SG for 3SG buy PFV
ge diannao
 CL computer
 ‘In order that he may study better, I bought a computer for him.’ (Elicited)

Less common in the typological literature on conjunctive uses of say verbs is the contrastive function, but this is possible in Xining Mandarin:

- (433) *qiantian no hen duo pingguo mai-shang-le fozho*
 day.before.yesterday 1SG very many apple buy-COMPL-PFV CNJ
nomen chi bu shang le
 1PL eat NEG COMPL PRT
 ‘The day before yesterday I bought a lot of apples, but we haven’t eaten them.’
 (Elicited)

My informants found that *fozho* in these cases fulfilled a clause-linking function rather than denoting a speech act or having an evidential/discourse function.

In the corpus data, *fozho* (SAY + IPFV) functions as a temporal conjunction indicating simultaneity i.e. a ‘when’ clause, translated in Chinese with *de shihou* ‘at the time of’:

- (434) *ersao dong ha shou fozho, gagogo shou*
 wife.of.second.eldest.brother move COMPL hand CNJ, little.brother guard
ha zho fo sa
 COMPL IPFV PRT PRT
 ‘When the wife of (his) second eldest brother was having surgery, the youngest of (his) older brothers was nearby watching.’

- (435) *Laoshi, na ge xiaozhang tingke lai li fozho*
 Teacher that CL headmaster listen.class come FUT *fozho*,
no ha dianhua da-zho, jiuba li ha dianhua wuwu de
 1SG ACC telephone hit-IPFV bar LOC PRT telephone ONM DE
 ‘The teacher, when the headmaster was coming to listen to the class, (she) phoned me.
 In the bar (my) phone was ringing.’

Taken together, the above examples show that *fozho* functions as a generalized clause-connective.

With regard to how such functions emerged, according to Chisarik and van der Wurff (2003), who consider the change from SAY to ‘because’, a general cognitive meaning could be diffused to SAY (‘engaging in cognitive processes’) when it is functioning as a complementizer in the complement clause of a matrix verb of cognition. They illustrate as follows with Bengali *bole* (using English in the examples for convenience):

(436) *He thought **bole** ('that') it was hot outside*

(437) *He thought **bole** ('thinking/reflecting/considering/cogitating') that it was hot outside*

Then, they argue, in contexts where the matrix verb is omitted, reinterpretation could occur of SAY with this cognitive meaning as a causal device, leading to adverbial uses like *thinking/cogitating/considering he was sick, he did not want to go outside*:

(438) *we didn't go outside **bole** ('thinking/reflecting/considering/cogitating') it was hot*

(439) *we didn't go outside **bole** ('because') it was hot*

Thus on Chisarik and van der Wurff's (2003) proposal, the progression observed for *fozho* would be from complementizer to volitional mood marker to conjunction. This mechanism will be explored briefly, as well as the extent to which the conjunctive uses (including the change from SAY → 'but') can be derived from the cognitive sense observed in Xining Mandarin *fozho*, namely the more specific notion of intention/desire. It must be noted that the discussion with regard to pathways of development here is by necessity speculative, since we do not have diachronic data on the dialect, and so the following cannot be interpreted as claims about what actually happened (as much as about how such changes could plausibly occur).

As noted, the cognitive meaning of *fozho* when used in matrix clauses is consistently intention/desire, rather than general cognition, and so the complementizer has acquired only a subset of the meanings of the cognitive verbs with which it occurred, and not more general meanings. However, it is proposed that the intention meaning may in fact be sufficient as an intermediary step in some cases, because reason and purpose clause marking involve only a slight alteration of the semantics of intention, as can be seen by the fact that adverbial clauses often denote the "content of a mental state... ascribed to the agent of [the] main clause, either as an *intention* or as a personal motivation" (Verstraete 2008: 766, emphasis added). For example, in English we may even use the lexical verb 'intend' to form adverbial clauses of reason and purpose: *Intending to take the bus [cause], I didn't bring my car keys* or *Intending to learn English [purpose], he moved to the UK*. However, in other contexts where a causal meaning does not arise so straightforwardly from an intention meaning (as in (440) below, where an intention meaning is incongruous (cf. 'intending to be sick')), there may instead be a direct reinterpretation of a lexical verb denoting a speech act so that it acquires a general cognitive sense (i.e. *thinking/cogitating/considering he was sick, he did not come to the classroom*):

- (440) *jia bing-ha-le fozho, jiaoshi li mei lai*
 3SG sick-COMPL-PFV CNJ classroom LOC NEG come
 ‘Because he was sick, he did not come to the classroom.’ (Elicited)

Once grammaticalization occurs, this would lead to a SAY causal conjunction arising without involving an intermediate step as a complementizer that acquires cognitive semantics from the matrix verb.

Regarding the use of SAY to mark contrastive clauses (SAY → ‘but’), it is suggested that there are pragmatic factors (specifically, the Gricean maxim of quantity⁷¹) which make progression from an intention meaning to a contrastive conjunction a logical development, and that past contexts could facilitate this reinterpretation. In some cases, a statement of intention can be deemed incomplete (insufficiently informative) on its own. This can be seen in particular in past contexts, because referring to a past event E as ‘x intended to do E’ rather than ‘x did E’ generates the conversational implicature that E did not happen. As such, past sentences with intention meaning often require a contrastive clause to reveal why the intended event did not happen (e.g. *Yesterday I intended to go shopping, but...*). This is illustrated in (441), where the insertion of bracketed *zuotian* ‘yesterday’ is treated as impossible or of low acceptability by informants:

- (441) *no *(zuotian) Lhasa qu lia fozho*
 1SG yesterday Lhasa go PRT VOL
 ‘I intend to go to Lhasa (*yesterday).’ (Elicited)

However, with a following contrastive clause, this example is acceptable:

- (442) *no zuotian Lhasa qu lia fozho,*
 1SG yesterday Lhasa go PRT CNJ

huoche ha mei gan-shang
 train OBL NEG catch-COMPL
 ‘Yesterday I wanted to take the train to Lhasa, but I missed the train.’ (Elicited)

Similarly, in (443) from the corpus data, we find a usage of *fozho* that both expresses intention and also introduces a following contrastive clause, illustrating the pragmatic motivation just discussed.

⁷¹ The maxim of quantity states: ‘Make your contribution as informative as is required (for the current purposes of the exchange)’ (Grice 1975: 45).

- (443) *zai na nomen tai ge zhe si fozho, zai na liqi mei*
 PRT then 1PL lift CL IPFV PRT *fozho*, PRT that strength NEG
you-zho
 have-IPFV
 'We want to carry (them), (but we) have no strength.'

Although these remarks are speculative, they show that a cognitive basis exists for the change from volitional modal to causal, purpose and contrastive conjunction.

With regard to the use of *fozho* to mark 'when' clauses denoting simultaneity, the adverbial clause marked by *fozho* indicates a state of affairs co-occurring with the event of the main clause. However, at least in (434) and (435) these states of affairs are not too far removed from being the personal motivation for the activity performed by the subject of the main clause (as in reason clause uses), and so this usage could perhaps also be explained in terms of an intermediate stage as SAY with a cognitive sense. But there is also another possible explanation for this usage. The simultaneity reading obtained for *fozho* could be a vestige of the imperfective semantics of *zho*, which is used to mark events occurring simultaneously, just as in Standard Mandarin (e.g. *zhan-zhe chi* 'Eat while standing'). In addition, however, Xining *zho* has itself been extended from imperfective marker to a marker of 'when' clauses (as far as I know this fact was not noted in studies on the Xining dialect, but it has been reported for the Linxia dialect in Gansu province by J.-J. Zhang 2007). (444) illustrates for the Xining dialect:

- (444) *zai jia zou li zho bao-shang-le ba*
 at 3SG walk FUT CNJ carry-on-PFV PRT
 'When he was leaving, he took them.'

If the development of *fozho* to 'when' conjunction capitalized on the imperfective semantics of *zho*, then the extension could perhaps occur without passing through an intermediate stage in which SAY acquired a cognitive sense. In either case, though, we have seen that a natural cognitive basis exists for this extension.

Finally, a role for language contact will be touched upon and a potential role for Mongolic contact influence identified. In sessions with my informants, I did not find any reason or purpose conjunctive uses of SAY in Amdo Tibetan. But SAY in Amdo Tibetan is reported to function as a conditional clause marker (cf. Section 6.7 below). Similarly, although SAY can fulfil a clause-linking function elsewhere in the Turkic family (e.g. Matic' and Pakendorf

2013: 363), with regard to Salar – the most widely spoken Turkic language of the Sprachbund – my informant did not find this acceptable.⁷²

However, a SAY-IPFV subordinating conjunction (*gedzi*) is found in Qinghai Mongolian, providing a model that could have helped catalyze this extension in Xining Mandarin:

- (445) *tere sərəulədan jau-səŋ gwæ gedzi, baxfe-esə uʔtesə* [Mongolian]
 DEM.DIST school go-PFV NEG CNJ teacher-ABL telephone
ire-sen
 AUX-PFV
 ‘Because he didn’t go to school, the teacher telephoned.’ (Lesson notes)

- (446) *enə sən surəltəxə gedzi bi negə bire xodoltən* [Mongolian]
 DEM.PROX good study CNJ 1SG one pen buy
aw-ad-ə ə gədʒe
 take-CV.PFV-come give QUOT
 ‘In order for him to study better, I bought him a pen.’ (Lesson notes)

In fact, the use of SAY to express a causal relation is attested from as early as Middle Mongolian, appearing in a letter from Il-Khan Argun to Pope Nicholas IV written in 1290 (cf. Brosig 2014: 20).

- (447) *edüge nama-yi silam-dur ese ora-juɣu keme-n*
 now 1SG-ACC Christianity-DAT NEG enter-PST.2H say-CVB
mayuila-n ba sedki-n a-qu ci
 blame-CVB FOC think-CVB COP-FUT.P 2SG
 ‘Now, you [= Pope Nicholas IV] will be offended and think ill [of me] because I have not become a Christian’ Or: ‘Now, you will be offended and think ill of me, saying “[He] has not become a Christian”.’ (Brosig 2014: 20, after Street 2013: 48)

In the next section, topic/condition clause marking by SAY is discussed.

⁷² My informant was an undergraduate student, and so one may wonder whether a more conservative variety of Salar, spoken by older speakers, would allow this usage.

6.7 Topic/condition clause marking by SAY

Xining Mandarin *fo* can function as a topic marker, an extension found across a number of other Chinese dialects, including Southern Min, Beijing Mandarin, Changsha Xiang and Shanghainese Wu (Chappell 2012: 87). Chappell (2012: 87) notes that SAY typically occurs clause-initially in the pattern ‘talking about X_{clause} ’, and is generally not highly grammaticalized in the sense that it retains the semantics of the speech verb. (448) illustrates this use of *shuo* in Beijing Mandarin:

(448) 我将来就是什么呀，说考大学，如果考不上，我就两次。 [Beijing Mandarin]

Wǒ jiānglái jiù shì shénme ya,

1SG future then be what PRT

shuō kǎo dàxué, rúguǒ kǎo-bu-shàng,

shuo sit:exam university if exam-NEG-DIR

wǒ jiù lián kǎo liǎng cì.

1SG then successive sit:exam two CL

‘So what will I do in the future?; **as for** taking university entrance exams, if I’m not admitted, I’ll just repeat the exams.’ (Chappell 2012: 87, after Fang 2006, example 30)

In Beijing Mandarin, in addition to topic marking, attaching *shuo* to a modal adverb or conjunction is a productive strategy for linking clauses with various logical relations such as condition clauses (e.g. *ruguo shuo* ‘if’) and other relations e.g. *keneng shuo* ‘maybe’, *budan shuo* ‘not only’ (Chappell 2012: 88). However, as well as these clause-initial uses, post-topic uses have been reported for Shanghainese *yijiang* (IPA: $hi^{23}kã^{34}$), which in (449) functions as a topic marker but also indicates counterexpectation (Han and Shi 2014: 486):

(449) $mən^{23}k^hγ^{34}dγ^{23}gə^{212}$ $mo^{212}zĩ^{23}$ $ɦĩ^{23}kã^{34}$, $ɦue^{23}tə^{255}$ RAP [Shanghainese]

outside carpenter ? can RAP

‘(It’s unbelievable that) the carpenter outside can do RAP!’ (Han and Shi 2014: 486)

A topic marking function for Xining Mandarin SAY does not appear to have been previously noted in the literature. In this function, SAY differs from the usual pattern in Chinese dialects by occurring phrase-finally (topic + *fo* + comment), similarly to Shanghainese *yijiang*. It is seldom used alone in this function, although an instance of this is shown in (450):

- (450) *huimin fo, hai jia xingqitian ha Xining zuo libai lai lia*
 Hui.people *fo*, still 3G Sunday PRT Xining do service come FUT
 '(He's) Hui, on Sundays he still comes to Xining for services.'

In context, *fo* here also seemed to fulfil an (inter)subjective function involving expressing the speaker's attitude and engaging the listener, because it follows remarks about the person concerned eating pork and drinking alcohol, activities not permissible for Hui Muslims (cf. discussion of subjective/intersubjective functions of SAY in the previous section). Thus this instance of *fo* apparently fulfils both a topic marking function, referring back to a topic in the discourse which is then commented upon, as well as calling the hearer to attend to the perceived ridiculousness of the person concerned attending services whilst still engaging in non-permissible activities.

More commonly *fo* as a topic/condition clause marker occurs in a composite form, preceding the dialect's conditional/topic marker *ha* (cf. Dede 2007: 875-7 for discussion of *ha*). (451) shows *fo-ha* marking a topic, and (452)-(453) show *fo-ha* marking a condition clause.

- (451) *dang ge jingcha fo-ha, na ge zai jiu xintou da shi zho*
 be CL police COND that CL at just interest big be PRT
 'As for being a policeman, he is very interested.'

- (452) *laowai zhenghao jiandier fo-ha zheng ha lia ge*
 foreigner by.chance spy COND ruin COMPL FUT PRT
 'If the foreigner happened to be a spy, we would be finished.'

- (453) *nomen de zhe ge Bai Li ha ling dao fo-ha,*
 1PL POSS this CL NAME TOP lead-COMPL COND
jiu bu qi-si ma, nomen ha
 just NEG anger-die Q 1PL TOP
 'If our Bai Li is taken away, wouldn't it drive us mad?'

Rather than having the structure typical of Chinese dialects, topic/condition marking with SAY in Xining Mandarin reflects that found in local languages like Amdo Tibetan, where the speech verb *bzlas* has also acquired a topic marking function (Shao 2015: 84). In Amdo, the bare speech verb may attach to the end of a nominal topic (topic + /fizi/ 'say' + comment). Also, a composite topic marker may be used in which /fizi/ 'say' precedes the subjunctive

conjunction /na/ (topic + *hizina* + comment). These uses are shown in (454) and (455) respectively:

- (454) *figormo-ra-figormo hizi, figormo mun-na* [Tibetan]
 money-CONN-money TOP money NEG-CONN
c̣hu ta tshuuzuk xhi-ni
 2SG.ERG PRT what know-EGO
 ‘You just know about talking about money, apart from money what else do you know about?’ (Shao 2015: 84)

- (455) *ḡsanbuu hizina ḡsaṭchen-zuk-re.* [Tibetan]
 Cordyceps.sinensis TOP expensive-INDEF-COP
 ‘Speaking of Cordyceps sinensis [a fungus], it is very expensive.’ (Shao 2015: 84)

Condition clause marking in Amdo Tibetan is usually performed with the composite form *hizina* (Shao 2015: 84-5):

- (456) *ḡa suwluḡ-ḡa ndzo ḡgo hizina, ḡa: lamyla*
 1SG.ERG Xining-DAT go.IPFV need COND 1SG.DAT petrol.money
ḡter ḡgo [Tibetan]
 need give
 ‘If they want to make me go to Xining, they have to give me petrol money.’
 (Shao 2015: 84-5)

Topic markers derived from SAY are also found in local Turkic and Mongolic languages such as Salar (Turkic) (Dwyer 2000: 56), and Baoan (Mongolic), where a composite form is also reported (A.-S. Zhang 2007: 354). With regard to Mongolic, the converb of SAY, *ke(m)e*, was commonly used in a topic marking function in the earliest records of the Mongolian language e.g. the *Secret History of the Mongols* (Street 2013: 12). The clause-final position of the topic marker in contrast to the typical clause-initial position in other Chinese dialects, as well as the matching form (SAY + conditional marker) suggests that this pattern is a calque of the Tibetan/Mongolic pattern.

6.8 Chapter summary

To summarize, this chapter has discussed the following non-lexical functions of SAY in Xining Mandarin:

- 1) Complementizer
 - a) Post-quotation complementizer *fo*, *fozho*
 - b) Pre-quotation particle complementizer *fo*
 - c) Complex complementizer *fozho fozho*
- 2) Hearsay / Reported speech marker
- 3) Discourse marker *fozho* / *fo*
- 4) **Volitional mood marker *fozho***
- 5) **Clausal conjunction *fozho***
- 6) **Topic/conditional marker *fo/fo-ha***

The functions in bold are, as far as I am aware, described here for the first time. With regard to previously documented functions, some new uses were identified, in particular with regard to the discourse marker use of SAY. Discourse marker SAY was seen to be used with a range of addressee-orientated functions, as well as to express speaker attitude, functions which illustrate dimensions of Traugott's notion of intersubjectification/subjectification. It was also noted that the composite device *fozho* is used to fulfil discourse functions, and not only bare *fo*, which was the focus of previous discussion of attitudinal/interpersonal functions of SAY in the dialect.

The origin of these devices was discussed with respect to endogenous mechanisms of change, as well as the role of language contact. With the exception of the intersubjective uses of SAY as a discourse marker, for which corresponding uses could not be identified in the local languages, and the particle complementizer (which was suggested to be a modern development), the chapter provided examples showing that the emergence of these non-lexical uses of SAY has contributed to the morphosyntactic convergence of Xining Mandarin upon the head-final grammar of the substrate languages, and resulted in increased structural isomorphism in the region.

Chapter 7 Scrambling

7.1 Introduction

The preceding chapters have illustrated the head-final clausal syntax of Xining Mandarin as it is evident across the clausal structure: in the domain of aspect, modal auxiliaries, tense and in the CP. The present chapter considers an aspect of word order variation in the dialect, object fronting to the pre-subject position, and argues that this movement operation possesses the properties of Japanese-style scrambling, which is well-documented for head-final languages like Japanese and Korean but unattested elsewhere among Chinese dialects. The existence of Japanese-style scrambling in Xining Mandarin is argued to be a consequence of the emergence of head-final syntax in the dialect, in line with the predictions of a proposed typological universal, the Generalized Holmberg Constraint (Wallenberg 2009), which predicts that scrambling cannot move elements leftward past a c-commanding head.

To set the stage for the discussion of scrambling, in the next section SOV basic word order in the dialect will be briefly discussed, a property touched upon in Chapter 3 which cross-linguistically is correlated with the presence of Japanese-style scrambling (Fukui 1993, Haider and Rosengren 2003). Then topicalization will be considered, and found to be insufficient to account for object fronting in Xining Mandarin (Section 7.3). Properties of Japanese style scrambling are considered in relation to the Xining dialect in Section 7.4. Section 7.5 considers the landing site for the fronted object, and Section 7.6 discusses the reason why Japanese style scrambling is possible in Xining Mandarin, in view of the Generalized Holmberg Constraint.

7.2 SOV word order

In Modern Standard Mandarin the basic word order is SVO (Huang 1982, Paul 2015: 60ff.), and whilst SOV is an available word order, it is not used for neutral 'out-of-the-blue' utterances. The precise information structure properties associated with SOV in Standard Mandarin remain controversial, but some consensus does exist, at least with regard to general tendencies. Traditionally, object preposing has been analysed as requiring a focus reading. Thus Ernst and Wang (1995) claim that SOV order is used to assign contrastive focus as well as for emphasis (cf. Shyu 1995, 2001). That is, without the use of focus marking devices (*lian* 'even', *ye* 'also', *dou* 'all', *bu* 'not'), or unless the contrast is indicated by strong phonological stress, SOV order is often only marginally acceptable (Ernst and Wang 1995: 224). Badan and Del Gobbo (2015), however, also recognize the need for a contrastive reading and for

emphasis but analyse bare preposed objects as a contrastive topic (a syntactic topic with contrastive stress) rather than a focus (cf. Badan 2008). Similarly, Paul (2002, 2005, 2015) has highlighted the topic properties of bare preposed objects, arguing against the need for a focus reading. Nevertheless, those in the topic camp have tended not to dispute the contrastive and emphatic reading associated with SOV order, and so the recognition of contrastive/emphatic properties of object preposing in Modern Standard Mandarin is a shared aspect of (at least some of) the divergent focalization and topicalization analyses.

However, from the early studies on Xining Mandarin (e.g. Cheng 1980), it has been known that SOV exists as a basic word order (see Yang 2009 for an overview). In Chapters 2-3 I assumed that Xining Mandarin was SOV, following the existing studies, but here I provide support for this view by showing some ways in which SOV in the Xining dialect differs from SOV in Standard Mandarin. Firstly, unlike the usual case in Standard Mandarin, SOV is fully acceptable in 'out of the blue' contexts, where it does not indicate contrastive focus.

(457) *Na ge gawa fu ha mai de yao lia*
 That CL boy book OBL buy NMLZ need PRT
 'That boy needs to buy a book.'

In addition, in (459), uttered in answer to (458), focus is assigned in-situ to the subject; the preverbal object is presupposed information (a topic), but it is not contrastive (as is expected to be the case for SOV in Standard Mandarin).

(458) *fei ni de mantou ha chi le?*
 Who 2SG POSS mantou OBL eat PFV
 'Who ate your mantou?'

(459) *XIAO WANG no de mantou ha chi le*
 NAME 1SG POSS mantou OBL eat PFV
 'Xiao Wang ate my mantou.'

A number of further properties distinguish SOV order in Xining Mandarin from SOV in Standard Mandarin. In the remainder of this section I will consider the interaction of the following elements/constructions with SOV order:

1. Proper names/pronouns
2. Indefinite objects
3. Clausal complements
4. *wh*-phrase objects
5. *shi de* cleft construction

7.2.1 *Proper names/pronouns*

Paul (2002: 699-700) reports that proper names cannot be preposed in Standard Mandarin unless a contrastive reading is present, as in (461), whilst preposing of pronouns, shown in (462), is disallowed:

(460) **Wo Xiaowang bu renshi* [Standard Mandarin]
 1SG NAME NEG know
 (intended) 'I don't know Xiao Wang.' (Paul 2002: 700)

(461) *Wo Li laoshi mei jiandao, Wang laoshi dao* [Standard Mandarin]
 1SG NAME teacher NEG see NAME teacher actually
shi jiandao-le
 be see-PFV
 'I did not see teacher Li, (but) teacher Wang I actually did see.' (Paul 2002: 699, note 7)

(462) **Wo-de pengyou ta renshi* [Standard Mandarin]
 1SG-SUB friend 3SG know
 (intended) 'My friends know him.' (Paul 2002: 700)

However, in Xining Mandarin, both pronouns and proper names can occur preverbally in out of the blue contexts where no contrastive reading is present. The postposition *ha* indicates the non-agent semantic role of the object, preventing it being interpreted as a subject.

(463) *Xiao Wang jia ha/Lao Bi ha xihuan zhe*
 NAME 3PLOBJ/NAME OBJ like IPFV
 'Xiao Wang likes him/Lao Bi.'

Preposing of pronouns is also perfectly permissible, as can be seen in the following dialogue. In (465) the pronominal object *jiamen* 'them' is not a topic or a focus.

(464) *Xiao Li de na ge xifuer zai mei qu fo a mei*
 NAME POSS that CL wife ADV NEG go PRT PRT NEG
 'Little Li's wife, (she) didn't go?' (Corpus)

(465) *na ge no jiamen ha wen-le zhe*
 that CL 1SG 3PL OBJ ask-PFV PRT
 'I asked them about that.' (Corpus)

7.2.2 Indefinite objects

A definiteness requirement constrains preposing of nominals in Standard Mandarin, meaning that indefinite objects are generally disallowed with SOV order (Badan 2008, Huang, Li and Li 2013: 200).⁷³

(466) **ta [yixie jiu xinfeng] baocun zhe* [Standard Mandarin]
 He some old envelope kept FP
 "He has kept some old envelopes." (Badan 2008: 28, after N. Zhang 1996: 15-16)

But indefinites are perfectly grammatical preverbally in Xining Mandarin (cf. also (474) - (479)):

(467) *jia yixie xinfeng ha reng-diao-le*
 3SG some envelope OBJ throw-COMPL-PFV
 'He threw out some envelopes.'

7.2.3 Clausal complements

In Standard Mandarin, preposing of complement clauses is disallowed (see Paul 2015: 467-8 and Paul 2002, 2005: 121), but Xining Mandarin allows clausal objects to occur in SOV order and attaches the postposition *ha* to the end of the clause:

(468) **[_{TP} ta [women ji dianzhong kai hui]* [Standard Mandarin]
 3SG 1PL how.many o'clock hold meeting
wang-le]
 forget-PFV
 (intended) 'He forgot what time we are having a meeting.' (Paul 2015: 468)

⁷³ Although Badan (2008) shows that this Standard Mandarin example becomes acceptable with *lian* focus, and Huang, Li and Li (2013: 200) note that a generic or kind reading can be possible with SOV order.

- (469) [TP *jia* [*ji* *dianzhong kai hui ha*] [Xining Mandarin]
 3SG how.many o'clock hold meeting OBL
wang-diao-gei-le
 forget-COMPL-CAUS-PFV
 'He forgot what time (we) are having a meeting.'

7.2.4 *wh*-phrase objects

wh-phrase objects can occur preverbally in Xining Mandarin, whereas in Standard Mandarin preposing of *wh*-phrase objects, whilst not always impossible, is not as free as in Xining Mandarin. Thus compare (470) and (471), the former fully acceptable, and the latter unacceptable:

- (470) *Lao Bi sha ha chi-le* [Xining Mandarin]
 NAME what OBJ eat-PFV
 'What did Lao Bi eat?'

- (471) *Lao Bi (*shenme) chi-le (shenme)* [Standard Mandarin]
 NAME what eat-PFV what
 'What did Lao Bi eat?' (Elicited)

7.2.5 *Shi... de* cleft construction

Finally, syntactic restrictions are evident on SOV order in Standard Mandarin in that it is unavailable for the *shi de* cleft construction, which is used for focalization (Badan 2008):

- (472) **Zhangsan shi [zhe ben shu] kanwan de.* [Standard Mandarin]
 NAME SHI this CL book read ... DE
 'It's this book that Zhangsan read.' (Badan 2008: 33)

By contrast, SOV is possible here in Xining Mandarin:

- (473) *Xiao Li shi na ge ren ha da-ha de*
 NAME be that CL person hit-COMPL DE
 'It is that person who Xiao Wang hit.'

7.2.6 *Interim summary*

The above discussion has briefly illustrated that because SOV is a basic word order in Xining Mandarin, it is not subject to the usage restrictions which are found in Standard Mandarin. However, although SOV is basic, it is important to note that in general word order

in Xining Mandarin is remarkably free. (474) - (479) show that all of the possible verb-final orders for clause-internal scrambling in ditransitive constructions are grammatical (cf. Ren 2004):

- (474) *Wang laoshi yi ben fu ha jia ha gei-zhe*
 NAME teacher one CL book OBJ 3SG ha give-ASP
 'Teacher Wang is giving a book to him.'
- (475) *Wang laoshi jia ha yi ben fu gei-zhe*
 NAME teacher 3SG OBJ one CL book give-ASP
- (476) *yi ben fu Wang laoshi jia ha gei-zhe*
 one CL book NAME teacher 3SG OBJ give-ASP
- (477) *jia ha Wang laoshi yi ben fu gei-zhe*
 3SG OBJ NAME teacher one CL book give-ASP
- (478) *yi ben fu jia ha Wang laoshi gei-zhe*
 one CL book 3SG OBJ NAME teacher give-ASP
- (479) *jia ha yi ben fu Wang laoshi gei-zhe*
 3SG OBJ one CL book NAME teacher give-ASP

Next, topicalization is considered, in order that it may be distinguished from scrambling.

7.3 Topicalization

A feature of Altaic scrambling languages like Japanese and Korean is that they also possess morphological case systems, making the distinction between topicalization and scrambling morphologically evident in that the object can be marked either with the topic marker or, if scrambled, with the accusative case marker:

- (480) *Ku kay nun, nay ka pelsse poassta.* [Korean]
 that dog TOP 1SG NOM already saw
 'As for that dog, I have already seen (it).' (Paul and Whitman to appear)
- (481) *Ku kay lul, nay ka pelsse poassta.* [Korean]
 that dog ACC 1SG NOM already saw
 'That dog, I have already seen.' (Paul and Whitman to appear)

As Bošković (2004: 618-9) notes concerning Japanese, when accusative case is used, scrambling must have occurred. However, like Standard Mandarin, Xining Mandarin does not contain obligatory morphological topic marking (though optional markers like the particle *a* exist, as in Standard Mandarin), and so non-morphological criteria must be used to determine whether Japanese-style scrambling exists in the dialect. However, before considering Japanese style scrambling specifically, I shall first identify object fronting in Xining Mandarin as a distinct operation from topicalization by the different information structure and syntactic properties found for these types of movement. It will be seen that whilst Standard Mandarin topicalization is incompatible with (information and contrastive) focus, as well as with indefinite objects, Xining Mandarin object fronting is not so restricted. Similarly, it is well known that Standard Mandarin topicalization licenses a resumptive pronoun, but object fronting in Xining Mandarin when accompanied by focus does not license a resumptive pronoun.

7.3.1 *Standard Mandarin topicalization vs. Xining Mandarin object fronting*

With regard to topicalization to the left periphery in Standard Mandarin, Li and Thompson (1981) define the nature of the widely-recognized aboutness relation existing between topic and comment in terms of Chafe's (1976: 50) notion of framework-setting, according to which 'a topic sets a spatial, temporal, or individual framework within which the main predication holds' (Ibid. 85). Thus as Shyu (2014: 101) notes, in (482) the domain or 'framework' set by the topic is *nei xie shumu* 'those trees', and so the sentence is not directly 'about' the trees, but rather about their trunks (to which the property of bigness is ascribed) (cf. Chafe 1976).

(482) <i>Neixie shumu, shushen da</i> Those tree trunk big 'Those trees, (their) trunks are big.'	[Standard Mandarin] (Li & Thompson 1981: 86)
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In addition, it is generally assumed that Chinese topicalization is associated with information that is in some sense given or 'familiar' (cf. Frascarelli & Hinterhölzl 2007) rather than new to the hearer (e.g. Badan 2007, Del Gobbo and Badan 2010, Shyu 2014, Cheng and Sybesma 2015). This subsumes Li and Thompson's (1981: 100) statement that topics in Standard Mandarin 'relate the material in the sentence of which it is a part to some preceding sentence' (see also Badan 2007, among others), as in the following example of a discourse-linked topic:

(483) A. *wo zai Xingguo xuexiao jiaoshu* [Standard Mandarin]
 I at Xingguo school teach
 'I teach at Xingguo School.'

B. *ou! Xingguo xuexiao, nar you yi-wei Zhang Xiansheng*
 Oh! Xingguo school, there exist one-CL NAME Mr.
ni renshi bu renshi
 you know not know
 'Oh! Xingguo School, do you know a Mr. Zhang there?' (Li and Thompson 1981:
 100)

However, as Badan (2007: 10) notes, the familiarity of the topic need not arise from it having been actually mentioned in the preceding discourse (cf. Paul 2002), so long as it is 'present in the shared knowledge of the speaker and the hearer'. The givenness of the topic may thus also arise through non-linguistic means (e.g. through general world knowledge, as for generic topics, or via the extralinguistic context; cf. Paul 2015).

Also, in line with their role in denoting 'old information', Standard Mandarin topics must be either definite or generic (cf. Li and Thompson 1981: 86, Shyu 1995, Shyu 2014, Cheng and Sybesma 2015). Indefinite topics are disallowed, which means noun phrases with *yi* 'one' are generally not permitted with OSV order unless the context allows a quantity interpretation ('one book' rather than 'a book').⁷⁴

(484) **Yi pian lunwen, wo hen xihuan.* [Standard Mandarin]
 one CL paper I very like
 "A paper I like very much." (Badan 2008: 34, after Tsai 1994: 31)

However, in Xining Mandarin, fronted noun phrases with *yi* 'one' can receive an indefinite reading (cf. also (476) and (478)):

(485) *yi ben fu na ge ban li mei ge xuesheng du-le*
 one CL book that CL class LOC every CL student read-PFV
 'Every student in that class read a book.'

⁷⁴ As Badan (2008: 34) notes, with a numeral reading, an example like the following is acceptable:

(6) [*Yi pian lunwen*], *wo hai keyi yingfu, [liang pian na] jiu tai duo le.* [Standard Mandarin]
 One CL paper I still can handle two CL that then too much FP
 "One paper, I can handle, but two papers, that's too much." (Badan 2008: 34)

This provides an initial indication that OSV in Xining Mandarin need not be derived by topicalization of the kind found in Standard Mandarin, but rather is like Japanese where, as Miyagawa (2004: 20) notes, indefinites can move to the pre-subject position.

Standard Mandarin topicalization of the object is naturally available in a context where the object has been previously mentioned and the focus is on another element in the sentence. In the following examples, the focus is the subject, which carries sentential stress (Badan and Del Gobbo 2015: 59):

(486) *shei mai le zhe ben shu* [Standard Mandarin]
 who buy ASP this CL book
 'Who bought this book?' (Badan and Del Gobbo 2015: 59)

(487) *zhe ben shu, ZHANGSAN mai le* [Standard Mandarin]
 this CL book NAME buy FP (Badan and Del Gobbo 2015: 59)

It has been observed that the pre-subject position in Standard Mandarin is not used for information focus, but rather focus is assigned in-situ (Cheng and Sybesma 2015). Badan and Del Gobbo (2015: 58-59) illustrate as follows:

(488) *Zhangsan mai le shenme?* [Standard Mandarin]
 NAME buy PFV what
 'What did Zhangsan buy?' (Badan and Del Gobbo 2015: 58-59)

(489) *Zhangsan mai le ZHE BEN SHU* [Standard Mandarin]
 NAME buy PFV this CL book (Badan and Del Gobbo 2015: 58-59)

(490) **ZHE BEN SHU, Zhangsan mai le* [Standard Mandarin]
 this CL book NAME buy PFV (Badan and Del Gobbo 2015: 58-59)

Likewise, in Standard Mandarin, OSV is not used for contrastive focus (a stressed item which provides a correction) (Badan and Del Gobbo 2015: 59-60). (492) shows contrastive focus felicitously assigned in-situ, whilst (493) shows the unacceptability of fronting the focused object.

(491) *Zhangsan mai le zhe zhang chuang ma?* [Standard Mandarin]
 NAME buy PFV this CL bed Q
 'Zhangsan bought this bed? (for his new room?)' (Badan and Del Gobbo 2015: 59)

(492) *bu shi, Zhangsan mai le ZHE ZHANG ZHUOZI* [Standard Mandarin]
 not be, NAME buy PFV this CL table (Badan and Del Gobbo 2015: 60)

(493) **bu shi, ZHE ZHANG ZHUOZI Zhangsan mai le* [Standard Mandarin]
 not be, this CL table NAME buy PFV (Badan and Del Gobbo 2015: 60)

However, in Japanese, scrambling to the pre-subject position is compatible with both information and contrastive focus. When the object is scrambled, object focus does not become unavailable, as in Standard Mandarin (cf. (490) above). Thus (494) is a valid reply to the question *Who did the dog bite?* (object focus) (Neeleman et al. 2009: 34).

(494) *JOHN-o_i sono inu-wa kinoo t_i kande-simatta* [Japanese]
 NAME-ACC that dog-WA yesterday bite-ended.up
 ‘The dog bit John yesterday.’ (Neeleman et al. 2009: 34)

Contrastive focus is illustrated by order (c), where OSV is used to provide a correction (Vermeulen 2013: 94):

(495) *John-wa Sue-ni CD-o ageta* [Japanese]
 NAME-wa NAME-to CD-ACC gave
 ‘John gave a CD to Sue.’

a. *Ie, John-wa Sue-ni ANO HON-O ageta.*
 b. *Ie, John-wa ANO HON-O_i Sue-ni t_i ageta.*
 c. *Ie, ANO HON-O_i John-wa Sue-ni t_i ageta.*
 No, that book-ACC NAME-wa NAME-to gave
 ‘No, John gave that book to Sue.’ (Vermeulen 2013: 94)

Similarly, in Xining Mandarin, a question with information focus on the object can be answered with OSV order (or SVO or SOV). This is illustrated below, where (497) - (499) are acceptable answers to the *wh*-question in (496):

(496) *Lao Bi sha ha chi-le?*
 NAME what OBJ eat-PFV
 ‘What did Lao Bi eat?’

- (497) *NO DE MANTOU jia chi-le* (OSV; fronted object focused)
 1SG POSS mantou 3SG eat-PFV
 ‘He ate my mantou.’
- (498) *jia chi-le NO DE MANTOU* (SVO; in-situ focus)
 3SG eat-PFV 1SG POSS mantou
- (499) *jia NO DE MANTOU HA chi-le* (SOV; in-situ focus)
 3SG 1SG POSS mantou OBL eat-PFV

Similarly, OSV order is possible when the object is the contrastive focus (i.e. a stressed item that fulfils a corrective function with regard to some information/assertion, Badan 2008: 36):

- (500) *Xiao Wang mai-le na ge baoma ma?*
 NAME buy-PFV that CL BMW Q
 ‘Did Xiao Wang buy that BMW?’
- (501) *bu shi, ZHE GE XUETIELONG HA jia mai-le*
 NEG be, this CL Citroën OBJ 3SG buy-PFV
 ‘No, He bought this Citroën.’

A further property of topicalization in standard Mandarin is that it licenses a resumptive pronoun:

- (502) *Zhang xiaojie, wo bu xiang zhui ta.* [Standard Mandarin]
 NAME Miss I not want court her
 ‘Miss Zhang, I don’t want to court her.’ (Huang, Li and Li 2013: 201)

This property is possessed by topicalization in Japanese but not scrambling (Saito 1985: 114), hence the difference in acceptability between (503) and (504):

- (503) *?Sono boosi_i-wa [_SJohn-ga [_{NP-j}e sore_i-o kabutte ita* [Japanese]
 that hat-top -nom it-acc wearing was
hito_j]-o yoku sitte iru rasii]
 person-acc well know seem
 (Speaking of that hat, it seems that John knows the person who was wearing it very well) (Saito 1985: 312)

<i>Property</i>	<i>Standard Mandarin</i>	<i>Xining dialect</i>
Allows contrastive focus	No	Yes
Allows information focus	No	Yes
Can be indefinite	No	Yes
Licenses resumptive pronoun	Yes	No

Table 7-1 Properties of Standard Mandarin topicalization and Xining Mandarin scrambling

In the next section, Japanese style scrambling is considered.

7.4 Japanese style scrambling

Beyond Japanese, which is among the best studied languages as regards scrambling, Japanese style scrambling is also reported for Korean and Turkish (e.g. Şener and Takahashi 2009, Cheng 2011, Bošković 2009) and it displays a number of properties that distinguish it from scrambling as it is found in languages like German. In fact, with regard to German, Bošković (2005: 61, note 48) goes so far as to argue that so fundamental are the differences that they are actually 'totally different movement operations', united only by the use of the term 'scrambling'. Japanese style scrambling has also been argued to be present in Slavic (Russian and Serbo-Croatian) (Bošković 2009), based on certain similarities, although the similarity only goes so far. Slavic scrambling lacks several properties of Japanese style scrambling – in particular the ability to create scope ambiguity and an A-binder, and to scramble *wh*-phrases.⁷⁵

⁷⁵ Indeed, object fronting in Russian has been argued to be similar to syntactic movement operations found in other SVO languages like English, making the scrambling analysis unnecessary (Bailyn 2003).

<i>Scrambling property</i>	<i>JSS</i>	<i>GS</i>	<i>SS</i>
Long distance scrambling out of finite clause (L)	Yes	No	Yes
Radical reconstruction (L)	Yes	No	Yes ⁷⁶
Scrambling of <i>wh</i> -phrases (M, L)	Yes	No	No ⁷⁷
Scope ambiguity (M)	Yes	Yes	No
Creates A-binder (for subject anaphor) (M)	Yes	No	No
Multiple scrambling (M, L)	Yes	Yes (M only)	Yes

Table 7-2 Differences between Japanese style scrambling (JSS), German scrambling (GS) and Slavic scrambling (SS) (based on Sauerland 1999; Grewendorf and Sabel 1999; Müller 1995, 1998; Bošković 2005: note 48, 2009; and references therein). M = medium distance (to the pre-subject position) and L = long-distance (i.e. across clausal boundaries).

With regard to Chinese, it is uncontroversial that Standard Mandarin does not possess Japanese-style scrambling (e.g. Shyu 1995, 2001, Cheng 2013, Paul and Whitman to appear). Sometimes Standard Mandarin has been said to show object scrambling (e.g. Ernst and Wang 1995 liken Standard Mandarin object preposing (yielding surface SOV order) to short scrambling in Korean), but the use of the term is not meant to imply the presence of long distance scrambling, which is found for Japanese style scrambling. Rather, Standard Mandarin OSV order is derived by topicalization, as discussed above. In the following sections it will be argued that, as shown in Table 7-3 below, object fronting in Standard Mandarin does not possess most of the properties associated with Japanese style scrambling, whilst each of these properties are evident in Xining Mandarin.

<i>Property</i>	<i>JSS</i>	<i>SM</i>	<i>XM</i>
Long distance object fronting	Yes	Yes	Yes
Radical reconstruction (L)	Yes	No	Yes
Scrambling of <i>wh</i> -phrases (M, L)	Yes	No	Yes
Creates scope ambiguity (M)	Yes	No	Yes
Multiple scrambling (M, L)	Yes	No	Yes
Creates an A-binder (for subject anaphor) (M)	Yes	Yes	Yes

Table 7-3 Properties of JSS, Standard Mandarin topicalization and Xining Mandarin scrambling. M = medium scrambling, L = long scrambling.

The distinctive properties of Japanese style scrambling, compared to scrambling in other languages and topicalization in Standard Mandarin, mostly involve scrambling to the pre-subject position (medium scrambling) and long scrambling (interclausally), and so this

⁷⁶ Bošković (2009) notes that it is not possible to test the existence of radical reconstruction in Russian, although he identifies this property in Serbo-Croatian.

⁷⁷ Russian is a multiple *wh*-fronting and so *wh*-items front by *wh*-movement or focus movement (Bošković 2004), though *wh*-scrambling may be marginally possible in some cases (cf. Bošković 2002: 360).

chapter focuses on scrambling to the left of the subject. In the following sections, the properties of Japanese-style scrambling listed in Table 7-2 and Table 7-3 will be discussed with a view towards distinguishing JSS from topicalization in Xining Mandarin. First, radical reconstruction is considered.

7.4.1 Radical reconstruction

Saito (1989) observed that, unlike *wh*-movement and topicalization, scrambling in Japanese can be 'semantically vacuous', undoing itself at LF rather than creating a semantically significant operator variable relation.⁷⁸ Bošković (2004: 618) has taken this to be 'the defining and most interesting property of Japanese style scrambling', and it is ascribed similar importance in a number of other studies (e.g. Saito 1992, Bošković and Takahashi 1998, Saito and Fukui 1998, Bošković 2009). Since radical reconstruction is a property exclusively possessed by long scrambling in Japanese,⁷⁹ it is not found in German where scrambling is clause-bound.

Saito (2015: 224) illustrates radical reconstruction as follows. The grammatical sentence (509) is an embedded *wh*-question (marked by the question marker *ka*) contained within a declarative matrix clause. However, (510) is ungrammatical because the *wh*-word occurs outside of the question clause that it should be interpreted with. This shows that a *wh*-word must be contained within the +*wh* CP where it takes scope (Harada's 1972 '*wh*-Q constraint').

(509) $[_{TP} \text{Taroo-ga } [_{CP}[_{TP} \text{dare-ga } \text{sono hon-o } \text{katta}] \text{ ka}]$
 NAME-NOM who-NOM that book-ACC bought Q
siritagatteiru (*koto*) [Japanese]
 want to know fact
 '[Taroo wants to know [Q [who bought that book]]]'. (Saito 2015: 224)

(510) $*[_{TP} \text{Dare-ga } [_{CP}[_{TP} \text{Taroo-ga } \text{sono hon-o } \text{katta}] \text{ ka}]$
 who-NOM NAME-NOM that book-ACC bought Q
siritagatteiru (*koto*) [Japanese]
 want to know fact
 '[Who wants to know [Q [Taroo bought that book]]]'. (Saito 2015: 224,
 after Harada 1972)

⁷⁸ Nevertheless, contra Bošković (2004), both medium and long scrambling are often regarded as having an effect on the output as far as focus is concerned (e.g. Miyagawa 1997 and later works) and its permissibility is sensitive to the discourse context.

⁷⁹ Medium scrambling leads to scope ambiguity rather than obligatory reconstruction (see Section 7.4.4).

Against this background, radical reconstruction can be observed in the examples below. In (512), the *wh*-phrase has been scrambled out of the embedded question CP but the sentence still receives a declarative interpretation, as in (511). That is, (512) remains a declarative root clause containing an embedded question, and does not contain an interrogative root clause, despite the *wh*-phrase being in the root clause in overt syntax. The *wh*-phrase is reconstructed to the embedded object position and the sentence is interpreted as though scrambling had not occurred.

(511) [_{TP} *Taroo-ga* [_{CP}[_{TP} *Hanako-ga* ***dono hon-o*** *yonda*] *ka*]
 NAME -NOM NAME-NOM which book-ACC read Q
siritagatteiru] (*koto*) [Japanese]
 want to know fact
 '[Taroo wants to know [Q[Hanako read which book]]].' (Saito 2015: 225)

(512) [***dono hon-o_i*** [_{TP} *Taroo-ga* [_{CP}[_{TP} *Hanako-ga* *t_i* *yonda*] *ka*]
 which book-ACC NAME-NOM NAME-NOM read Q
siritagatteiru]] (*koto*) [Japanese]
 want to know fact
 '[Which book_{*i*}, Taroo wants to know [Q [Hanako read *t_i*]].]' (Saito 2015: 225)

By contrast, *wh*-movement and topicalization do not allow radical reconstruction and necessarily have a semantic effect, placing the *wh*-word or topic in the position where they take scope. Thus, as Bošković (2004: 624) notes, a *wh*-moved phrase cannot take embedded scope after being fronted. This is illustrated by the ungrammaticality of (514).

(513) *Mary said that Bill asked [which car John bought].*

(514) ***[Which car John bought]** *Mary said that Bill asked*

Similarly, in (516), the topicalized *who* phrase is outside of the only *wh*-clause in the sentence and the sentence is ungrammatical, because as in Japanese, a *wh*-word in English must occur within the question CP where it takes scope (Bošković 2004: 624; cf. also Saito and Fukui 1998).

(515) ?*[Which picture of who]_{*j*} do you wonder who_{*i*} *t_i* bought *t_j*?* (Bošković 2004: 624)

(516) ***[That Mary met who]_{*i*}** *I know who_{*j*} *t_j* believes *t_i*?* (Bošković 2004: 624)

The radical reconstruction property of Japanese long scrambling also means that it does not alter quantifier scope (Saito 1989, Saito 1992, Bošković and Takahashi 1998, Saito and Fukui

1998). The scope reading of a long scrambled quantifier is not determined by the surface word order but rather it still receives embedded scope, as though scrambling had not occurred.

- (517) *Daremo₁-ni dareka-ga [Mary-ga t₁ atta to] omotteiru.* [Japanese]
 everyone-DAT someone-NOM NAME-NOM met that thinks
 = For some x , x a person, x thinks that for every y , y a person, Mary met y
 ≠ For every y , y a person, there is some x , x a person, such that x thinks that Mary met y
 (Bošković and Takahashi 1998: 354)

Unlike Japanese, Standard Mandarin does not show the undoing or radical reconstruction property when objects are fronted from within an embedded clause. Rather, in line with Huang's (1982) Isomorphic Principle, the LF interpretation of the sentence matches the surface syntax, and so scope readings do not show ambiguity. Li (1996: 159-60) thus argues against Standard Mandarin topicalization possessing the radical reconstruction property, showing that the *wh*-object in the embedded clause can take embedded or matrix scope, but when fronted it can only take matrix scope:

- (518) *Zhangsan zhidao Lisi jiezou le na-yi-ben shu?* [Standard Mandarin]
 NAME know NAME borrow LE which-one-CL book
 'Which book did Zhangsan know that Lisi borrowed?' (Li 1996: 159)
 'Zhangsan knows which book Lisi borrowed'

- (519) *[Na-yi-ben shu]_i, Zhangsan zhidao Lisi jiezou t_i le?* [Standard Mandarin]
 which-one-CL book NAME know NAME borrow LE
 'Which book did Zhangsan know that Lisi borrowed?' (Li 1996: 160)

Moreover, as discussed by Cheng (2013: 167), despite the unnaturalness of (520), there is no question that only a surface scope reading is possible for the fronted universal quantifier object and that reconstruction cannot occur.

- (520) ?*Meige xuesheng₁ dou you yige laoshi* [Standard Mandarin]
 every student all have one teacher
renwei [Mali cengjing jiao-guo t₁]
 think NAME before teach-ASP
 ‘lit. every student, one teacher thinks Mary has taught e before.’
 = ‘For every y, y a student, there is some x, x a teacher, such that x thinks that Mary has taught y before.’
 ≠ ‘For some x, x a teacher, x thinks that for every y, y a student, Mary has taught y before.’ (Cheng 2013: 167)

However, in Xining Mandarin, the 'undoing' property of long distance scrambling is found as a possible reading, although not the only one. As shown in (522), a fronted *wh*-word can have embedded scope, or matrix scope, just as in the non-scrambled sentence in (521). Unlike in Standard Mandarin (cf. (519)), the embedded scope reading does not become unavailable after fronting the *wh*-item.

- (521) *Xiao Wang Lao Bi sha ha mai lia fozho xiang-zhe*
 NAME NAME what OBJ buy FUT CMP think-ASP
 'Xiao Wang thinks, "What will Lao Bi buy?"' (embedded +wh; matrix declarative)
 'What does Xiao Wang think Lao Bi will buy?' (matrix +wh)
- (522) *sha ha Xiao Wang Lao Bi mai lia fozho xiang-zhe*
 what OBJ NAME NAME buy FUT CMP think-IPFV
 'Xiao Wang thinks, "What will Lao Bi buy?"' (radical reconstruction reading)
 'What does Xiao Wang think Lao Bi will buy?' (matrix scope reading)

One informant said that which reading is derived for (522) is related to sentential stress; if the stress is on the interrogative *sha-ha*, then an interrogative interpretation is more likely with wide scope for the *wh*-word, whereas if the stress is on the subject, Xiao Wang, a declarative interpretation is more natural. However, the important point here is that the Japanese style scrambling reading is actually available.⁸⁰

⁸⁰ The fact that a wide scope reading also exists suggests that a *wh*-topicalization reading is also available, which Japanese also allows for some *wh*-items in suitable discourse contexts (e.g. cf. Kizu 2005: 42).

(524) is a similar example illustrating radical reconstruction with a different *wh*-item. Again, the fact that both readings are available rather than only the embedded scope reading indicates that a topicalization reading is also available for the D-linked *wh*-phrase here.⁸¹

(523) *Xiao Wang Zhangsan a ben fu kan-le fozho fo-zhe*
 NAME NAME which CL book read-PFV CMP say-ASP
 'Xiao Wang said: "Which book did Zhangsan read?"'
 'Which book did Xiao Wang say Zhangsan read?'

(524) *a ben fu Xiao Wang Zhangsan kan-le fozho fo zhe*
 which CL book NAME NAME read-PFV CMP say ASP
 'Xiao Wang said: "Which book did Zhangsan read?"'
 'Which book did Xiao Wang say that Zhangsan read?'

Radical reconstruction is also evident in that a long scrambled universal quantifier can take embedded scope in (525). As in the preceding examples, the matrix scope reading exists too because unlike in languages that make a morphological distinction between topicalization and scrambling, a topicalization reading is also available.

(525) [*mei ge ren*]₁, *you ren Xiao Wang t₁*
 Every CL person someone NAME
xihuan-zhe fozho fo-zhe
 like-ASP CMP say-ASP
 'Someone said that Xiao Wang likes everyone.'
 someone > everyone, everyone > someone

7.4.2 Adjuncts

Japanese allows locative adverbs to be scrambled long distance and yet take scope from the embedded clause:

(526) [*Kooen-de*]₁ *John-ga Mary-ga t₁ ason de-iru to omotta* [Japanese]
 park-LOC NAME-NOM NAME-NOM playing CMP thought
 'John thought Mary was playing in the park.' (based on Yokota 2004: 42)

⁸¹As Bošković (2009: 8) notes in his discussion of radical reconstruction in Slavic, the availability of a topicalization derivation interferes with showing that radical reconstruction not only can but must occur, since the topicalization reading shows wide scope.

Similarly, with some adjuncts, Japanese allows scrambling clause-internally, but this is much less acceptable or sometimes fully ungrammatical when the adjunct crosses a clausal boundary (Saito 1985: 175, Müller 1995: 137).

- (530) *Mary-ga* [_S *John-ga* ***riyuu-mo naku*** *sono* [Japanese]
 NAME-NOM NAME-NOM reason-even without that
setu-o *sinzite iru to*] *omotte iru (koto)*
 theory-ACC believe CMP think fact
 ‘Mary thinks that John believes in that theory without any reason.’ (based on Saito 1985: 175)
- (531) ****Riyuu-mo naku***_i *Mary-ga* [_S *John-ga* *t_i* *sono setu-o* [Japanese]
sinzite iru to] *omotte iru (koto)* (Saito 1985: 175)

7.4.3 Multiple scrambling

A number of studies have noted that whilst multiple topicalization is marginal or not possible, multiple scrambling is freely acceptable (a.o. Fukui 1993, Saito and Fukui 1998, Bošković 2004, 2009). Bošković (2009: 719) illustrates the former case with (532):

- (532) ****To John_p, that book_p***, (*Bill said that*) *Mary handed t_i t_j*.

Clause-internally and long distance, multiple scrambling is fully acceptable in Japanese:

- (533) [_{IP} *Mary-ga* ***John-ni sono hon-o*** *watasita*] (*koto*). [Japanese]
 NAME-NOM NAME-to that book-ACC handed
 ‘Mary handed that book to John.’ (Fukui 2006: 183)
- (534) [_{IP} ***Sono hon-o_i*** [***John-ni_j*** [*Mary-ga* *t_j t_i* *watasita*]]] (*koto*). [Japanese]
 that book-ACC NAME-to NAME-NOM handed (Fukui 2006: 183)
- (535) [_{IP} ***John-ni_j*** [***sono hon-o_i*** [*Mary-ga* *t_j t_i* *watasita*]]] (*koto*). [Japanese]
 NAME-to that book-ACC NAME-NOM handed (Fukui 2006: 183)
- (536) ***Sono hon-o₁ Masao-ni₂*** *Taroo-ga* [_{CP} *Hanako-ga* *t₂t₁* *watasita to*] [Japanese]
omotteiru (koto)
 ‘That book₁, to Masao₂, Taro thinks that Hanako handed *t₂t₁*.’ (Saito 1992: 30)

By contrast, as Paul and Whitman (to appear) illustrate with (537), Standard Mandarin only allows multiple clause-internal topicalization if the topics are base-generated.

- (537) *Zhōngguó, dà chéngshì, Shànghǎi, jiāotōng bǐjiào luàn.* [Standard Mandarin]
 China big city Shanghai traffic relatively chaotic
 ‘As for China, as for big towns, Shanghai, the traffic is rather chaotic.’ (Paul and Whitman to appear)

However, multiple fronting is not possible. Shyu (1995) uses PPs to illustrate the unacceptability of multiple fronting, since PP-topicalization must be derived by movement and not by base-generation (see Paul and Whitman to appear for evidence that PP-topicalization is island-sensitive, and hence not base-generated). As shown, clause-internally, one but not two PPs may be fronted:

- (538) *Zhangsan cong Meiguo ji le yiben shu gei Lisi.* [Standard Mandarin]
 NAME from USA send ASP one-CL book to NAME
 ‘Zhangsan sent a book to Lisi from the USA.’ (Shyu 1995: 111)
- (539) *Cong Meiguo₁, Zhangsan t₁ ji le yiben shu gei Lisi.* [Standard Mandarin]
 from USA NAME send ASP one-CL book to NAME
- (540) *Gei Lisi₂, Zhangsan cong Meiguo ji le yiben shu t₂.* [Standard Mandarin]
 to NAME, NAME from USA send ASP one-CL book (Shyu 1995: 111)
- (541) **Gei Lisi₂, Cong Meiguo₁, Zhangsan t₁ ji le yiben shu t₂.* [Standard Mandarin]
 to NAME from USA NAME send ASP one-CL book
 ‘To Lisi, from the USA, Zhangsan sent a book.’ (Shyu 1995: 111)

Similarly, multiple long distance fronting is not permitted in Standard Mandarin:

- (542) *Wo xiang Zhangsan cong Meiguo ji le yiben shu gei Lisi.* [Standard Mandarin]
 I think NAME from USA mail ASP one-CL book to NAME
 ‘I think that Zhangsan mailed one book to Lisi from the USA.’ (Shyu 1995: 214)
- (543) **Cong Meiguo₁, gei Lisi₂, wo xiang Zhangsan t₁ ji le yiben shu t₂.* [Standard Mandarin]
 from USA to NAME I think NAME mail ASP one book (Shyu 1995: 214)

However, Xining Mandarin allows multiple scrambling clause-internally and long distance. Examples (545) and (546) illustrate clause-internal multiple scrambling:

(544) *Wang Laoshi jia ha yi ben fu gei-zhe*
 NAME teacher 3SG OBJ one CL book give-IPFV
 'Teacher Wang is giving him a book.'

(545) *yi ben fu jia ha Wang Laoshi gei-zhe*
 one CL book 3SG OBJ NAME teacher give-IPFV

(546) *jia ha yi ben fu Wang Laoshi gei-zhe*
 3SG OBJ one CL book NAME teacher give-IPFV

Likewise, long distance multiple scrambling is also possible:

(547) *yi ben fu na ge gawa ha Xiao Wang fo-zhe Zhang laoshi*
 one CL book, that CL boy OBJ NAME say-IPFV NAME teacher
gei-zhe fo
 give-PFV QUOT
 'Xiao Wang said that Teacher Zhang gave a book to that boy.'

Next, scope ambiguity is considered.

7.4.4 *Scope ambiguity*

Medium scrambling leads to scope ambiguity in Japanese: it creates a new scope relation but does not destroy the old one. The contrast between scrambling and topicalization is thus evident in (548) and (549) respectively. The former, scrambling, leads to scope ambiguity but in the latter, topicalization (indicated by topic marker *wa*), only the high scope reading is available (Paul and Whitman to appear):

(548) *Ooku no korera no hon o subete no* [Japanese]
 many GEN these GEN book ACC all GEN
gakusei ga yonda.
 student NOM read
 'Many of these books, all of the students have read.' (Paul and Whitman to appear)
 (many > all, all > many)

- (549) *Ooku no korera no hon wa subete no gakusei ga yonda.* [Japanese]
 many GEN these GEN book TOP all GEN student NOM read
 ‘Many of these books, all of the students have read.’ (Paul and Whitman to appear)
 (many > all, *all > many)

Meanwhile, in Standard Mandarin, as Cheng (2011: 238) notes (cf. Cheng 2013), overt movement always has a semantic effect, and topicalization does not allow scope reconstruction. Paul and Whitman (to appear) thus illustrate the difference between scrambling in Japanese and object fronting in Standard Mandarin by showing that the latter does not create scope ambiguity, patterning with topicalization (and not scrambling) in languages like Japanese/Korean:

- (550) [*Hěnduō zhèxiē shu*]_i, wǒmen dōu kan-guo ti. [Chinese]
 many these book we all read-EXP
 ‘Many of these books, all of us have read.’ (many > all) (Kuno et al. 2001: 138,
 cited in Paul and Whitman 2015)

Against this backdrop, the existence of scrambling in Xining Mandarin is evident in the fact that scope ambiguity is created by fronting a quantifier object. Like Standard Mandarin and Japanese, Xining Mandarin is scope-rigid, and so inverse scope readings in sentences with canonical order (e.g. (551)) are disallowed. However, scrambling the quantifier object to sentence-initial position leads to a new scope reading that was previously unavailable.

- (551) *youren mei ben fu ha kan-le*
 someone every CL book OBJ read-PFV
 ‘Someone read every book.’
 $\exists > \forall, * \forall > \exists$

- (552) *mei ben fu ha youren kan-le*
 every CL book OBL someone read-PFV
 ‘Every book, someone read.’
 $\exists > \forall, \forall > \exists$

However, inserting a pause after the fronted object tends to result in only the high scope reading being available⁸³ and so can disambiguate topicalization from scrambling (a pause

⁸³ If a topic marker is inserted, then as might be expected only the high scope reading is available.

can be used to mark off the topic in topicalization structures in Standard Mandarin too; cf. Li and Thompson 1981):

- (553) *mei ben fu ha, youren kan-le*
 every CL book OBJ someone read-PFV
 ‘Every book, someone read.’
 * $\exists > \forall$, $\forall > \exists$

Next, scrambling of *wh*-phrases is considered.

7.4.5 Scrambling of *wh*-phrases

In Japanese, it is well-known that *wh*-phrases can be overtly scrambled (Saito 1985, 1989, Takahashi 1993, Sauerland 1997), and this property distinguishes Japanese style scrambling from that in languages like German where *wh*-scrambling is generally disallowed (Sauerland 1997):

- (554) **Wer hat gesagt, daß wen₁ die Maria t₁ mag?* [German]
 who has said that who the NAME likes (Sauerland 1997)

In Japanese, both clause-internal and long-distance scrambling of *wh*-phrases is possible, as shown in (556) and (558):

- (555) *John-ga nani-o katta no?* [Japanese]
 NAME-NOM what-ACC bought Q
 ‘What did John buy?’ (Sabel 2001: 2)
- (556) *Nani-o John-ga t katta no?* [Japanese]
 what-ACC John-NOM bought Q (Sabel 2001: 2)
- (557) *John-ga [CP Mary-ga nani-o katta ka] sitteiru.* [Japanese]
 John-NOM Mary-NOM what-NOM bought Q knows
 ‘John knows what Mary bought.’ (Sabel 2001: 2)
- (558) *[IP Nani-o [IP John-ga [CP Mary-ga t katta ka] sitteiru]].* [Japanese]
 what-ACC John-NOM Mary-NOM bought Q knows
 ‘John knows what Mary bought.’ (Sabel 2001: 2)

However, in Standard Mandarin, *wh*-phrases cannot be fronted unless they are D(iscourse)-linked (Pan 2011, Shyu 1995: 215). According to Pan (2011), *wh*-topics involve a restrictive set from which the *wh*-word picks out a member - an interpretation that is unavailable for bare

(out-of-the-blue) *wh*-words. Thus D-linked (559) is acceptable, but bare out-of-the-blue *wh*-words are not felicitous, as shown in (560).

- (559) [*Na-dao cai*]_i, *Zhangsan chi-le t_i?* [Standard Mandarin]
 which-CL dish NAME eat-PFV
 ‘Which dish (is the one that) Zhangsan ate?’ (Pan 2011: 232)
- (560) **Shenme*_i, *Zhangsan chi-le t_i?* [Standard Mandarin]
 what NAME eat-PFV
 (‘What did Zhangsan eat?’) (Pan 2011: 232)
- (561) ?[*Shenme cai*]_i, *Zhangsan chi-le t_i?* [Standard Mandarin]
 what dish NAME eat-PFV
 ‘What dish (is the one that) Zhangsan ate?’ (Pan 2011: 233)

In Xining Mandarin, however, *wh*-scrambling is freely possible for bare *wh*-words both clause-internally and long-distance ((563) and (564) = (521) and (522)), as in Japanese:

- (562) *sha ha Xiao Wang chi-le*
 what OBJ NAME eat-PFV
 ‘What did Xiao Wang eat?’
- (563) *Xiao Wang Lao Bi sha ha mai lia fozho xiang-zhe*
 NAME NAME what OBJ buy FUT CMP think-IPFV
 ‘Xiao Wang thinks, “What will Lao Bi buy?”’
- (564) *Sha ha Xiao Wang Lao Bi mai lia fozho xiang-zhe*
 What OBJ NAME NAME buy FUT CMP think-IPFV

7.4.6 Scrambling creates an A-binder

Finally, another property of Japanese-style scrambling which distinguishes it from scrambling in languages like German and Russian is that scrambling the object to the pre-subject position can create an A-binder. The ability of a moved constituent to bind an anaphor that is unbound in its base position has been suggested by Grewendorf and Sabel (1999: 8) to be the most robust test for A-movement. Thus Japanese (565) is ungrammatical (a principle A violation), but scrambling of the object remedies the situation in (566):

(565) **[Otagai -no sensei] -ga karera-o hihansi -ta (koto)* [Japanese]
 each other-GEN teacher-NOM they -ACC criticize-Past fact
 ‘Lit. Each other’s teachers criticized them’ (Saito 2009)

(566) *Karera-o_i [otagai -no sensei] -ga t_i hihansi -ta (koto)* [Japanese]
 they -ACC each other-GEN teacher-NOM criticize-Past fact
 ‘Lit. Them, each other’s teachers criticized’ (Saito 2009)

Regarding Standard Mandarin, Paul and Whitman (to appear) argue that an object scrambled to the pre-subject position does not create an A-binder for a subject anaphor, taking this to illustrate the absence of Japanese style scrambling in Standard Mandarin.

(567) **Nà ge lùshī, tā-zìjǐ de lǎopo shāsi-le ti.* [Standard Mandarin]
 that CL lawyer 3SG-self SUB wife kill-PFV
 (‘That lawyer, his own wife killed.’) (Paul and Whitman to appear,
 after Pan 2013: 60)

In Xining Mandarin, however, on the basis of this test it is clear that an A-position does exist for pre-subject scrambled objects, meaning that object fronting in the dialect patterns with Japanese style scrambling:

(568) **guojia de pengyou Xiao Wang ha da-le*
 self POSS friend NAME OBJ hit-PFV
 ‘His₁ own friend hit Xiao Wang₁.’

(569) *Xiao Wang ha guojia de pengyou da-le*
 NAME OBL self POSS friend hit-PFV
 ‘Xiao Wang₁, his₁ own friend hit.’

Further evidence for a pre-subject A-position can be adduced from crossover effects. Consider strong crossover data parallel to that of Frank et al (1995). For strong crossover effects, following Frank et al. (1995: 5), the binder used is a pronoun and the bindee is an R-expression, and if a principle C violation occurs, then binding is assumed to obtain, and the pronoun is taken to occupy an A-position. Evidence for a pre-subject A-position includes the ability of the scrambled indirect object to bind the subject, as shown by the resulting principle C violation (cf. Frank et al. 1995: 5, ex. (10)):

IO binds subject

(570) *Xiao Wang₁ de gege jia₁ ha zhaopian kan gei-le*
NAME DE brother 3SG OBJ picture look give-PFV
'Xiao Wang₁'s brother showed him₁ a picture.'

(571) **jia₁ ha Xiao Wang₁ de gege zhaopian kan gei-le*
3SG OBJ NAME POSS brother picture look give-PFV
'Xiao Wang's brother showed him a picture.'

Similarly, the direct object below is scrambled to the left of the subject and the resulting ungrammaticality shows that it cannot be reconstructed to its base position where it is bound by the subject, thus showing that the landing site is an A-position (cf. Frank et. al 1996: 6, ex. (14)).

DO binds subject

(572) *Xiao Wang₁ de fumu jia₁ ha zhufu-zhe*
NAME POSS parents 3SG OBJ bless-ASP

(573) **jia₁ ha Xiao Wang₁ de fumu zhufu-zhe*
3SG OBJ NAME POSS parents bless-ASP
'Xiao Wang₁'s parents blessed him₁.'

Likewise, in (575) we see that a pre-subject A-position exists, into which the direct object quantifier moves and binds the pronominal subject, remedying the principle B violation in (574) (cf. Frank et al. 1995: 8, ex. (26)).

DO quantifier binds subject

(574) **jia₁ de pengyou fei₁ ha beiqi-le*
3SG₁ POSS friend who₁ OBJ betray-PFV

(575) *fei ha jia₁ de pengyou beiqi-le*
who₁ OBJ 3SG₁ POSS friend betray-PFV
'Who₁ did his₁ friend betray?'

Nevertheless, despite the ability of scrambling to create an A-binder being a distinctive of Japanese style scrambling, it may not be as useful as Paul and Whitman (to appear) suggest with regard to demonstrating the absence of such scrambling in Chinese. This is because

object fronting can show A-movement properties in Standard Mandarin, as argued earlier by Qu (1994: 42-3). For example, (576) is allowed, and this is similar to (569) (Qu 1994: 43):

(576) *John_i [zijide_i haizi]_j dou bu xihuan t_i.*
 NAME self's kids even not like
 'John_i, even his_i, own kids do not like [him]_i.'

For this reason, the ability of object fronting to create an A-binder cannot be taken as evidence in itself for Japanese style scrambling in Xining Mandarin, but it is valuable evidence when viewed in conjunction with the other properties observed above.

7.5 Landing site for object scrambling

In this section I apply diagnostic tests from Miyagawa (2010), and earlier works, and analyse Xining Mandarin scrambling as movement to Spec, TP, leaving the subject in-situ in Spec, ν P, as Miyagawa (e.g. 2005: 188-9) claimed for Japanese. It is assumed that for an element to fall within the scope of negation, it must be c-commanded by negation (Miyagawa 2010), which like Miyagawa I take to be situated between ν P and TP (cf. Pollock 1989; see below). In (577), the object in its base position falls within the scope of negation and so a partial negation reading is available ('Xiao Wang saw some but not all of the pictures').

(577) *Xiao Wang yigua de zhaopian mei kan*
 NAME all NMLZ picture NEG see
 'Xiao Wang did not see all of the pictures.'
 neg > all, (all > neg)⁸⁴

However, object scrambling changes the scope relation between negation and a quantifier subject. In (578), with SOV order, the quantifier subject 'all' is obligatorily outside of the scope of negation.

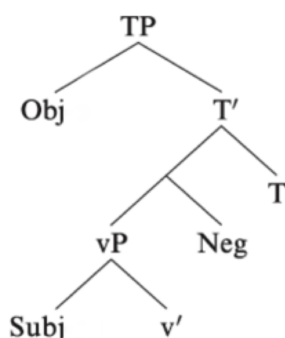
(578) *yigua san ge mantou mei chi*
 all three CL mantou NEG eat
 'All did not eat three mantou.'
 *neg > all, all > neg

⁸⁴ The availability of the all > neg reading here, despite 'all' being c-commanded by neg, can be explained as arising from a collective rather than distributive interpretation of 'all' (Miyagawa 2001: 329, note 9) i.e. 'all' is interpreted as one collectivity, and so negating this 'collection' of individuals is equivalent to all > neg ('for every picture Xiao Wang did not see it'), but is derived from a different scope relation.

It is assumed that in this scenario the subject raises to Spec, TP (the motivation for this is discussed below). However, after object scrambling, as in (579), the subject can be interpreted within the scope of negation, which suggests that it remains in Spec, vP, whilst the object raises to outside of the scope of negation (to Spec, TP). The fact that the all > neg reading is still available when object scrambling occurs indicates that another derivation is available, which below is taken to involve the subject raising to Spec, TP, and the object occupying a position above Spec, TP.

- (579) *san ge mantou yigua mei chi*
 three CL mantou all NEG eat
 ‘Three mantou, all did not eat.’
 neg > all, all > neg

On the basis of these tests, Miyagawa (2010: 83) adopts the following structure for the scrambling derivation in Japanese:



Note that Xining Mandarin is an S O Neg V language, but Japanese has S O V Neg. However, this difference in ordering does not affect the scope facts reported here, and so the tests are still valid in terms of determining the position of the object in the structure. Unlike in most other Mandarin dialects (and Standard Mandarin), in Xining Mandarin the negator occurs strictly preverbally forming a tight unit with the verb, and does not show freedom of movement. Thus in Standard Mandarin and many other dialects, the order Neg + Adv + Verb is allowed, where the negator is separated from the verb by an adverb; however, the Xining dialect uses Adv + Neg + Verb (Wang and Dede 2016: 420). But as is common in SOV languages the negator takes scope not simply over the verb but over the predicate as a whole, including preceding manner adverbs:

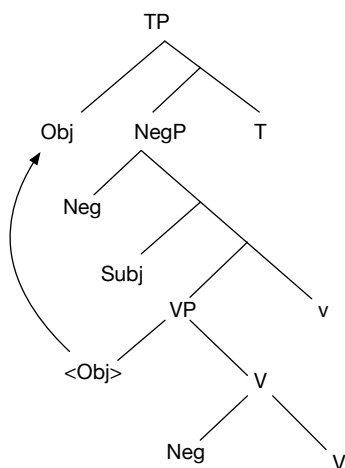
- (580) *na kuai di, yigua de ren (houdao-zho) mei tuo*
 that piece ground all NMLZ person (quickly-DE) NEG mop
 ‘Everyone did not mop that piece of ground (quickly).’
 Everyone > NEG; ?NEG > everyone

That the negator is tightly associated with the verb reflects the scenario for short negation by *an-* in Korean, which has been treated as a prefixal bound morpheme (cf. Loewen 2007):

- (581) *Eunji-ga pap-ul ppali an-mek-ess-ta.* [Korean]
 NAME-NOM rice-ACC quickly NEG-eat-PAST-DECL (Loewen 2007: 4)

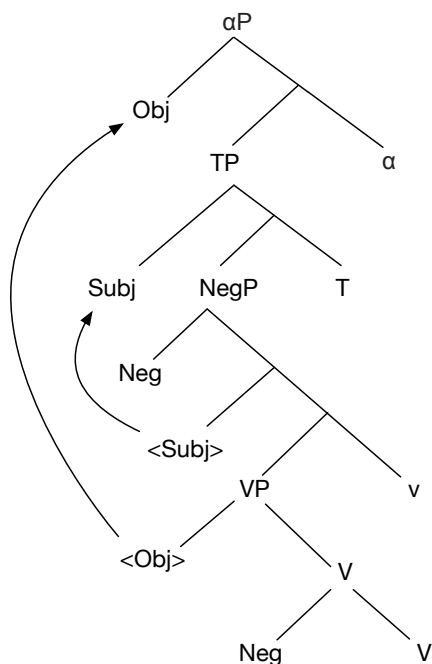
- (582) **Eunji-ga pap-ul an- ppali mek-ess-ta.* [Korean]
 NAME-NOM rice-ACC NEG quickly eat-PAST-DECL
 ‘Eunji didn’t eat the rice quickly.’ (Loewen 2007: 4)

Given the similarly fixed position of negation in Xining Mandarin (in contrast to the freedom of word order found for adverbial elements), I assume that the negator is merged cliticized to the verb.⁸⁵ The scope facts can be explained by postulating NegP, from which the negator takes scope via LF-raising and which licenses the negator similarly to the scenario found for aspectual V₂ elements (resultative verb complements) in Standard Mandarin, which merge on the verb and are licensed through LF-raising to AspP (Wu 2004).



⁸⁵ Hypothetically speaking, string vacuous verb raising would be a possible alternative analysis (cf. Otani and Whitman 1991 on Japanese). However, I have no independent evidence for verb raising in Xining Mandarin, and so do not entertain this as a possible derivation (indeed, verb raising remains controversial even in languages like Japanese and Korean, being rejected for example by Fukui and Sakai 2003).

But as noted, the example of scrambling in (579) has a second reading, as in Japanese (Miyagawa 2003), in which negation scopes under the subject. This is consistent with the proposal that the subject raises to Spec, TP, and the object moves to a position above Spec, TP, which Miyagawa (2010) terms α P.



In this account, it is assumed that α P projects when multiple object scrambling occurs (as in (583) and (584)), to provide a further landing site in addition to Spec, TP (since CP is reserved for discourse topicalization).

(583) *yi ben fu jia ha Wang Laoshi gei-zhe*
 one CL book 3SG OBJ NAME teacher give-ASP

(584) *jia ha yi ben fu Wang Laoshi gei-zhe*
 3SG OBJ one CL book NAME teacher give-ASP

The two derivations can be disambiguated by adverbials, as Miyagawa (2003) notes. With no adverb or with a manner adverb v P-adjoined below the inner Spec, v P, the scope facts indicate that the subject can remain in Spec, v P within the scope of negation, or raise to Spec, TP above negation (i.e. in (585) the Spec, v P reading allows for the possibility that some people did not mop the ground).

- (585) *na kuai di, yigua de ren (houdao-zho) mei tuo*
 that piece ground all NMLZ person (quickly-DE) NEG mop
 ‘Everyone did not mop that piece of ground (quickly).’
 Everyone > NEG; ?NEG > everyone⁸⁶

However, a clear difference in acceptability arises when the subject precedes TP adverbs like a temporal or illocutionary adverb: it can only be interpreted above the scope of negation i.e. in Spec, TP (i.e. ‘for every person, it is the case that they did not mop the ground’).

- (586) *na kuai di, yigua de ren zuotian mei tuo*
 that piece ground all NMLZ person yesterday NEG mop
 ‘Everyone did not mop that piece of ground yesterday.’
 Everyone > NEG; *NEG > everyone

- (587) *na kuai di, yigua de ren xingkuai mei tuo*
 that piece ground all NMLZ person fortunately NEG mop
 ‘Fortunately everyone did not mop that piece of ground.’
 Everyone > NEG; *NEG > everyone

Regarding the motivation for scrambling in Xining Mandarin, I assume that as in Miyagawa’s (2010) discussion of Japanese it is driven by information structure properties that have a semantic effect on the output, namely topic (in Miyagawa’s 2010 sense) and focus, which following Holmberg and Nikanne (2002) and others are taken to be grammatical features in the narrow syntax. Miyagawa (2010: 13, 74) uses ‘topic’ as a motivation for scrambling in the sense of denoting ‘what the sentence is about’, and as being ‘categorial’ rather than ‘thetic’ (Kuroda 1972). As such, the scrambled object is not necessarily a discourse topic, but it is categorial in Kuroda’s sense, in that there is a double cognitive act – first, attention is given to the topicalized object, and then a predicational judgement is made upon it (whereas without object scrambling, in a thetic judgement, the object has no particular salience beyond being a component of the event denoted). Thus Miyagawa draws a distinction between scrambling as topicalization in this sense and discourse topicalization, which is marked by the topic marker

⁸⁶ The reason why the NEG > everyone reading is not fully acceptable seems to be because of the prominence of the interpretation on which the object is a topic (i.e. in Spec, CP), which is supported by the pause, in which case the subject obligatorily raises to Spec, TP above the scope of negation; but the NEG > everyone reading is not altogether ruled out as in (586) and (587) below) and arises if the object moves to Spec, TP, allowing the subject to remain in Spec, vP.

wa, anchored into the discourse, and assumed to be located in Spec, CP. In Xining Mandarin, object fronting is possible even when the object is not focused and is not old information (known to the hearer), but through fronting the object nevertheless gains prominence and satisfies Miyagawa's definition by yielding a categorial judgement. In addition, we also saw that it is possible for object fronting to be motivated by object focus.

To summarize, in this section tests concerning the scope of negation were applied to identify the landing site for fronted objects. With respect to these tests, the Xining Mandarin data was seen to resemble the Japanese data analysed by Miyagawa (2003, 2005, 2010). Accordingly, two derivations were seen for object fronting: on the one hand, the object may land in Spec, TP, allowing the subject to remain in-situ in Spec, *v*P, or on the other hand, the object may land above Spec, TP, allowing the subject to raise to Spec, TP. In the next section, the question of *why* Japanese style scrambling is possible in the Xining dialect is discussed, given that it is a movement operation that is absent elsewhere among Chinese dialects.

7.6 The Generalized Holmberg Constraint

It is proposed that the existence of Japanese style scrambling in Xining Mandarin is a consequence of the phrase structure change, outlined in Chapter 3, from head-initial to head-final in the dialect's clausal syntax. In particular, it is argued that the reason why it is possible here falls out from the Generalized Holmberg Constraint (GHC), stated below:

Generalized Holmberg Constraint (Wallenberg 2013: 290)

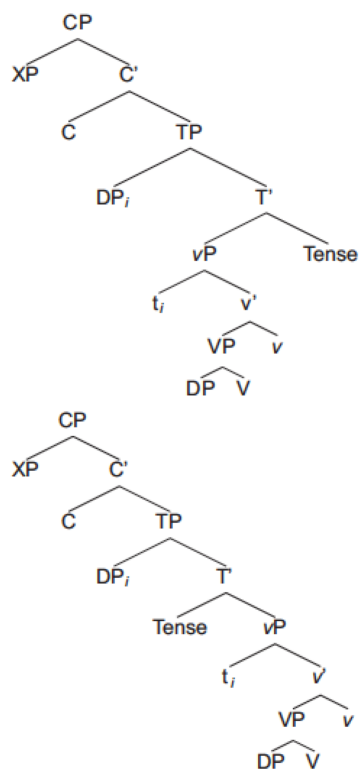
Scrambling and object shift cannot move elements leftward past a c-commanding head

In proposing the GHC, Wallenberg (2009, 2013) extends Holmberg's Generalization (Holmberg 1986) about object shift⁸⁷ to scrambling and makes a universal prediction about how different types of scrambling correlate to phrase structure. Wallenberg (2013) discusses a well-described diachronic change in Yiddish, in which the headedness of TP changed from head-final to head-initial (from 'Tense-final to 'Tense-medial') (cf. Santorini 1989, 1992, 1993), and shows that this led to an immediate restriction on the height to which the object

⁸⁷ Holmberg's (1986) generalization about object shift in Scandinavian (North Germanic) languages was that the object may only move leftwards if verb movement occurs (e.g. in verb second constructions). Holmberg (1999: 15) stated the generalization as follows:

Object shift cannot apply across a phonologically visible category asymmetrically c-commanding the object position except adjuncts.

may scramble. The change in the position of Tense can be represented as follows (Wallenberg 2013: 291):



According to the GHC, the upper bound on available landing sites for scrambling is determined by the point at which the scrambled object meets a head-initial category. In Yiddish, this means that scrambling past T is possible in the Tense-final structure, but not in the Tense-medial structure. Wallenberg (2009, 2013) shows that this prediction is borne out by the diachronic data in Yiddish: in early Yiddish, the object could land above the subject and immediately adjacent to C, as in (588), but in modern Yiddish, this is disallowed, as shown in (589).

(588) *d[a]z es unzr her gut oyz ginumn hut far an* [Early Yiddish]
 that it our Lord God out took has presently
 ‘...that our Lord God has made a success of it presently’
 (Leib bar Moses Melir’s Book of Esther, date: 1589) (Wallenberg 2013: 292)

(589) *... *az {im, dem bikhl}* *Hayim hot nekhtn nit gekoyft.* [Modern Yiddish]
 ... that {him, the book} Hayim has yesterday not bought (Wallenberg 2013:
 295)

In modern Yiddish, however, scrambling to a pre-subject position is possible in (only) one environment, a fact which Wallenberg (2013: 295) argues provides support for the Generalized Holmberg Constraint. If V-to-C movement occurs, moving Tense to C, the TP-adjoined position becomes available as a possible landing site (Wallenberg assumes an adjunction analysis of scrambling). Under the Generalized Holmberg Constraint, this is permitted because the Tense barrier has itself moved higher in the structure, and so the upper bound for scrambling is no longer T. (590) and (591) illustrate this scenario:

- (590) *hot dos di rebetsn nit gekent hern* [Modern Yiddish]
 has that the rebbetzin not could hear
 “The rabbi’s wife wasn’t able to hear that. (Wallenberg 2013: 295, after
 Olsvanger, 1947, Royte
 Pomerantsen)
- (591) *nu, iz vos hot aykh der fish geentfert?* [Modern Yiddish]
 So, Q what had you-DAT the fish answered
 “So what did the fish say back to you?” (Wallenberg 2013: 296,
 after Olsvanger 1947, Royte
 Pomerantsen)

With regard to Japanese style scrambling, Bošković (2005: note 48) observes that a 'hallmark property' of this movement is that it operates long-distance, escaping clausal boundaries. The Generalized Holmberg Constraint therefore predicts that Japanese style scrambling will only be possible in languages with a uniformly head-final clausal structure from the VP all the way up to CP, because if the CP (or a lower functional head) is head-initial, that would block scrambling. This finds support from the fact that languages which allow long distance scrambling, such as Korean and Japanese, are head-final all the way up the clausal spine, containing head-final complementizers (cf. Wallenberg 2013: 293). Meanwhile, languages without long distance scrambling are those which contain a head-initial CP, German being a well-known case in point, where scrambling is strictly clause-bound. Wallenberg (2013: note 1), in view of arguments in Bailyn (2003), assumes that object movement in Slavic (SVO) languages, involves a syntactic operation other than scrambling (cf. discussion in Section 7.4).

With regard to Standard Mandarin, very little research has been conducted on Holmberg’s Generalization. However, the well-known fact that long distance fronting in Standard Mandarin is derived by topicalization and not scrambling is predicted by the Generalized Holmberg Constraint, because this movement requires, at least, crossing the c-commanding V

(given that the Standard Mandarin VP is head-initial). Other head-initial categories such as modal auxiliaries, when present, would also block long distance scrambling.

Whether or not object preposing in SOV structures in Standard Mandarin is derived by object shift/scrambling, and thus contradicts Holmberg's Generalization and the Generalized Holmberg Constraint, requires further research, but here it is assumed that Chinese (Standard Mandarin) does comply with these constraints, though perhaps only trivially. Thus Soh (1998) argues that Chinese VP scrambling is consistent with Holmberg's generalization. According to Soh (1998), the order in (592) is derived by the object moving leftward over the frequency adverb.

(592) *Wo qu-guo Meiguo liangci* [Standard Mandarin]
 I visit-PFV US two time
 'I have visited US twice.' (Soh 1998: 33)

Soh (1998: 36) assumes, as is widely held, that V-to-*v* raising occurs in Chinese (whilst the adverb adjoins to VP). The object then moves to a functional projection above VP but below *v*. According to Soh (1998), object movement is only permissible where overt verb-raising occurs:

(593) *Wo qu-le liang ci Meiguo* [Standard Mandarin]
 I visit-PFV two time US
 'I have visited US twice.' (Soh 1998: 279)

(594) **Wo Meiguo liang ci qu-le* [Standard Mandarin]
 I US two time visit-PFV
 'I have visited US twice.' (Soh 1998: 279)

However, Soh notes that the fact that verb raising to *v* occurs even when the object does not move means that no direct support is provided for the constraint. But Soh (1998) does not consider object preposing more widely in Chinese. N. Zhang (1997) mentions examples like the following and concludes that Holmberg's Generalization is not obeyed in Chinese.

(595) *ta zheiben shu mei kan-guo* [Standard Mandarin]
 he this book not read-ASP
 'He has not read THIS BOOK.' (N. Zhang 1997: 57)

Among other things, N. Zhang (1997: 58) relates this to the different properties of the movement, claiming that preposed objects such as the above in Chinese must be +focus,

whereas in Scandinavian they must be -focus. In other words, object preposing to a post-subject position in Chinese need not respect Holmberg's Generalization (or the Generalized Holmberg Constraint) because it is a different kind of movement to that for which these generalizations are formulated.

With regard to object preposing in Chinese being a different kind of movement from object shift (and scrambling), it is important to note that this view can be maintained even where focalization is not involved. Thus Paul (2005, 2015) argues that object preposing in Chinese is clause-internal topicalization and not focus movement, and the object moves to a particular functional projection (TopicP) which occurs fairly high in the clause structure: higher than 'even' FocusP but below IP (Paul 2005: 125). To the extent that object preposing in Chinese is to a single functional projection, it behaves differently from the free positioning of the object in scrambling languages, which is well-captured under an adjunction account of scrambling (e.g. Wallenberg 2009). Overall, it is clear that Chinese respects the Generalized Holmberg Constraint with regard to the non-existence of long distance scrambling, and pending further research, I assume that object preposing in SOV structures also complies with these constraints, largely because – if Paul (2015) is correct – they involve a different kind of movement operation from scrambling.

Meanwhile, with regard to Xining Mandarin, we find that the traditional or historic dialect possesses a head-final clausal structure, which is what the Generalized Holmberg Constraint requires for Japanese style scrambling. As discussed in the preceding chapters, the early contact scenario led to the emergence of, for example, a head-final VP and modal auxiliaries, Tense became head-final (cf. Chapter 5), and so did the CP (cf. Chapter 6). Therefore, whilst in Yiddish we have an example of a phrase structure change from head-final to head-initial leading to a restricted domain for scrambling, in Xining Mandarin we find the reverse scenario: a change from head-initial to a uniformly head-final clause structure led to the creation of an enlarged scrambling domain. The co-occurrence of this phrase structure change with the emergence of Japanese-style scrambling supports the proposal that scrambling is contingent upon head-final syntax.

However, Xining Mandarin is not a naturally occurring head-final language, but rather head-final syntax originally emerged through the creolization scenario discussed in Chapters 2 and 3, and we also saw that currently head-final forms are in competition with head-initial variants arising under the modern influence of Standard Mandarin. Perhaps due to its status as a variety currently undergoing a syntactic change in head-directionality (the loss of its contact-

induced head-final features), the dialect appears to be typologically anomalous in also allowing scrambling across head-initial categories, contrary to the cross-linguistic generalization formalized by the Generalized Holmberg Constraint. Thus applying the same diagnostics that were used above, *wh*-scrambling of a bare *wh*-word is possible over a head-initial matrix verb, just as we saw for a head-final matrix verb. A Japanese style scrambling reading is evident for the movement in (596) because the *wh*-word is not restricted to taking surface scope (i.e. ‘What does Xiao Wang think that Lao Zhang will buy?’) but an embedded scope (i.e. radical reconstruction) reading is also possible (also cf. (547)). The embedded scope reading was noted in Section 7.4.1 to be unavailable in Standard Mandarin, where fronting occurs via topicalization.

- (596) *sa ha Xiao Wang xiang-zhe Lao Zhang mai lia*
 what OBL NAME think-IPFV NAME buy FUT
 ‘Xiao Wang is thinking, “What will Lao Zhang buy?’ (embedded +wh)
 ‘What does Xiao Wang think that Lao Zhang will buy’ (matrix +wh)

A full explanation of the issue of the permissibility of scrambling over head-initial categories awaits future research. However, it is suggested that such scrambling over head-initial categories can be regarded as a consequence of diachronic syntactic change in the dialect being gradual rather than instantaneous: the historic, contact-induced emergence of head-final syntax is being followed in modern times by pressure to adopt Standard Mandarin head-initial syntax, and yet at present we find that both head-initial and head-final variants co-exist because this change has not yet been fully accomplished. Should this gradual change reach completion and head-final syntax be fully lost in the future, so that the dialect fully conformed morphosyntactically to the Standard Mandarin model, then scrambling would be expected to likewise disappear from the dialect. Thus whilst the evidence before us does not support the absolute impossibility of scrambling across head-initial categories synchronically, it does support the correlation with head-final syntax when considered from the perspective of diachronic change, as well as from a typological perspective, with respect to the absence of scrambling elsewhere among Chinese dialects.

Chapter 8 Conclusion

This dissertation has been concerned with the mechanisms underlying change from head-initial to head-final syntax, a type of language change which is much less well studied than the change from head-final to head-initial. The first chapter of the discussion explored the socio-linguistic mechanisms responsible for this change in Xining Mandarin, and the evolutionary trajectory of the dialect itself: on the basis of the available socio-historical evidence, it was argued that the dialect likely developed along the trajectory associated with ‘fort creolization’ (a type of endogeneous creolization): a gradual progression from trade jargon to a pidgin to a stable and then an expanded pidgin. The structural interference evident in the dialect is so extreme because, for the local peoples learning Chinese, access to the target (Chinese) was probably generally poor, whilst access to their native languages remained abundant. This account was argued to be more plausible than the explanation previously assumed in the literature, which was that structural interference was introduced abruptly and was nativized at the outset of the contact scenario as a result of language shift by a large portion of the local population. It was suggested that the fort creolization model could also be helpful in shedding light on the spread of the Chinese language elsewhere across the Chinese frontier, where Chinese expansion into non-Han areas led to similar fort-based contact scenarios being created.

The study then considered the linguistic mechanisms operative in the emergence of head-final grammatical categories in the dialect. Three mechanisms of change were identified: reordering of exponents of grammatical categories that were head-initial in Chinese (e.g. modal of necessity *yao*), functional transfer (Siegel 2012) to lexical and grammatical categories in Chinese, and outright borrowing of head-final form-meaning units from the substrate languages. Of these, functional transfer was seen to be the principal mechanism by which head-final syntax arose, whilst borrowing of head-final form-meaning units and reordering of Chinese functional categories were comparatively minor strategies.

Following Siegel (2012), functional transfer in the dialect was classified as either grammatical expansion (of the early pidgin Chinese) through the recruitment of lexical items to grammatical functions, or as altering Chinese grammatical devices to create new head-final grammatical categories. The former strategy, transfer to lexical categories, concerned the transfer of grammatical functions (e.g. the complementizer function) to the speech verb, which was argued to have already participated in the change from head-initial to head-final at the VP level (cf. Section 6.3.4.7). Meanwhile, where new head-final categories were created

by altering existing Chinese grammatical categories, these Chinese categories were already head-final, or at least clause-final (e.g. the topic marker grammaticalized as a postposition *ha*, or the sentence-final modal particle *li* to which a future tense function was transferred).

Given that the former type of change (recruitment of lexical items as grammatical category exponents) is associated with circumstances involving poorer access to the target, whilst morphological alteration requires better access to the target (essentially involving imperfect acquisition rather than no acquisition of grammatical morphology) (see Siegel 2012), it was proposed that insight may be possible into the diachronic progression of the emergence of head-final syntax in the dialect. That is, the SAY complementizer likely emerged first while access to the target was at its poorest (with Chinese speakers severely outnumbered), whereas the creation of head-final categories from existent head-final/clause-final Chinese devices likely occurred later once access to Chinese improved through continuing Han immigration into the area.

In terms of the cases of morphological alteration discussed, the findings there enhance our understanding of the dialect's aspect and tense system. The development of Chinese imperfective ZHE to a general imperfective was argued to have occurred on the model of a general imperfective category in the substrate, since negative metalinguistic evidence would generally not have been available to enable semantic narrowing of learners' L1 aspectual category during their acquisition of Chinese. However, the perfective function of ZHE was argued to be a retention from early Mandarin, which was seen to provide linguistic evidence for the Lower Yangtze origin of the Ming dynasty immigrants to Qinghai. Meanwhile, the Chinese sentence-final particle *li* was found to have acquired the aspectually-conditioned pattern of temporal marking associated with the Mongolic substrate, resulting in the creation of a clause-final, aspectually sensitive future tense marker. The distribution of ZHE and *lia* across a variety of contexts (including with regard to adverbials), was argued to provide support for a unified semantic (i.e. mereological) model of aspect in Chinese in the spirit of de Swart (1998) and for the ontology of eventuality descriptions assumed therein.

Finally, although 'Japanese-style scrambling' is not found elsewhere in Chinese, this movement operation was demonstrated to be present in Xining Mandarin. This descriptive observation was found to provide broad support for the correlation between head-final syntax and scrambling formalized by the Generalized Holmberg Constraint, which predicts that such scrambling will only be possible in languages with a head-final clause structure. That is, whilst the shrinking of the scrambling domain in Yiddish correlated with a diachronic change

from head-final to head-initial (Wallenberg 2009), the enlarged scrambling domain in Xining Mandarin was attributed to phrase structure change from head-initial to head-final. In this respect and others, the dialect sheds light on linguistic variation during periods of contact-induced change.

Appendix A

Operational Tests

(quoted from Chen and Shirai 2010)

Predicates are indicated in bold italics.

Step 1: State or nonstate (nondynamic vs. dynamic)

The verb (or verb phrase) cannot have a habitual interpretation without any aspect marker attached, can it?

If it cannot → state (e.g., *Wo ai ni* ‘I love you’ → no habitual reading)

If it can → nonstate (e.g., *Wo tiantian chi mifan* ‘I every day eat rice’ (I eat rice every day) → habitual reading possible) → Go to Step 2

Step 2: Punctual or durative

[If test (a) does not apply, apply test (b)]

(a) Can you say ‘X *kaishi* VP’ (= ‘X begin to VP’) without an iterative interpretation?

— If you cannot → Achievement (e.g. #*Ta kaishi si* ‘he begins to die’) → Go to step 4.

— If you can → Accomplishment (e.g. *Ta kaishi xie yi feng xin* ‘he begins to write a letter’) or Activity (e.g., *Ta kaishi paobu* ‘he begins to run’) → Go to Step 3

(b) Can you say ‘X will VP at Y o’clock (e.g. 2 o’clock) sharp’?

— If you can → Achievement (e.g. *Huiyi hui zai 2 dian zheng kaishi* ‘Lit: meeting will at 2 o’clock sharp begin’ (The meeting will begin at 2 o’clock sharp) → Go to step 4

If you cannot → Accomplishment or Activity → Go to Step 3

Step 3: Accomplishment or Activity/semelfactive (Telic vs. atelic)

[If test (a) does not apply, apply test (b)]

(a) Can ‘X *chadianr* VP *le*’ (= ‘X almost VP *le*’) mean ‘X started V but did not complete

it'?

— If it can → Accomplishment (e.g. *Ta chadianr pao dao xuexiao le* 'Lit: he almost run arrive school *le*' (he almost ran to the school) can mean that he started running but he didn't reach the school).

— If it cannot → Activity or semelfactive (e.g. *Ta chadianr pao le bu* 'he almost ran *le*' (he almost ran) can only be interpreted as he almost started running) → Go to Step 4.

(b) Can you say 'X will VP for Y time' (e.g., 10 min)?

— If you can → Activity (e.g., *Ta hui zuo 10 fenzhong* 'he will sit for 10 minutes') or semelfactive (*Ta kesou le 10 fenzhong* 'he coughed for 10 minutes').

— If you cannot → Accomplishment (e.g. #*Ta pao dao xuexiao 10 fenzhong* 'he run arrive school 10 minutes' (#He ran to school for 10 minutes) → Go to Step 4.

Step 4: Achievement or Semelfactive

Can you say 'X zai VP' with iterative/repetitive (i.e. iteration on one occasion. Not habitual) interpretation?

— If you can → Semelfactive (e.g. *Ta zai kesou* 'he zai cough' [he is coughing])

If you cannot → Achievement (e.g. #*Ta zai si* 'he zai die')

Appendix B

The frequency data in the tables in this appendix come from approximately 11.5 hours of natural discourse data from speakers from Haiyan county. Table B-1 lists the matrix verbs with which the complementizer *fozho* occurred:

Verb type	Occurences
<i>Speech verbs</i>	
<i>fo</i> 'say'	34
<i>chuan</i> 'spread'	1
<i>han</i> 'shout'	1
<i>wen</i> 'ask'	4
<i>jiao</i> 'call'	3
<i>Cognitive verbs</i>	
<i>xiang</i> 'want'	4
<i>yiwei</i> 'think'	2
<i>simen</i> 'think'	3
<i>Total</i>	52

Table B-1 Matrix verbs selecting fozho-marked complements

Table B-2 lists the structures in which the various complementizers occurred:

Structure	Occurrences
<i>Lexical verb uses</i>	
(NP _{SUBJ})-(NP _{hearer})- fo _{lexical verb} -[reported speech-(fo/fozho)]	84
(NP _{SUBJ})-(NP _{hearer})-[reported speech-(fozho)]- fo _{lexical verb}	34
[reported speech-(fo/fozho ⁸⁸)]-NP _{SUBJ} -(NP _{hearer})- fo _{lexical verb}	24
<i>Non-lexical verb uses</i>	
(NP _{SUBJ})-[reported speech fozho _{CMP}]-V _{speech/cognitive}	30
(NP _{SUBJ})-[reported speech fozho _{QUOT} ⁸⁹]-V _{speech/cognitive}	3
(NP _{SUBJ})-(NP _{hearer})-V _{speech/cognitive} -[reported speech fozho]	17
(NP _{SUBJ})-(NP _{hearer})-V _{speech/cognitive} -[reported speech fo]	12
NP _{SUBJ} -V _{speech} -[reported speech fozho-fozho]	1
<i>Particle complementizer</i>	
NP _{SUBJ} -V _{speech} - fo -[reported speech(fozho)]	2
[reported speech-fozho]-NP-V _{speech} - fo	2

Table B-2 Lexical and non-lexical uses of the SAY verb

Table B-3 shows the frequency data for clause-final uses of SAY in non-embedded contexts:

Clause-final marker in matrix clause	Frequency
<i>fozho</i>	87
<i>fo</i>	160
Total:	247

Table B-3 Discourse marker uses of SAY

⁸⁸ 4 of the fronted complement clauses in this pattern were marked by *fo*, and 2 by *fozho*.

⁸⁹ *fozho*_{QUOT} refers to quotation marker uses in which *fozho* marked a single word rather than a clause.

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