

**The Function of Pronominal Expressions
in Puxian**

Jianming Wu

A thesis submitted to Lancaster University for the Degree of Doctor of Philosophy

May 2010

Department of Linguistics and English Language

Lancaster University, United Kingdom

Declaration

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been acknowledged.

Jianming Wu

May 2010

Lancaster University

Abstract

Puxian, a Min dialect of China, has many significant linguistic features. Based on a corpus of spoken data, this thesis sets out to examine aspects of the grammar of pronominal expressions in Puxian, focusing especially on three prominent issues in the linguistic literature, viz. *impersonality*, *reflexive markings* and *Person effects on linearization*.

The investigation of impersonality has been built on the latest typological framework (see e.g. Siewierska 2008) and deals with a group of constructions in Puxian that have pronominalized subjects but crucially with impersonal reference. These subjects can be projected onto five semantic domains, i.e. *vague*, *generic*, *non-referential indefinite*, *referential indefinite* and *referential definite*, with regard to referentiality and (in)definiteness (cf. Givón 1984: 397). A correlation between these domains and morphophonological realizations of impersonal forms is studied as well.

The discussion of reflexive markings focuses on grammaticalization, as different reflexive forms in Puxian assumed interrelated functions along the pathway of grammaticalization. Significantly, some highly grammaticalized functions, e.g. *impersonals* or *anticausatives*, are not necessarily associated with more simplified reflexive forms.

The attention to linearization is centered on the *give* morpheme $k\varepsilon^{21}$, which acts like a case marker in a number of constructions, ranging from the monotransitive, ditransitive, causative, passive and even to the intransitive. Yet the main concern is how the grammatical category of Person as a whole plays a crucial role in the placement of syntactic constituents as well as encodings of argument roles, as against the unmarked AVP word order.

Since Puxian dialect has been relatively unknown in linguistics, a sketch of Puxian grammar and language situation will be offered in the beginning.

Acknowledgement

First of all, I would like to express my gratitude to my principal supervisor, Prof. Anna Siewierska. Without her help, support and patience, this thesis would not have been possible. I feel great admiration for her unsurpassed knowledge and foresights in the field of linguistics, which have benefited me tremendously. I would also thank my second supervisor, Dr. Willem Hollmann for his help and good advice, especially his kind comments on my first assignment at Lancaster University, which have been invaluable to me.

I also wish to thank many of the nice people around me. They are so wonderful and helpful during my stay at Lancaster.

At a more personal level, I would like to thank my parents and my wife for their supports throughout, as always. I would also like to thank my lovely young son, now two-year-old, who often sings the sweetest song in the world for his absent daddy.

For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

Abbreviations

ABS	absolutive case
ACC	accusative case
ADP	adposition
ADJ	adjective
ADV	adverb
AF	agent focus
AGR	agreement
APPL	applicative
ART	article
ASP	aspect
AUX	auxiliary
CAUS	causative
CL	classifier
CLT	clitic
CNJ	conjunction
COMP	complementizer
COP	copula
CP	complementizer phrase
DAT	dative
DEF	definite
DEM	demonstrative
DET	determiner
DO	direct object

EMPH	emphatic
ERG	ergative
EXCL	exclusive (of the addressee)
FOC	focus
FF	fusion form
GEN	genitive case, possessed
IMP	imperative
IMPF	imperfective
INCL	inclusive (of the addressee)
INDEF	indefinite
INF	infinite
INST	instrumental
INTF	intensifier
INTR	intransitive
IO	indirect object
IP	inflection phrase
IPFV	imperfective
IRLS	irrealis
LOC	locative
LOG	logophoric
MID	middle
N	noun or nominal
NEG	negative element
NOM	nominative
NP	noun phrase

NR	nominalizer
O	object
P	patient
PASS	passive
PAST	past
PAT	patient
PAU	paucal
PERF	perfective
PL	plural
POSS	possessive
PP	prepositional phrase
PREP	preposition
PRES	present
PRON	pronoun
PROG	progressive
PROX	proximate
PRT	particle
R	recipient
REFL	reflexive
REL	relative
RLS	realis
S	single argument of intransitive verb
SBJ	subject
SFP	sentence-final particle
SG	singular

SPEC	specifier
STAT	stative
SUBJ	subjunctive
T	theme of ditransitive clause
TOP	topic
TR	transitive
UGR	undergoer
V	verb
VP	verb phrase
1	1st person
2	2nd person
3	3rd person

Table of Contents

Abstract.....	1
Acknowledgement	3
Abbreviations.....	4
Chapter 1 - Introduction	12
1.1. Introduction.....	12
1.2. Language situation.....	13
1.2.1. The Min dialects	13
1.3. Data collection, transcription and corpus	15
1.3.1. Data collection	15
1.3.2. Transcription	17
1.4. Major linguistic features in Puxian.....	19
1.4.1. Phonology	20
1.4.2. The pronominal paradigm under investigation	23
1.4.3. Main grammatical features of Puxian.....	26
1.5. Research backgrounds, motivation and orientations	32
1.6. Outline of the thesis	44
Chapter 2 - Pronominal impersonals in Puxian	46
2.1. Introduction.....	46
2.2. The notion of impersonal constructions.....	47
2.3. Impersonal constructions in Puxian.....	55
2.4. The distribution of pronominal impersonals in Puxian.....	71
2.4.1. Identifying pronominal impersonals.....	71
2.4.2. The distribution.....	74
2.5. Linking pronominal impersonals to the definiteness hierarchy.....	79
2.5.1. Semantic characterization of pronominal impersonals.....	80
2.5.2. The referentiality and definiteness hierarchy.....	84
2.6. Grading pronominal impersonals in Puxian	89
2.6.1. Pronominal impersonals with <i>generic</i> reference	89
2.6.2. Pronominal impersonals with <i>non-referential indefinite</i> reference	91
2.6.3. Pronominal impersonals with <i>referential indefinite</i> reference.....	96
2.6.4. Pronominal impersonals with <i>referential definite</i> reference.....	98
2.6.5. Pronominal impersonals with <i>vague</i> reference.....	99
2.7. Further thoughts on pronominal impersonals in Puxian.....	105
2.7.1. The semantic range of zero forms.....	105
2.7.2. Impersonal uses of <i>naŋ</i> ²⁴ as an indefinite pronoun.....	108
2.7.3. The typology of 3 rd IMPs.....	116
2.8. Concluding remarks.....	120
Chapter 3 - Reflexives in Puxian	122
3.1. Introduction.....	122
3.2. C.-T. J. Huang's syntactic approach to Mandarin <i>ziji</i>	123
3.3. <i>kai</i> ⁴² as an anaphor.....	128
3.3.1. Definitions of anaphor	128
3.3.2. Anaphors in Puxian.....	135
3.3.2.1. <i>kai</i> ⁴² - <i>kai</i> ¹¹ as the primary reflexive marker	136
3.3.2.2. Syntactic anaphor.....	140
3.4. Reflexive verbs	144

3.4.1. The typology of reflexive verbs.....	144
3.4.2. Reflexive verbs in Puxian.....	151
3.5. Intensifiers.....	158
3.5.1. The intensifiers <i>kai</i> ⁴² and <i>kai</i> ⁴² - <i>kai</i> ¹¹ in Puxian.....	158
3.5.2. Semantic distinctions of the adverbial intensifier <i>kai</i> ⁴² - <i>kai</i> ¹¹	166
3.5.3. Contrast between the intensifier <i>nay</i> ²⁴ and <i>kai</i> ⁴²	167
3.6. Viewpoints and the untriggered reflexive <i>kai</i> ⁴²	171
3.6.1. The typology of viewpoint markings.....	171
3.6.2. Previous studies on Mandarin LDR <i>ziji</i>	176
3.6.3. The empathic and logophoric <i>kai</i> ⁴² in Puxian.....	183
3.6.4. The rationale.....	194
3.7. The grammaticalization of <i>kai</i> ⁴² in Puxian.....	196
3.7.1. The grammaticalization of reflexives.....	198
3.7.2. The case of Puxian <i>kai</i>	206
3.7.2.1. The lexical sources of <i>kai</i>	206
3.7.2.2. Intensifiers and anaphors.....	208
3.7.2.3. Verbal reflexives.....	212
3.7.2.3.1. Reciprocals.....	213
3.7.2.3.2. Middles/anticausatives.....	215
3.7.2.3.3. Reflexive Passives/impersonals.....	218
3.8. Conclusion.....	223
Chapter 4 - Word order, alignment and the interplay of Person in Puxian <i>kε</i>²¹ constructions.....	225
4.1. Introduction.....	225
4.2. Grammaticalization of transfer verbs in languages.....	226
4.2.1. Semantics and syntax of transfer verbs.....	226
4.2.2. Transfer verbs in Puxian and other Sinitic languages.....	230
4.3. Types of <i>kε</i> ²¹ constructions in Puxian.....	235
4.3.1. The ditransitive construction.....	236
4.3.1.1. The indirect object construction.....	237
4.3.1.2. The double object construction.....	240
4.3.1.3. The secondary object construction.....	242
4.3.1.4. The unique ditransitive construction.....	245
4.3.1.5. Violation of the <i>prominence</i> and <i>weight</i> principles.....	247
4.3.2. The causative construction.....	251
4.3.2.1 Causatives in Puxian.....	257
4.3.2.1.1. Analytic causatives.....	257
4.3.2.1.2. Complex causatives.....	263
4.3.2.2. The typological perspective.....	266
4.3.3. The passive construction.....	269
4.3.3.1. The passive in Puxian.....	274
4.3.3.1.1. The personal passive.....	274
4.3.3.1.2. The double-marked passive.....	277
4.3.3.1.3. The indirect passive.....	279
4.3.4. The <i>kε</i> ²¹ -marked intransitive constructions.....	281
4.4. Word order, alignment and the interplay of person.....	290
4.4.1. Case relations and word order.....	290
4.4.2. Case relations in Puxian <i>kε</i> ²¹ constructions.....	296
4.4.2.1. Case relations in the <i>kε</i> ²¹ -marked intransitive constructions.....	301
4.4.2.2. The causative/passive constructions.....	302

4.6.2.3. The ditransitive constructions	306
4.4.3. Alignment.....	309
4.5. Concluding remarks	318
Chapter 5 – Conclusion	319
Appendix - A Transcription sample	326
References.....	333

Indexes of Tables

Table 1 Consonants in Puxian	21
Table 2 Vowels in Puxian	22
Table 3 Puxian tones (Cai Guomei 2006).....	23
Table 4 Person paradigms in Puxian.....	24
Table 5 The person paradigm in Upper Bal.....	33
Table 6 Pronominal paradigm in Ancient Chinese	35
Table 7 Number distinction in Puxian and Mandarin person pronouns	77
Table 8 Referential domains with corresponding impersonals.....	87
Table 9 Association between the pronominal forms and meanings.....	103
Table 10 Semantic domains and the related features of Puxian zeros	108
Table 11 Coreferential and disjoint use of phoric object pronouns in transitive clauses...	195
Table 12 Distribution of case over word order types.....	296

Index of Figures

Figure 1 Distribution of the Min dialects in Southeastern China	13
Figure 2 Division of VP structure in Chinese history (c.f. Norman & Mei 1976)	32
Figure 3 Distribution of impersonal pronominals by the number of instances	74
Figure 4 Distribution of impersonal pronominals as against other pronominal functions ..	75
Figure 5 Semantic domains coded by i^{533} , $naŋ^{24}$ and zero.....	105
Figure 6 Semantic Map of indefinite pronouns.....	110
Figure 7 Semantic map of $naŋ^{24}$	116
Figure 8 Distribution of the empathic and logophoric reflexives in Puxian and Mandarin	183
Figure 9 Categories of reflexives in Puxian and Mandarin	191
Figure 10 Grammaticalization of reflexives in Puxian.....	197
Figure 11 Distribution of different types of $k\epsilon^{21}$ constructions in the data.....	235
Figure 12 The Causee Accessibility Hierarchy	253
Figure 13 Typical grammatical relation changes between Basic and Causative verbs.....	254
Figure 14 Thematic relations in the active, passive and causative	275
Figure 15 Scales of prominence	299
Figure 16 The Nominal Hierarchy (Silverstein 1976).....	299
Figure 17 Morphological alignment types.....	310
Figure 18 Ditransitive Alignment.....	316

Chapter 1 – Introduction

1.1. Introduction

Pronominal expressions, being one of the most common yet most intriguing phenomena in natural languages, have received unremitting attention in linguistic literature¹. This thesis seeks to bring to light aspects of the grammar of pronominals as used in Puxian, a Min dialect of Chinese. It will focus on issues that have featured prominently in the theoretical and typological discussions of pronominals of the last 30 years or so. These are pronominal impersonals, reflexives and linearization among constructions. The conception has also been very much inspired by Siewierska (2004), where, for the first time, we are provided with an extensive and finely examined typology of person markers on a data of over 700 languages. In this introductory chapter I will first provide some background information on the Min dialect group in section 1.2 and the data collection and transcription methodology in section 1.3. Section 1.4 discusses the major linguistic features of Puxian in terms of its pronominal paradigm, phonology and grammar. In section 1.5, I will talk about the research backgrounds, motivation and goals of this study. Finally, an outline of this thesis will be presented in section 1.6

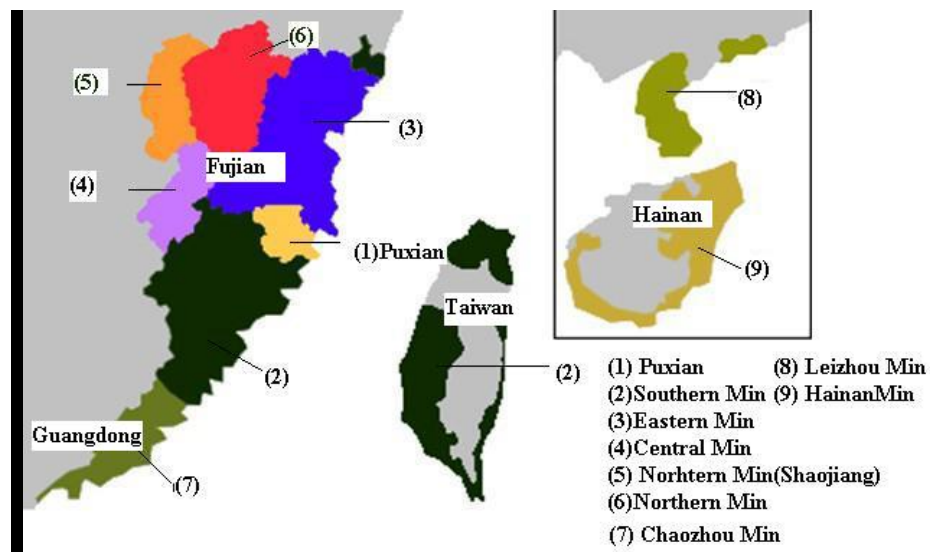
¹ For instance, the Government and Binding Theory (Chomsky 1981, 1982, 1986) is much concerned with intra-sentential anaphora of reflexives or pronouns; the neo-Gricean pragmatic theories (Levinson 1987 a ,b, 1991, Y. H. Huang 1994, 2000) are employed to solve referent competition by pronominals in discourse; and the cognitive-discourse theories, e.g. the Accessibility Hierarchies (Ariel 1990) or Centering theory (Grosz, Joshi, and Weinstein, 1983, 1995) attempts to construct a mental model of referentiality at intra-and inter-sentential levels.

1.2. Language situation

1.2.1. The Min dialects

The Min dialect group is one of the seven main dialects in China, which include Mandarin, Xian, Gan, Wu, Yue, Kejia (Hakka) and Min (Chao 1968, Norman 1988, Chappell 2001). The Min dialects are mainly spoken in Fujian province in the Southeastern part of China and can be further divided into several branches, such as Northern Min, Central Min, Eastern Min, Puxian Min and Southern Min (all spoken in Fujian and Taiwan) as well as Chaozhou Min, Leizhou Min and Hainan Min (spoken in Guangdong and Hainan). These dialect branches are not at all homogenous in terms of lexical, phonological and grammatical features. People from different dialect backgrounds may find that their speech to be on the whole mutually unintelligible. The distribution of these dialects is shown in figure 1.

Figure 1 Distribution of the Min dialects in Southeastern China



Historically, it is believed that there were three major immigrations to what is now

Fujian province as a result of upheavals in central China. According to Norman & Mei (1976), the first immigration happened in the Qin-Han imperial expansion period (around 221 BC – 206 AD), which brought Old Chinese to Fujian; the second immigration happened during the Southern dynasties (420-589 AD), when people from the Wu-Yue region (now Jiangsu and Zhejiang province) moved to Fujian; the third immigration took place at the end of the Tang dynasty (at the beginning of 10th century AD). These immigrations brought in new linguistic elements, which mixed with the aboriginal languages of the areas. In the past millennium, the forbidding terrains (being geographically inaccessible in ancient times) have allowed Min to develop relatively independently from outside influences.

Min People in the coastal areas are known as seafaring people². They have been making a living in different parts of the world (as early as the Han Dynasty). There are now Min speaking populations in Malaysia, Singapore, Philippine and many other countries. In Singapore, for example, about 53% of the population speaks Min (e.g. Chaozhou Min) as their first language (Kuo 1980); In New York City, USA, about one third of the Chinese population speaks native Min dialects (García, et al. 2002: 242). Today, in China, the Min speaking people make up 4.1% of the Chinese population (Ramsey 1987: 87).

Linguistically, the Min dialects inherited many archaic linguistic features from ancient Chinese (Norman 1988). For example, the retention of dental stops [t] and [tʰ], which were palatalized at an early stage in the other main dialect groups, e.g. to [ts] and [tsʰ] in Mandarin (Chappell 1989); the absence of the [f] phoneme in the dialects, which first appeared in the Northern dialects in the Tang period (618-907 AD) (Ramsey 1987: 108).

² People speaking Puxian and Southern Min in the coastal Fujian areas, Taiwan and some South-East Asian countries commonly worship the goddess 'Māzǔ', who is known as the protector of the sea.

Some recent studies (e.g. Ting 2002, S. Li 2003) suggest that Min Dialects are closely linked to Wu dialects. For example, similar archaic phonetic features such as lack of the distinction between dentals, e.g. [t] and supradentals, e.g. [z] / [ts] are also observed in Wu (Li 1937, Tung 1953, Yuan 1960). In addition, some common words such as *mou*¹⁴ ‘do not have’, *p’a*⁴² ‘hit’, *k’o*⁴⁴ ‘leg’, etc. are seen in both Wu and Min (Zheng zhang 1984).

It is also known that Wu areas were once inhabited by the ancient Yue people, whose languages are ancestral to the current Zhuang and Dong languages(壮侗语), known in the west as Tai-Kadai languages³, spoken in South and Southeastern China. Norman and Mei (1976), following a lexical approach, propose that the language of the ancient Yue people was Austro-Asiatic, particularly close to Vietnamese. And the languages of the Min, Wu and Yue may have the same linguistic affiliation to Vietnamese. Due to the lack of adequate evidence, they admit that ‘we know so little about the ancient Yue language that it would be virtually impossible to show that the trait in question could actually be traced back to a Yue substratum’. Similar research has also been conducted by other linguists in an attempt to establish some linkage between Old Chinese and Proto-Austronesian (see e.g. Li Rulong 2005, Sagart 1993).

1.3. Data collection, transcription and corpus

1.3.1. Data collection

There has been some noticeable unevenness in the studies of Min dialects, for most linguistic surveys focus on the areas of Southern Min, Eastern Min and Chaozhou Min.

³ The Tai-Kadai languages, also known as Daic, Kadai, Kradai, or Kra-Dai, are a language family of highly tonal languages found in southern China and Southeast Asia. They include Thai and Lao, the national languages of Thailand and Laos respectively.

Other areas of Min are less studied. This is probably due to the lack of reliable documentation (e.g. written works) of these dialects in the past.

Puxian, obviously, is one of the under-described dialects. There are some recent publications on Puxian, most notably.

(a) *Putian County Record* (Liu, Fuzhu 1994)

(b) *Xianyou County Record* (Li, Rulong 2001)

These works are concerned mainly with aspects of Puxian life. The linguistic sections, compiled by Liu and Li, have a detailed account of the phonology and lexicons as well as some sketchy grammatical description (mainly in the form of exemplar sentences).

Another published work in Puxian is the *Bible in Hinghwa (Xinghua) Romanized*, which was compiled by the British and Foreign Bible Society in the 19th century. The copy I obtained is from Beijing University. The Romanized written system for Puxian dialects does not distinguish some phonemic contrasts, e.g. [s] and [ʃ], aspirated [kʰ] or other unique forms of consonant mutation. I will refer to the above material as supplementary sources of reference.

Since Puxian dialect maintains an oral tradition, spoken data will, in a sense, reflect the language situation better than the written ones. The data which this thesis is based on were collected in the Puxian town of Licheng, where I was born and brought up. The collection started in March, 2008 and involved two stages of fieldwork: one from March to May in 2008; the other from August to October of the same year.

The informants selected are elderly Puxian people. Most of them are more than 50 years old and speak Puxian only. Despite being a Puxian speaker myself, it took me

quite some time to gain their trust and assure them that it is harmless to be recorded and interviewed. With their consent, I had them sign the Chinese version of affidavits to acknowledge their willingness to participate in the data collection. The genres of the recordings include folktales, conversations or other narratives. The native speakers were asked individually to narrate any personal or traditional stories that they were familiar with (see Appendix A for an illustration). The identities of the conversation partners were noted at the beginning and they were then free to talk about anything they wanted. In the interview, the subjects were asked to tell a story on how to carry out some local practices, such as farming, cooking and others. In all I collected, a total of 10 hours' recordings which I then saved in WAV format on the computer.

1.3.2. Transcription

There have been various transcription systems for Min dialects, e.g. the earliest Romanization system by western priests or the *Pinyin* Romanization system for Mandarin (adopted in 1959 by the Chinese government). However, both of these systems are not ideal for Puxian, for some unique phonemes, e.g. [ɬ], [ʔ] cannot be represented. In Chinese linguistics, the standard practice for transcription is through the International Phonetic Alphabet (IPA), which is a universal system for transcribing sounds that occur in spoken language and has a one-to-one mapping between phones and written symbols.

During the transcription, I adopt some conventions that facilitate the process of transcribing. These conventions are summarized as follows: (1) the tone value is based on a five-point scale set up by Yuanren Chao (1930), with 5 standing for the highest pitch and 1 the lowest pitch. Tone categories are marked by numerical superscripts

rather than diacritics. In the majority of cases, each morpheme has a ‘combination tone’ (a tone occurs in combination with the following full tone, e.g. sandhi tone) or an ‘isolation tone’ (a tone that occurs in isolation or is followed by an unstressed tone). For example, the morpheme *hi*⁵³³ ‘fly’ in an isolation tone 533 is changed to a combination tone 11 in the compound word *hi*¹¹-*ki*⁵³³ ‘fly-machine’; (2) there are usually three ways to transcribe an aspirated consonant, i.e. [kh], [k^h] and [kʰ]. For the sake of convenience, the first, that is, [kh] is adopted for the transcription in this thesis; (3) a hyphen is generally used to indicate compounding, e.g. *lou*²⁴-*ly*⁴⁵³ ‘rat’, reduplication, e.g. *tshou*¹¹-*tshou*⁵³³ ‘careless’, or affixation, e.g. *kai*⁵³³-*lia*²⁴ ‘self-eat/self-live’; (4) zero forms in the subject, object or prepositional subject position are coded with the numerical 0, 1, 2, 3 separately, which can later be recognized by corpus tools; (5) considering that the nature of this thesis is for grammar, the resulting phonological fusion, consonant mutation, etc. are transcribed without noting down their original phonemes; (6) the transcribed IPA symbols from Word documents need to be converted into the Unicode encoding system and save in plain text, which can be processed by the corpus tools, such as Antconc 3.2 and Wordsmith 5.0, as applied in this study.

Throughout this thesis, I follow a standard set of conventions, known as the *Leipzig Glossing Rules* in providing interlinear morpheme-to-morpheme glosses and grammatical information⁴. The recordings were then transcribed and corrected with the help of some of the informants. On average, one hour’s recording needs 5 or 6 hours’ transcription. A corpus of 40,000 words has since been built. When the transcription of a sound file was completed, further checking was performed and specific problems were discussed and solved. The types of the text and the speaker(s) recorded are provided

⁴ These conventions were jointly developed by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology in conjunction with the Department of Linguistics of the University of Leipzig. However, it is only possible for me to provide grammatical information for the examples cited in this thesis, not the whole corpus.

below.

(1) Corpus of recorded texts

(a) Interview A, April, 2008

Speakers: Mr. S. Lin.; Mr. G. Wu.

(b) Story A, B and C, April, 2008

Speaker: Mr. M. Huang; Mr. Y. Huang; Mr. Z. Liu.

(c) Conversation B, August, 2008

Speakers: Mr. M. Huang; Mr. K. Wang; Mrs. R. He.

(d) Conversation C, August, 2008

Speakers: Mr. S. Huang; Mr. M. Huang.

(e) Conversation D

Speaker: Mr. T. Huang.

1.4. Major linguistic features in Puxian

Puxian, as shown in Figure 1, is located between Eastern Min and Southern Min. Historically, before the year AD 979, Puxian was part of Quanzhou County and Puxian people at the time probably spoke a form of Southern Min. In the Song Dynasty (after AD 979), the region had its separate administration from Quanzhou region. Due to the proximity with Eastern Min and Southern Min, Puxian may have absorbed some linguistic elements from both but definitely has many unique phonological and grammatical properties of its own. For example, the Mandarin words such as 肥 *fei* ‘fat’, 饭 *fan* ‘meal’, which have the initial labiodental [f], are invariably pronounced with the bilabial [p] or [pʰ], as in *phui*²⁴ ‘fat’ or *phui*⁵³³ ‘breakfast’ This was exactly the same in ancient Chinese; In a Buddhist scripture in Puxian, the transliterated character

伽 or 迦 is pronounced with the initial consonant [k] or [kh], which is similarly found in the English translation of Sanskrit. For example, *Sakyamuni* ‘Buddha’ in English corresponds to 释迦牟尼 *ʃi²¹ kɑ⁴ mɔ²⁴ ni⁴* in Puxian but *shì jiū mǒ ní* in Mandarin, which the character 迦 has the initial consonant [j]. In terms of lexicon, Puxian probably keeps more ancient Chinese words than other dialects, such as 鼎 *t’ij⁴²* ‘cooker’, 册 *tsa⁴²* ‘book’, 吼 *hau⁴²* ‘cry’, all of which are typically seen in ancient literary works. In addition, Puxian has some inflectional morphology via ‘reduplication’, whereby quantifiers, verbs and adjectives can all be repeated, e.g. *kiã⁴ –kiã²⁴* ‘walk-walk / have a walk’, *tsy⁴ –tsy⁴²* ‘cook-cook / do some cooking’, etc.

1.4.1. Phonology

Puxian has 15 consonants as well as 39 rimes on the basis of 6 vowels (Liu Fuzhu 1994, 2007: 290; Li Rulong 2001, Cai Guomei 2006), as shown in Table 1 and 2.

Table 1 Consonants in Puxian

Consonants		<i>Bilabial</i>	<i>Alveolar</i>	<i>Lateral</i>	<i>Velar</i>	<i>Glottal</i>
<i>Stop</i>	<i>Voiceless</i>	p	t		k	ʔ
	<i>Voiced</i>	ph	th		kh	
<i>Nasals</i>		m	n		ŋ	
<i>Fricative</i>	<i>Voiceless</i>			ɬ		h
	<i>Voiced</i>	β*				
<i>Affricates</i>	<i>Unaspirated</i>		ts			
	<i>Aspirated</i>		tsh			
<i>Approximant</i>				l		

Among these consonants, the lateral fricative [ɬ], which corresponds to [s] in Mandarin, is not widely seen outside Puxian and Min (but it can be also found in Southern Pinghua (Guangxi) or the Austronesian branch of the Formosa language in Taiwan). The voiced fricative [β] is used only when *consonant mutation* occurs. Consonant mutation is a principled phonological phenomenon in Min (Chao 1956). It is primarily used when two monosyllabic lexemes join together to form a compound word or a phrase. For instance, if a second lexeme in the compounding has the initial consonant [h] and the first lexeme has its final consonant [ŋ], [h] of the second lexeme should be changed to [ŋ] as well, e.g. the two words, *phaj*⁴² ‘set’ and *hue*⁴⁵³ ‘fire’, when forming a phrase ‘set-fire’, will be pronounced as *phaj*⁴² *ŋue*⁴⁵³, where the consonant [h] in *hue*⁴⁵³ ‘fire’ is changed to [ŋ]. In the case of [β], it occurs when the preceding lexeme has a vowel ending and the following consonant is [p], which should be changed to [β], for example, *tai*²⁴-*βieu*⁴⁵³

‘representative’ or *hi⁴²-βieu⁴²* ‘tickets’. There are about 62 combinations of consonant mutations in Puxian, which are also seen in other Min dialects (Wang 1999: 1, Chen 1998: 11). But consonant mutation is much more frequent in Puxian than in Southern Min (Liu Fuzhu 2002). In general, most lexical words in Puxian are pronounced differently from those of neighboring dialects. For example, the vowel [a] in Southern Min is mostly replaced by the vowel [o] in Puxian, as in *ka²¹* to *ko²¹* ‘feet’.

The distribution of vowels is different in various Min dialects (Li and Zhang 2005). There are about six basic vowels in Puxian, which can combine with each other (i.e. diphthong), have a nasal ending [ŋ], be nasalized shown by the diacritic symbol [~] or terminate with the glottal ending [ʔ]. This is shown in the following rime chart (see also Liu Fuzhu 2007).

Table 2 Vowels in Puxian

Vowels	Diphthong	Nasal	Glottal
a	au / ai	aŋ / ā / āŋ / aũ	aʔ
ɔ		ɔŋ / ǔ	ɔʔ
o	ou	oŋ	oʔ
e	ai	eŋ	eʔ
i	iu / ia / ieu	iŋ / ieŋ / iã / ĩ / iũ	iʔ
u	ui / ua	ũ / uĩ / uã	

In addition, Puxian is a tone language, which is noteworthy for complex tone sandhi phenomena. There are 7 tones, as shown in Table 3.

Table 3 Puxian tones (Cai Guomei 2006)

Tone	<i>Yin Ping</i>	<i>Yang Ping</i>	<i>Shang Sheng</i>	<i>Yin Qu</i>	<i>Yang Qu</i>	<i>Yin Ru</i>	<i>Yang Ru</i>
Value	533	24	453	42	11	21	4

Tone sandhi occurs when two monosyllabic lexemes join together. There are about 49 tone sandhi combinations used in daily speech (Cai Guomei 2006: 14). The tone of the first lexeme changes according to that of the second, whereas the tone of the second lexeme remains basically the same. For instance, the tone value *Ying Ping* 533 will change to *Yang Qu* 11, when it meets with another *Ying Ping* 533, as in the case of *hi*⁵³³ ‘fly’ to *hi*¹¹-*ki*⁵³³ ‘fly-machine’ or ‘plane’; *Shang Sheng* 453 will change to *Yin Qu* 42 when it meets with *Yang Qu* 11, as in the case of *pɔ*⁴⁵³ ‘protect’ in *pɔ*¹¹-*liŋ*⁴² ‘promise’.

1.4.2. The pronominal paradigm under investigation

The main pronominal system in Puxian includes the 1st, 2nd and 3rd person forms, reflexives and a generalized noun, meaning ‘man or people’, as shown in Table 4 below.

Table 4 Person paradigms in Puxian

	Singular	Plural	
1	<i>kua</i> ²¹	Inclusive	Exclusive
		<i>na</i> ⁴²	<i>kuoŋ</i> ³²
2	<i>ty</i> ²¹	<i>tyøŋ</i> ³²	
3	<i>i</i> ³³	<i>yøŋ</i> ^{21/32}	
Reflexives	<i>kai</i> ⁴² , <i>kai</i> ⁴² - <i>kai</i> ¹¹ , <i>kai</i> ⁴³³ -		
Pronominalized noun	<i>naŋ</i> ²⁴		

In Puxian, the number distinction is realized through syllable contraction with the morpheme *naŋ*²⁴, meaning ‘man’ (except the case of 1st person inclusive *na*⁴², whose origin is still not clear); there is the inclusive vs. exclusive distinction, that is, the inclusive *na*⁴² refers to speaker and addressee and the exclusive *kuoŋ*³² refers to speaker and non-speech-act participants, which is not seen in standard Mandarin; most singular forms can also have plural reference, whereas most plural person forms (i.e. more than 70% of 1st exclusive, 2pl and 3pl) can not assume subject function independently but are seen in appositive and determiner-like constructions (see Figure 4 below); The reflexive marker *kai*⁴² can be used as a deictic pronoun in subject position, referring to 1sg, 2sg and even 3sg in different contexts. For instance,

(2) *Kai*⁴² *na*⁴ *tshaŋ*⁴-*tshaŋ*⁴²

1sg/2sg/3sg *BE* *poor*

‘I/You/he is poor.’

*kai*⁴² in (2) is not anaphoric but expresses the speaker's locus of viewpoint, who identifies himself with the protagonist in the sentence. In addition to the deictic/argumental *kai*⁴², there are different tonal and formal variants of *kai*. For instance, the adnominal intensifier, *kai*⁴², expresses a sense of contrast/focus in (3a); the preverbal anaphor *kai*⁴²-*kai*¹¹, as in (3b); the non-argumental reflexive marker *kai*⁵³³-, as in (3c). Detailed discussion of these reflexive markers will be available in Chapter 3.

(3) a. John **kai**⁴² thi²¹ tɛna⁴²

John self_{INTF} be teacher

‘John himself is a teacher.’

b. John **kai**⁴²-**kai**¹¹ pha⁴².

John self-self_{INTF} hit

‘John hits himself.’

c. i²¹ **kai**⁴⁵³-ly⁴²

3sg self-cook

‘He self-cooks/self-lives.’

In addition, Puxian has different ways to express possession: (i) ‘singular personal pronoun + Noun’, as in (4a); (ii) ‘plural personal pronoun + noun’, as in (4b); (iii) ‘personal pronouns + *e*_{POSS}+ N’, as in (9c). Thus for instance,

(4) a. $kua^{21}/ty^{21}/i^{533}$ $ha^{11} - ton^{24}$

1sg / 2sg / 3sg *school*

‘My/your/his school’

b. $Kuon^{32} /tyon^{32} / yon^{32}$ $ha^{11} - ton^{24}$

1pl_{EXCL}/2pl */3pl* *school*

‘Our/your/their school’ or ‘my/you/his school’

c. $Ty^{21}/tyon^{32}$ e $ha^{11} - ton^{24}$

2sg/2pl *POSS* *school*

‘Your/their school’

We see that both singular and plural person forms can directly precede the noun $ha^{11} - ton^{24}$ ‘school’ as a form of ‘possessive determiner’. In most cases, the plural determiner, e.g. $kuon^{32}$ ‘we’ or $tyon^{32}$ ‘you’ or even yon^{32} ‘they’ in (4b) do not assume plural meanings but signal a sense of respectfulness. In addition, both plural and singular person forms can be followed by the possessive marker e , as in (4c), preceding the nominal head.

1.4.3. Main grammatical features of Puxian

Like other Sinitic languages, Puxian has no case marking or agreement marking morphology. One way to differentiate argument roles is through consistent placement of A and P on both sides of V, forming an unmarked word order AVP (or SVO). Rearrangement of the syntactic constituents usually involves extra morphosyntactic

markings, especially with the case-like morpheme $k\epsilon^{21}$. As pointed out by Chappell (2007), ‘when a direct object occurs in a non-canonical position preceding the main verb, this SOV structure can be morphologically marked’.

(5) a. i^{533} tsy^{42} ma^{24}

3sg cook food

‘He cooks food.’

b. ma^{24} $k\epsilon^{21}$ \emptyset tsy^{42} lo^4

food KE cook PRT

‘(You) cook the food.’

(5a) has an unmarked AVP order, where the A i^{533} ‘he’ and the P ma^{24} ‘food’ is placed on both sides of the transitive V tsy^{42} ‘cook’. In (5b), the P ma^{24} ‘food’ is placed in the sentence-initial position and the A is not expressed (if present, it should precede the P as well). The morpheme $k\epsilon^{21}$ is thus used to mark the non-canonical P position as well as an increased argument in the form of null expletive. Detailed discussion of such constructions will be available in Chapter 4.

In addition, there are also many sentences in Puxian and Mandarin that involve separate elements of Topic and Subject, with a structure referred to as ‘Topic + comment’ by Chao (1968) or Li and Thompson (1976). I will take Topic in such structures to be a pragmatic concept. If present, it is in sentence-initial position, signaled by an intonation break (marked as ‘//’ below) or the discourse particle a^4 . The Topic, in this sense of the term, could be a patient, an agent or other syntactic constituents, which, once topicalized, will not enter into obligatory thematic relations with the main verb

(Chappell 2007). In other words, the omission of Topic does not affect the grammaticality of the sentence⁵. On the other hand, the Subject enters into an obligatory thematic relation with the predicate verb in the clause. The Subject in Puxian can be an agent or patient, merging with or separate from the Topic. Like other languages, the Subject prototypically assumes the thematic role of agent, which has a ‘doing’ or ‘being’ relation with the main verb. Although there are some ambiguous instantiations of Subject and Topic (Yuan Yulin 2002; Liu Danqing et al. 1998, Shi Dingxu, 2000), in the main, the following four basic sentence types are attested in Puxian.

(i) *Sentences with a distinct overt subject and topic*

(6) kau¹¹ // kua²¹ tshuai⁴ thiau¹³ lo²¹

*dog*_{TOP} *Isg*_{SUBJ} *find* *PFV* *PRT*

‘I found the dog.’

Lit. ‘The dog, I have found ø.’

The sentence has the subject *kua*²¹ ‘I’, which is the agent and the topic *kau*¹¹ ‘dog’, which is the patient. The patient topic *kau*¹¹ in the sentence-initial position is viewed as a special syntactic encoding, by which the speaker chooses to assign a more prominent role to it, e.g. the encoding of a focus (Shibatani 1985) or Task Urgency Principle (Givón 1983, 1988, 1989: 224).

(ii) *Sentences where the subject and topic coincide*

(7) na⁴² thiau¹³ tha⁴² tsy⁴

*Ipl*_{INCL} *must* *read* *book*

‘We must read books.’

⁵ There are frequent thematic argument omissions in Puxian and Mandarin, not just Topic.

In the sentence, the NP *na*⁴² ‘we’ is a prototypical subject, which consists of the semantic function of agent and the pragmatic function of topicality⁶.

(iii) Sentences with an overt topic and a null subject

(8) *ma*²¹ // \emptyset *lia*⁴² *liau*²⁴ *lo*²¹
*Dinner*_{TOP} *eat* *ASP* *PRT*
 ‘(I / someone) ate the dinner’

Sentences like (8) often pose some difficulty in relation to the assignment of Topic and Subject. One interpretation for the syntactic category of *ma*²¹ ‘dinner’ is that it has the thematic role of patient, which has been moved to the prominent sentence-initial position for pragmatic reasons. And there is a null subject, namely, the agent, immediately preceding the transitive predicate *lia*⁴² ‘eat’ (see the translation). The other interpretation can be better illustrated in (9).

(9) *ma*²¹ *lia*⁴² *thiŋ-thiŋ*¹¹
dinner eat sweet
 ‘The dinner has a taste of sweetness.’
 Lit. ‘The dinner eats sweet.’

In (9), the NP *ma*²¹ is a subject and the predicate *lia*⁴² ‘eat’ is now an intransitive verb, which, together with the adjectival element *thiŋ-thiŋ*¹¹ ‘sweet’, depicts certain properties of the subject *ma*²⁴. Such a construction is also known as a ‘notional passive’ in Chinese linguistics, which features a PV structure and an unspecific agent as well. Although (8)

⁶ According to Bakker & Siewierska (2004), typologically, the notion of subject is related to a set of morphosyntactic phenomena (MSP), which is determined by the relevant set of pragmatic and semantic factors (PSF). In other words, subject assignment is motivated by semantic functions (e.g. agent and patient), pragmatic functions (e.g. topicality) or other formal constraints (e.g. animate vs. inanimate, pronominal vs. nominal).

may be interpreted in the same way as (9) (in the sense that ma^{21} is the subject), only the latter (9) is more naturally interpreted as having a ‘Subject + V’ structure, for the presence of the adjectival element $thiŋ-thiŋ^{11}$ ‘sweet’ is viewed as predicating the subject.

(ii) Sentences with null subject and no topic

(10) **A:** $tʂa^{21}$ // i^{533} _{AG} pe^{453} $puai^{21}?$

book 3sg buy not: PFV

B: \emptyset _{AG} pe^{453} lo^{21}

buy PRT

A: ‘Did he buy the book?’

B: ‘(he) bought (it) already.’

In the above dialogue, both the topic $tʂa^{21}$ ‘book’ and the subject i^{533} ‘he’ are present in A’s question. In B’s answer⁷, only the predicate verb pe^{453} ‘buy’ and the perfective marker lo^{21} are needed. Both the patient and the agent are omitted.

In addition to the above basic sentence types, Puxian has some unique linguistic features. For example,

(a) There are a significant number of nominals that have the ‘head + modifier’ structure rather than what is commonly seen in Mandarin, which is the ‘modifier + head’ structure. For example, $tʂou^{21}$ - ia^{11} ‘small house’ (lit. house little), $tʂai^{42}$ - $iaŋ^{24}$ ‘salted vegetables’ (lit. vegetable salted), $naŋ^{21}$ - a^{42} ‘guest’ (lit. people guest) and li^{24} - $thŋ^{21}$ ‘mid day’ (lit. day mid), etc.

(b) The aspectual expression can be realized by a grammaticalized auxiliary verb

⁷ B, in his confirmation, could repeat A’s sentence in a declarative sentence with a falling tone (no morphosyntactic change).

*u*¹¹, meaning ‘have’, preceding the verb, whereas Mandarin requires an aspect marker (e.g. *le*) directly following the verbs. For example,

(11) a. kua²¹ u¹¹ pha⁴² theŋ-ua⁴² ke²¹ i⁵³³
Isg have hit phone to 3sg (Puxian)

b. Wǒ dǎ le diàn-huà gěi tā.
Isg hit ASP phone to 3sg
 ‘I have phoned him.’ (Mandarin)

Constructions like (11a) are not frequently seen in other Chinese dialects (a notable exception being Hong Kong Cantonese). This construction is reminiscent of the Perfect tense in English, as illustrated in the translation.

(c) The adjunctive particles, such as *liau*⁵³³ (also an aspect marker) and *lo*⁴ (a sentential marker, signaling a new event or situation) cannot follow the predicate verb directly and are always placed in sentence-final position. This is quite different from Mandarin, where the predicate verb is closely followed by the aspect markers, e.g. *le* or *guo*.

(12) ø ʃia⁴² ma²⁴ liau⁵³³ lo⁴
eat meal ASP PRT
 ‘(I) had dinner.’ (Puxian)

(13) \emptyset chi le fan *(le)

eat ASP meal (ASP)

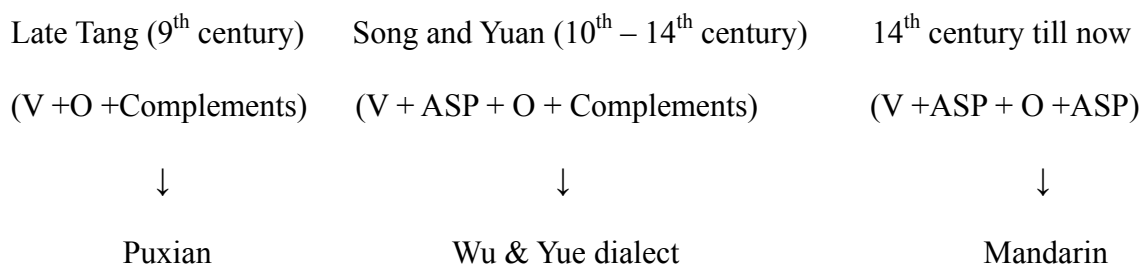
(I) had dinner.

(Mandarin)

In (12), the aspect marker *liau*⁵³³ and the sentential marker *lo*⁴ are placed together in sentence final position. Such placement can only be found in the Tang literature (7th -9th century) (Norman & Mei 1976).

The fact that Mandarin prefers to have an aspect marker or other adverbial elements attached to the verb, forming a resultative compound verb (RCV) (Lin 1998, Gao 2002) is an inheritance from the Chinese languages of the end of 10th century. Current Puxian, however, does not attest similar aspectual constructions, which may suggest its historical linkage to the Chinese of the 9th century. The following graph shows such a difference between the dialects (see also Shi 1999, 2002).

Figure 2 Division of VP structure in Chinese history (c.f. Norman & Mei 1976)



1.5. Research backgrounds, motivation and orientations

Pronominals in Puxian, as a grammatical category, include subgroups like personal pronouns, reflexives, pronominalized nouns and other determiner-like elements⁸. When

⁸ It may be difficult to draw a clear-cut characterization of various sub-categories of pronominals. For instance,

considering these forms in Puxian, just as in the case of any other language, several typological points need to be considered. The first of these is the ability of pronominals to encode a regular set of semantic features, such as number, gender, animacy, etc. Among these features, number is the most common one (Siewierska 2004: 75). Take English for example, in the sentence *Rose read a letter to him*, the accusative pronoun *him* is able to encode a set of semantic features like ‘singular’, ‘male’, ‘non-speaker/non-addressee’ and ‘animate/human’. In other words, a simple morphosemantic realization like the English 3rd person pronoun *him* actually corresponds to the description of a list of complex nominal phrases. Languages, nonetheless, tend to have a profuse variety of ‘shorthand’ referring expressions (Wales 1996: 4). These expressions may be independent forms (e.g. *I*, *him* in English) or dependent forms, i.e. *weak*, *clitic*, *bound* or *zero* (see Siewierska 2004: 21-471). A typical case of dependent person marking is exemplified by Upper Bal, a dialect of the South Caucasian language Svan (Cysouw 2009: 12), where both the prefixal and suffixal markers on the verb are needed, as shown in Table 5 below.

Table 5 The person paradigm in Upper Bal

Prefixal paradigm		Suffixal paradigm		
1INCL	<i>l-</i>	Singular		Plural
1EXCL	<i>xw-</i>	1	<i>-äs</i>	<i>-ad</i>
2	<i>x-</i>	2		
3	<i>ø-</i>	3	<i>-a</i>	

(Upper Bal; Cysouw *ibid.*)

person forms in Puxian are often used as possessive determiners; a generalized noun meaning ‘man’ can refer to first or third person.

According to Cysouw (2009: 12), the prefixal paradigm marks a distinction between speaker and addressee as well as the inclusive vs. exclusive distinction. The suffixal paradigm marks an opposition between speaker/addressee and non-speech-act participants, as well as number opposition in the former. Thus in Upper Bal, a phrase like *x-ama:r—äs/-ad* ‘you prepare’ has the prefixal morpheme *x-* denoting 2nd person and the suffixal morphemes *—äs/-ad* for number. In this case, the 2nd person marker *x-* can be morphologically distinguished for singular or plural senses, which is not seen with *you* in the English translation. Person markings using affixes like Upper Bal, however, are very rare and may not involve all verbs in the language (Siewierska 2004: 24). Yet there are at least 98 different person paradigms across languages, as reported by Cysouw (2000).

In comparison, Puxian has a relatively simple paradigm for person. It marks a distinction between 1st, 2nd and 3rd person but has no gender distinction. The marking of number is also less grammaticalized. For example, in the following sentence, the 1st person inclusive *kuoŋ*³² can refer to a singular speaker or to a group of people related to the speaker without the addressee⁹.

(14) *kuoŋ*³² *a*⁴-*miã*²¹ *y*⁵³³

1sg/1pl_{INCL} *not want* *go*

‘I/We don’t want to go.’

(Puxian)

Over 70% of the plural person markers in my corpus data (including 1st person plurals *kuoŋ*³²/*na*⁴², 2nd person plural *tyøŋ*³² and 3rd person plural *yøŋ*³²) are only used in

⁹ Such number phenomena are also observed in standard Mandarin, as 1st person singular *wǒ* can appear in *wǒ jūn* or *wǒ guó* literally meaning ‘I army’ or ‘I country’ but ‘our army/country’ instead, without using the plural marker *–men* (see also Iljic 2001).

non-argumental positions (e.g. the appositive or determiner position). They do not necessarily acquire plural readings as well. At the same time, there are singular person forms that are able to assume plural reference, especially for the 3rd person singular *t*⁵³³. One potential explanation is that Puxian, like ancient Chinese, lacks evident number marking on pronouns and nouns (in a sense, being neutral for number) and the current person paradigm, with the coexistence of plural and singular person markers, reflects different stages of grammaticalization. To illustrate, let us have a look at the person paradigm in ancient Chinese texts prior to 汉Han dynasty (206 B.C. – 220 A.D.), where there was virtually no plural marker attested (Yang and He 1992: 128)¹⁰:

Table 6 Pronominal paradigm in Ancient Chinese

Singular/Plural

1 st	吾 <i>wú</i> , 我 <i>wǒ</i> , 余(予) <i>yú</i> , 朕 <i>zhèn</i> , 台 <i>yí</i> , 印 <i>àng</i> , etc.
2 nd	汝 <i>rǔ</i> , 若 <i>ruò</i> , 尔 <i>ěr</i> , etc.
3 rd	其 <i>qí</i> , 之 <i>zhī</i> , etc ¹¹ .

Yet, given the potential overlap in the functions of the singular and plural person forms, it is interesting to explore what motivates the exact distribution of the two in daily usage. For instance, the typological literature (see e.g. Siewierska 2004: 210) leads one to expect that the plural person forms will have more impersonal uses than the singular ones. However, Puxian actually exhibits the opposite pattern, where it is the

¹⁰ Independent words like 辈 *bèi*, 等 *děng*, 曹 *cáo*, etc. were only optionally attached to personal pronouns in Han and post-Han writings. Systematic number distinction for personal pronouns was not seen until Tang Dynasty (618 – 907). Yet the above number markers were only optional and are much different from the belated appearance of *-men* 们, now fully-grammaticalized into a number marker in current Mandarin (being obligatory with personal pronouns but not with nouns).

¹¹ In ancient Chinese, 3rd person pronouns rarely appeared in subject position. Most 3rd person subjects were regular NPs or zero forms.

singular person forms that have more impersonal uses (see Chapter 2).

Another issue relating to person forms, apart from that of the nature of the semantic features they encode, is prompted by discourse-pragmatic factors. Taking English again for an example, in the sentence, *John said he would send a letter to him/himself*, the choice between *him* and *himself* actually reflects different loci of narration: the former *him* may originate from the current speaker and the latter *himself* comes from the matrix subject (i.e. the secondary ego) *John* (Siewierska 2004: 201). In terms of the matrix subject's perspective locus, some languages may resort to a special person marker, namely, *logophor* for such marking. This is the case in Ewe, a Kwa (Niger-Congo) language, as in (15), where the affixal person marker *yè-* is used for the sole purpose of referring back to the matrix subject.

- (15) kofi be yè-dzo
 Kofi *say* *LOG-leave*
 ‘Kofi_i said that he_i left.’

(Ewe; Clements 1975: 142)

In many Eastern Asian languages, such as Japanese, Korean, Mandarin and Puxian, reflexive markers have been grammaticalized into specific viewpoint-marking functions (more complex than *x-self* in English). These reflexives can even be locally-free or even non-anaphoric in the discourse. This is also the case of Puxian, as in (16), where the reflexive form *kai*⁴², instead of referring back to the subject *i*⁵³³, has deictic functions and carries the subject's empathic point of view towards the other participant in the clause.

(16) I⁵³³_i koŋ kai⁴²_j tiau²⁴ menniŋ²¹

3sg say self must clever

Lit. 'He_i says self_j (you/he/someone) must be clever (to handle something).'

(Puxian)

In (16), the reflexive form *kai*⁴² is actually a deictic pronoun, corresponding to *you/he* or even *someone /anyone* in English. Its primary function is not so much for expressing intra-sentential anaphora as for transporting the internal protagonist's (i.e. the subject *i*⁵³³ 'he') empathic point of view towards the other participant.

There are also some cognitive factors that affect the choices of pronominal forms, such as *accessibility* or *entity saliency* (Ariel 1990, Gundel et al. 1993, 2000). According to Ariel (ibid), the more accessible an entity reference is, the less likely it is to be realized in morphologically complex forms. Although the actual forms involved depend on 'the repertoire of encoding devices that a given language has at its disposal' (Siewierska 2004: 67,176), such an assertion is true for many languages. Take 'zero forms' for example, which are known as the most simplified referring expressions (that is, a grammatical person without phonological representation) and are more accessible for hearers than other stressed pronouns (which, in turn, are more accessible than full lexical NPs). In some inflection-rich languages, such as Spanish and Italian, zeros (or *pro* in the generative terminology), occurring in subject position, are generally recoverable through agreement markings on the predicate. In Mandarin and Puxian, zero forms are even more widely used than in other languages, as they can occur in almost any syntactic position. Due to the lack of case and agreement marking, zeros in the two languages, however, are open to different interpretations in context. What is puzzling in the Puxian case is that there are a significant number of antecedentless zeros, which may not be motivated by accessibility theory or other saliency factors. As will be

explored later (in Chapter 2 as well), these zeros have deictic as well as impersonal reference, which can be subdivided into finer semantic categories.

Another aspect of person markings is related to syntax. Alcorn (2008), for example, observes that in Old English there is a statistically significant correlation between the placement of third person and non-third person relative to the preposition, i.e. in the case of prepositional objects, there are more 3rd person pronouns placed to the left of the preposition than 1st and 2nd person ones (i.e. a split in the person category itself). For instance, in (17) the 3rd person pronoun *him* is found to the left of the preposition *to*.

(17) Ðæt wif **him** cwæð þa to

The woman him said then to

‘The woman then said to him’

(Old English; Alcorn *ibid.*)

Similarly, in current studies of ditransitive constructions, it is found that languages tend to favor a pattern of 1st/2nd person Recipient and 3rd person Theme (Haspelmath 2004), which is sometimes termed the ‘Person-role constraints’ or ‘Person effect’ in ditransitives (see e.g. Siewierska 2003, Haspelmath 2007, Heine et al. 2010, among others). In the case of Puxian, there appears to be an even stricter constraint. For instance, the Recipient should always be human, preferably a personal pronoun. If it is inanimate/non-human, the ditransitive construction may be transformed into a seemingly ‘benefactive-applicative’ construction, where the R moves to the preverbal position and is marked by the prepositional dative marker *ke²¹*. Consider for example:

(18) ty²¹ ke²¹ hua²¹ o⁴² tsui²¹

you DAT flower rain water

‘You water the flower.’

Lit. ‘You to the flower rain water.’

(Puxian)

In (18), the R *hua*²¹ ‘flower’ receives a beneficiary reading and is placed differently from the usual sentence-final position in ditransitives. Similar syntactic operations have been observed in Korean and Japanese by Shibatani (2008: 336) (see also Chapter 4 for discussion).

Person constraints in Puxian are also in evidence in some intransitive clauses, where differential subject marking (DSM) occurs with the person category and as a result of split intransitivity (i.e. unergative vs. unaccusative). For example, in the following sentences, the unaccusative predicate complex *ke*²¹ *thø*⁴² ‘get fallen’ has an unmarked subject *tsiu*²⁴ ‘wall’, whereas the unergative predicate *kiã*²⁴ ‘walk’ has a dative-marked subject *kie*⁴⁵³ ‘to him’ (see Chapter 4).

(19) a. *tsiu*²⁴ *ke*²¹ *thø*⁴² *luai*⁴

wall KE fall PFV

‘The wall has fallen.’

b. *kie*⁴⁵³ *kiã*²⁴ *tshui*²¹ *kiŋ*⁴

DAT:2sg walk very fast

‘You walk very fast.’

(Puxian)

Person effects may be related to *alignment* as well, where the properties of core thematic arguments are compared between the intransitive, the monotransitive and the

ditransitive (Dixon 1994: 85, Siewierska 2003, etc.). This will be explored from the Puxian perspective in Chapter 4.

Finally, person markers or other pronominal forms are the products of grammaticalization. They may originate from lexical nominals (Lehmann 2002) and evolve into different morphophonological realizations. This is the case of the generalized noun *naŋ*²⁴ ‘man’ in Puxian, as well as the correspondents of, say, English *one*, French *on*, Spanish/Italian *uno*, German *man/men*, Latin *homo*, Udmurt *odig*, Hausa *a/an*, Lele *ge*, Somali *la*, etc. (Siewierska 2004:210). These nouns underwent a series of grammaticalization processes and even developed into pronominal-like functions, e.g. referring to 1st or 3rd person (Sansò 2007, see also Lehmann 1995: 50; Haspelmath 1997: 182-183; Heine and Kuteva 2002: 208). What is unique, however, for Puxian *naŋ*²⁴ is that, apart from the pronominal uses, it has become an intensifier in partial complementary distribution with the reflexive marker *kai*⁴² (the former has a sense of respectfulness while the latter has not); it is also a plural marker, yet mostly in phonological fusion with the person markers.

Like the generalized nouns, reflexive markers in many languages are believed to have originated from lexical nominals as well. The body part noun, *tèt-* ‘head’, which is currently used as an anaphor in Haitian CF is a case in point (Lefebvre 1998: 165). In Puxian, as well as other Min varieties, the reflexive forms are derived from a nominal meaning ‘family’. However, what is even more noticeable is that these forms evolve into markers of anticausatives, middles, passives or even impersonals, much like *si/se* in Romance and Slavic languages. In my discussion in Chapter 3, three different reflexive markers, i.e. *kai*⁴², *kai*⁴²-*kai*¹¹ and *kai*⁵³³- are found to have similar functions to *si/se*, which is quite unexpected in Sinitic languages.

Furthermore, a more complex grammaticalization mechanism involves *reanalysis*

of grammatical constructions. In Puxian, it appears that the causative, passive and even some intransitive constructions share a common linearization of ‘NP₁+ $k\varepsilon^{2l}$ +NP₂+ V’, where NP₂ may assume different thematic roles in the form of a nominal or an expletive pronominal, depending on the specific constructional semantics (see Chapter 4 as well).

In sum, the typology for person or pronominals discussed here has set up a good framework for my investigation. In view of this, this thesis will concentrate on three areas of study, namely, impersonal constructions with pronominal subjects, reflexive markers and person effects in $k\varepsilon^{2l}$ constructions. All of these areas have been relatively under-investigated in Sinitic languages, especially from a systematic and up-to-date typological perspective. The study of impersonal constructions with pronominal subjects, viz. ‘pronominal impersonals’ (Siewierska 2007), refers to a group of impersonal constructions that have a pronominalized human subject in the forms of a personal pronoun, an indefinite element, a zero form or other pronominal with different morphosyntactic realizations. The study attempts to join Puxian, a (morphologically) isolating language in the East, in the current discussion of impersonality, which, however, has been constructed mainly in the Indo-European linguistic framework. The study also tries to unite impersonal subjects by projecting them onto five contiguous semantic domains, associated especially with the Definiteness hierarchy (Givón 1984: 387), as well as the Semantic Map for indefinite pronouns (Haspelmath 1997: 26) and the typology of 3rd person plural impersonals (3pl IMPs) (Hofherr 2003, 2006). Such an effort has few obvious precursors that I am aware of.

The investigation of reflexives in Puxian is significantly different from what has been going on in the past literature, which discussed almost exclusively the Mandarin reflexive form *ziji* and has been heavily influenced by the generative tradition. Following recent typological and grammaticalization theories (Siewierska 1984, Faltz

1985, König et al. 2000, 2002; Lehmann 2002, Haspelmath 2008, etc), my study will offer a new perspective to reflexives in Puxian and other Sinitic languages. It will also arrive at an understanding on the following issues: (i) how the primary reflexive marker (i.e. *anaphor*) kai^{42} - kai^{11} can be distinguished from the morphologically simplex kai^{42} (Reinhart and Reuland 1991, 1993; König & Gast 2002); (ii) why the same reflexive operation, via the reflexive marker kai^{533} -, can result in both unaccusative or unergative predicates (cf. Chief 1998, Reinhart & Siloni 2004, Chierchia 2004); (iii) how the morphologically distinguished intensifiers kai^{42} and kai^{42} - kai^{11} finally developed into ‘headless intensifiers’ or ‘untriggerred reflexives’, profiling uniquely three different viewpoint marking functions, such as *logophoricity*, *empathy* and *inter-empathy* (Parker et al. 1990, König & Siemund 2000, among others); (iv) how the grammaticalization processes may shape the reflexive markers in Puxian that have a series of highly grammaticalized functions, such as *middles*, *anticausatives*, *reflexive passives* and *impersonals* but, contrary to what is expected in grammaticalization, these grammaticalized functions do not appear to correlate with the simplex reflexive morphology. That is, say, *impersonals* may rely on the nominal reflexive kai^{42} , while a relatively less grammaticalized function, such as *reflexive passives* use the affixal-like reflexive morpheme kai^{533} .

The study of person effects on the linearization of different types of $k\epsilon^{21}$ constructions has benefited greatly from some pioneering works on Min dialects (e.g. Chappell 1989, 2000, 2001a & b, 2006, 2007, Matthews et al. 2005, among others). In my study, I try to identify a number of semantic and syntactic properties associated with the morpheme $k\epsilon^{21}$, which is involved in the monotransitive, ditransitive, causative, passive and even intransitive constructions. My findings suggest that not only does the personal passive share a structure similar to the analytic causative (for the former can be

understood as a ‘weak causative’) but the $k\epsilon^{21}$ -marked intransitives appear to pattern with the causative as well. In these intransitive constructions, there is an implicit ‘external causation’, whereby the construction has to be realized as if an extra valency had been increased. On the basis of an in-depth look at these constructions, I am able to bring the typology on *Word Order*, *Alignment* and *Person* constraints (Siewierska 2003, 2005; Haspelmath 2005, 2007, 2008; Siewierska & Bakker 2008: 291, among others) into the discussion. Concerning different placement of syntactic constituents and adpositional-markings on arguments, three alignment types, viz. the *tripartite*, *indirective* and *secundative* are identified in the ditransitives. Besides, Person and other Prominence factors (Heine et al. 2010) are critically evaluated with respect to, for instance, why R in Puxian prefers the clause-final position; or how the phenomena of differential subject marking (DSM) and differential object marking (DOM) can be predicted by the split on the nominal hierarchy (Silverstein 1976).

In addition to the above discussion, my study is also motivated out of a necessity to bring Puxian and other Sinitic languages to light from a new perspective, which is different from the main linguistic tradition in Chinese dialectal studies. Such a tradition may focus mainly on phonology in a bid, for instance, to reconstruct the historical development of Chinese languages (see early studies from Norman et al. 1971, 1988). Also, there have been more cross-dialectal comparisons in these studies than cross-linguistic ones. As a consequence, some unique linguistic phenomena may be neglected or simply taken for granted when only dialects of the same linguistic family are observed. It is, therefore, expected that in the future, a systematic typology with crosslinguistic orientation can be established in China. The current study of Puxian pronominals may be regarded as an effort leading towards the goal (see also Chappell 2001 on *Sinitic grammar*).

In the past, there has been a tendency in linguistics to treat Mandarin, the official language, as the standard representative of Chinese languages, and to neglect the other dialects, which may, for some phenomena, be equally or even more representative. My study is intended to redress the issue somewhat by focusing on Puxian, a dialect which is even deemed ‘vulgar’ in school education and has remained largely unknown to the international linguistic community.

1.6. Outline of the thesis

The present thesis seeks to investigate pronominal expressions from a functional-typological perspective, and in doing so to contribute to the understanding of Puxian and other Sinitic languages.

This thesis, therefore, consists of five chapters. This chapter, Chapter 1 gave a general introduction, including the motivation for the research, theoretical framework adopted, orientations, data collection methods and the nature of the corpus. The following three chapters are the main parts of this study. Chapter 2 seeks to identify a group of ‘pronominal impersonals’ and attempts to determine whether there is a correlation between the pronominal subjects and impersonal reference on the scale of the Definiteness Hierarchy (Givón 1984: 387). The chapter will also look into links with the Semantic Map of indefinite pronouns (Haspelmath 1997: 26) and the typology of 3pl IMPs (Hofherr 2003, 2006); Chapter 3 begins with a critical review of the dominant generative approach to the Mandarin reflexive marker *ziji*, especially by C. –T. J. Huang (1982, 2001) and then proceeds to develop a functional-typological analysis as well as a grammaticalization approach to reflexives in Puxian. This involves taking into account not only the primary reflexive marker, but also reflexive verbs, intensifiers and other

extended functions of reflexives; Chapter 4 starts out with a discussion of the $k\epsilon$ 21-related constructions, ranging from the monotransitive, to the ditransitive, causative, passive and even the intransitive use and tries to examine the inherent thematic relations within these constructions, i.e. the placement of syntactic constituents, the interplay of person and even the alignment typology. Finally, Chapter 5 will offer a conclusion, summarizing all these findings and discusses some prospects for further research.

In each chapter of the main discussion, I will first introduce the theoretical and typological issues related to the phenomenon in question and then attempt to position previous research on Mandarin and other Min dialects, if available in the typological context. Subsequently, I will turn to a consideration of the Puxian data and show how it related to previous claims about Mandarin, other Min dialects and what is known about the discussed phenomenon in general. Whenever possible, I will support my arguments for Puxian with statistical data drawn from my corpus.

Chapter 2 - Pronominal impersonals in Puxian

2.1. Introduction

The term ‘pronominal impersonals’ was first introduced by Siewierska (2007), by which she refers to a group of impersonal constructions that have a pronominalized human subject, such as a personal pronoun, an indefinite element, a zero form or other pronominal with different morphosyntactic realizations. Inspired by her notion of pronominal impersonals, I will seek an extended notion of the term by referring to impersonals that have a pronominal subject with or without human reference. Such a definition will bring in more types of constructions within the existing framework of impersonality (Siewierska 2008, among others). What is more, on the basis of the assumption that semantic/functional characterization of pronominal impersonals, with regard to their *referentiality* and *definiteness*, provides viable analyses for crosslinguistic comparison, the discussion will also try to establish a correlation, if any, between morphophonological realizations of impersonal subjects and their inherent referential ranges.

Yet, for any further discussion, it would be necessary to take into account two important questions: (i) what are impersonal constructions? (ii) To what extent are they related to each other in Puxian? In fact, it is amazing to see how the notion of impersonality will be applied to Puxian. On the one hand, most available analyses of impersonality are based on the linguistic contexts of Indo-European languages; on the other, Puxian is a dialect that inherits many archaic linguistic features from ancient Chinese, such as being neutral for number, having no verbal agreement or case marking.

Thus, some fundamental elements of impersonality in Indo-European languages may not be so applicable when it comes to Puxian. A case in point is that, although Puxian allows extensive uses of null subjects, it is difficult to have them termed ‘pro-drop’, because the notion is closely associated with the inflection-rich languages such as Spanish, Italian or Greek, where a dropped argument is recoverable through agreement features.

The chapter is organized as follows. In section 2.2., I will briefly discuss the notion of impersonality in the framework proposed by Siewierska (2008). Then in Section 2.3., I will discuss some important impersonal constructions in Puxian. The remaining sections will be devoted to pronominal impersonals: Section 2.4 involves a statistical description of pronominal impersonals in Puxian as well as some discussion on related person and number features; Section 2.5 and Section 2.6 will discuss pronominal impersonals in Puxian from a semantic point of view, namely, the five semantic domains developed from the definiteness hierarchy; in section 2.7 I will explore the typological significance of such a semantic characterization by finding out whether there is a correlation between impersonal reference and corresponding formal expressions as well as how it may fit into some known typology such as the Semantic Map of indefinite pronouns (Haspelmath 1997a) and the classification of 3pl IMPs (Cabredo Hofherr 2003, Siewierska 2008).

2.2. The notion of impersonal constructions

The notion of impersonal constructions or impersonality has been variously construed in the linguistic literature. It may refer to disparate linguistic phenomena such as person shifts, non-agreeing subjects, subjectless finite verbs or agent defocusing (see e.g.

Siewierska 1984: 93-125, 237-251; Moreno 1987, Kitagawa & Lehrer 1990, Bauer 2000: 93-150; Blevins 2003, Langacker 2004, 2006). The lack of consensus on impersonality is due to the fact that different scholars assume different theoretical perspectives, aiming at somewhat distinct aspects of the issue. Thus impersonality, rather than being a unifying notion, is often restricted to some theory-specific constructions.

Siewierska (2007, 2008) argues that different ways to impersonality can in fact be attributed to two fundamental approaches, namely, the syntactic approach and the communicative-functional approach. While the syntactic approach is associated with the lack of a canonical subject, the functional approach is linked to human agentivity or rather to the defocusing theory.

In my opinion, these two approaches to impersonality are interrelated and involve a theoretical sphere or more exactly, a broad framework¹, in which different types of impersonal constructions can be incorporated, referred to and compared in a connected yet divergent manner (probably for the first time in linguistics). Without such a framework, impersonal constructions would presumably remain as discrete as they were. Recent initiatives to investigate impersonal constructions across languages (e.g. Perlmutter & Moore 2002, Creissels 2007, Kibort 2008, Malchukov 2008, etc.) are all seen to be contextualized in such a framework, as various impersonals constructions receive both structural and functional/semantic² reflections.

From the syntactic perspective, there are about four major types of constructions that qualify as impersonal. The first of these are the *pronominalized subject* constructions which have a pronominal form as subject but importantly with

¹ In my opinion, the two approaches proposed by Siewierska (2008) have in a sense contributed to a 'top-order' framework, though she does not explicitly mention it.

² According to Siewierska (2007), the semantic notion of impersonality centers on two aspects: a) the agent defocusing, b) the referentiality of agentive arguments. The second notion will be the focus of this discussion.

non-specific human reference. Cross-linguistically, they are the most common type of impersonal constructions. The pronominal form can be a regular personal pronoun (e.g. *they* in English), a generalized indefinite element such as *man* in German (1), a reflexive marker³, as in the case of Romance and Slavic reflexive impersonals (2) or a null subject (i.e. zero forms) as in the languages with or without person inflection on the verb, such as Spanish (3) or Mandarin (4).

(1) Man behauptete, man habe meine Akte verloren.

man claimed man had my file lost

‘They claimed they had lost my file.’

(German; Kratzer 1997)

(2) Biło się Piotra.

beat.3SG.NEUT REFL Peter (MASC).ACC

‘(One) beat Peter.’

(Polish; Kibort 2008)

(3) Ø llaman a la puerta.

Knock:3PL to the door

‘(Somebody) is knocking at the door.’

(Spanish; Ovalle 2001)

³ According to Kibort (2008) and others, the reflexive markers or clitics in these languages (e.g. *się* in Polish) are semantically similar to an indefinite pronoun with human reference; in addition, they also exhibit some nominative properties. It is therefore reasonable to view them as a member of the pronominalized subject construction.

(4) Ø Zhòng guā dé guā
plant melon receive melon

‘(One) gets what he did.’

Lit. ‘(One) plants melons and gets melons.’

(Mandarin)

Impersonal constructions of the second type are the *oblique-marked subject* constructions, such as the genitive subject in Finnish (5) or the dative one Icelandic (6), etc. Typically, such constructions have a default 3sg agreement on the verb (for more detailed discussion, see Kibort 2000, Corbett 2006, Siewierska 2008).

(5) sinu-n t äty-y men-n ä

You :GEN must:3SG go:INF

‘You must go.’

(Finnish; Helasvuo & Vilkuna 2008)

(6) mér byður við þessum óhreinu neglum.

me:DAT disgusts with these dirty nails

‘I feel disgusted by the(se) dirty finger nails.’

(Icelandic; Barðdal 2006)

The third type of impersonal constructions is the expletive subject constructions, which typically have a pronominal form in the subject position yet lacking substantive semantic content. In languages, the expletive subjects could be *there & it* in English (7),

es in German (8) or null forms (i.e. *pro*) in Spanish (9).

(7) a. There is going to be a storm.

b. It is unfair.

(English)

(8) a. Es regnet heute.

it rains today

‘It’s raining today.’

b. Es wurde getanzt.

it was danced

‘There was dancing going on.’

(‘It was danced.’)

(German; Smith 2005)

(9) \emptyset Parece que Juan no quiere venir.

seem:3SG that Juan not wants come:INF

‘(It) seems that Juan doesn’t want to come.’

(Spanish; Hofherr 2006)

The last type of impersonal construction is the *subjectless* construction, which features an inherently impersonal verbal predicate. Constructions such as the zero constructions in Finnish⁴ (9) or the infinitive constructions in Polish⁵ (10) belong to

⁴ In the Finnish zero constructions, there is no overt subject and the verb is in the default 3rd person singular form, which is different from the null subjects in the pro-drop languages, where the verb may assume a variety of person inflections.

⁵ According to Kibort (2008), the infinitive constructions in Polish consist of a small group of inherently impersonal predicates (non-inflecting verbs) such as *widac* ‘see’, *slychac* ‘here’, etc. These verbs have clearly verbal roots and

this type.

(9) Illa-lla ei uskalta-nut nukahta-a.

Evening:ADE NEG:3SG dare:PCP fall.asleep:INF

‘In the evening one didn’t dare to fall asleep.’ (Finnish; Helasvuo et al. 2008)

(10) Słyszać ją / jakieś mrużenie.

hear her:ACC some:NEUT:ACC murmuring:ACC

‘One can hear her/some murmuring.’

(Polish)

The four types of impersonal constructions mentioned above attest different non-canonical subject properties. For example, the pronominalized subject constructions have a non-referential subject in contrast to a personal and referential one; in the oblique-marked subject constructions and the subjectless constructions, impersonality is related to the absence of a full set of subject encoding properties; and in the case of the expletive subject constructions, the lack of semantic content of the expletive.

In terms of the communicative-functional approach, impersonality is involved with different strategies of agent defocusing. By agent defocusing is meant various morphosyntactic means of distributing focus strength, which correlates with the amount of attention to certain semantically coded elements (Shibatani 1985). In other words, an agentive entity is likely to be defocused from its prototypical focus position⁶ if it is no

their forms resemble the infinitive.

⁶ The term ‘focus’ or ‘focal’ may be used in different senses in linguistics. For some, it refers to the information structure, e.g. a discourse new elements at the sentence final position. For others, ‘focus’ refers to the prominence or salience of entity, as it receives syntactic and morphological encodings (see Shibatani 1985 for a detailed discussion on focus). The latter sense is adopted in the chapter. Therefore, the prototypical focus position is viewed as referring

longer deemed important in the speaker's mind.⁷ Therefore, the speaker may resort to a series of defocusing strategies such as non-mentioning of an agent, moving an agent to a less prominent syntactic slot or obscuring the identity of an agent by means of plurality. Siewierska (2008) summarizes these strategies and posits that they involve (a) the non-elaboration or under-elaboration of the instigator, (b) the demotion of the instigator from its prototypical subject and topic function or (c) both demotion and non-elaboration.

Impersonal constructions characteristic of this approach are *agentless passives*⁸, *anticausatives*, *nominalizations* and many other constructions from a language-specific point of view, by which an agent is non-elaborated or demoted from the surface structure, with its reference being left open for contextual interpretations. Some defocusing strategies include *demotion* as in English agentless passives (11) and *non-elaboration* as in Spanish anticausatives (12) or Romanian nominalizations (13).

(11) The door was broken last night.

(English)

(12) La puerta se abrió
the door REFL opened

'The door opened.'

(Spanish; Sansò 2006)

to the primacy of subject.

⁷ There are two senses involving defocusing an agent. One is that the speaker believes the agent is not important and thus should be coded less prominently than the other entities in the sentence; the other is that the speaker may be unable to pinpoint the identity of the agent, which is not so important to him as well. Thus he may resort to a defocusing strategy i.e. to code the agent indefinitely.

⁸ The passives are viewed as impersonal typically because they have atypical subject assignment to a non-agent rather than an agent, thus either featuring demotion (i.e. agentless passives) or under-elaboration (i.e. passives with an agent).

(13) Fumatul constant al trabucurilor l-a ruinat.

Smoke: *SBJ + the constant AL cigars+the:GEN him-has ruined*

‘The constant smoking of cigars has ruined him.’

(Romanian; Cornilescu 2001)

Given that agent defocusing has much to do with the prototypical focus position (i.e. subject⁹), it is not surprising to see that the impersonal constructions depicted under this approach overlap with those from the syntactic approach. For example, the pronominalized subject constructions, as in (1) – (4), are also considered impersonal from the agent-defocusing perspective, because the pronominal subjects coded with plurality actually increase the potential range of referents and thus lower the possibility of exact referent identification. That is, a defocusing or a weak focus¹⁰ is achieved when a pronominal subject does not agree with its intended (indexical) referents (Shibatani 1985, Langacker 2004). Such a defocusing strategy is *under-elaboration* because the agent, rather than being demoted, is still present at the subject position, though as a weak focus. Also included in this strategy is the oblique-marked subject construction, as in (5) and (6), because a morphologically marked agent is atypical in that it is less volitional (i.e. mostly experiencers or cognizers in these constructions) in comparison to an initiator or a causer of the prototypical transitive clause. Other impersonal constructions such as the expletive subject constructions¹¹, as in (8b) or the subjectless constructions, as in (9) and (10) are also seen as some kind of *under-elaboration* or *non-elaboration*, provided that they have an human agent, be it

⁹ According to Shibatani (1985), ‘focus’ decreases along the hierarchy of grammatical relations: subject>direct object> indirect object> oblique objects.

¹⁰ Here ‘weak focus’ means the pronominal is in the focus position of subject but is used impersonally.

¹¹ There are two types of expletive subject constructions referred to here. One typically depicts an event and thus involves certain implied human participants, as in (8b), the German impersonal passive; the other does not depict events, thus lacking an agent altogether, which includes the existential constructions, as in (7a & b), the extraposed constructions, as in (9) or the weather constructions, as in (8a). The latter type is not considered impersonal under the functional approach.

explicit or implicit, controlling the depicted situation or event.

The above two-approach framework has provided us with various impersonal constructions. Yet, what seems even more promising is the attempt to unify them by means of a semantic/functional characterization, i.e. the referential interpretation of an impersonal agent or subject, which may reveal some interesting correlation between impersonal meanings and the associated morphosyntactic varieties. In what follows, my discussion will be directed to overall features of impersonal constructions in Puxian dialect and then seek to characterize these impersonals from a semantic/referential point of view.

2.3. Impersonal constructions in Puxian

Undoubtedly, the discussion of impersonal constructions in Puxian has both structural and semantic implications. Under the structural point of view, the chief impersonal constructions are the *pronominalized subject* construction, *null subject* constructions and *dative subject* constructions. The pronominalized subject constructions are seen to have a pronominal agent as subject but crucially one that is non-specific. The pronominal subjects could be a generalized noun *naŋ*²⁴ ‘man’ or a singular¹² or plural personal pronoun, which denote non-specific human reference. For example,

(14) *naŋ*²⁴ *ɦia*¹³ *thiŋ*², *ty*²¹ *ɦia*¹³ *kiã*⁴.

man eat sweet, you eat salt

‘While they have something sweet, you have something salty.’

¹² As will be discussed in the following sections, singular person forms in Puxian can denote plural meanings, esp. 3rd person singular *i*⁵³³.

(15) i^{533} hŋ-nau⁴ thi²¹ oŋ- weŋ- ya²¹

3sg there BE coins

‘They use coins there.’

(Puxian)

In (14), the subject $naŋ^{24}$ ‘man’ is a generalized noun, derived from its lexical root ‘man’ (see also below). In the sentence, it is interpreted as *other people* or *they* in English. As to (15), the 3rd person singular subject i^{533} corresponds to the plural *they* in English¹³. In fact, it is not uncommon for Mandarin and Puxian to have singular person forms denoting plural referents.¹⁴

Besides, there is also one type of pronominal subject constructions, namely, the overt expletive subject constructions, featuring the 3rd person singular subject i^{533} . For example:

(16) i^{533} tsiu³-a²¹ hy²¹ thoŋ²⁴ t̩⁴ thi²¹ puai²¹ kai²⁴ hoŋ⁴

3sg ancient that time BE not liberate

‘It is not liberated at that time.’

(17) i^{533} thi²¹ t̩ena²¹.

3sg BE how

‘It is like this.’

(Puxian)

¹³ The 3rd personal plural $yøŋ^{32}$ in Puxian is more used in determiner-like constructions (see below)

¹⁴ For example, in the following Mandarin sentence, 3sg $tā$ denotes plural referents by referring back to the NP $dìxìōng-men$ ‘brothers’ at the beginning of the sentence:

Shòu-shāng de **dìxìōng-men**₁, wǒ-men zhǐhǎo kàn tā₁ sī qù.
wound DE brothers₁ Ipl have-to see 3sg dead ASP

‘For those wounded brothers, (because (we) do not have medicine,) we have watch them die.’

(DE = modifier maker)

(Mandarin; appearing in the *Tiánhàn Opera* 1937)

In both of the above sentences, the 3rd person singular *i*⁵³³ serves the syntactic function of subject yet it does not refer to any specific human referent or concrete entity. Nonetheless, it may have some semantic content. For example, the above *i*⁵³³ is only linked to sentences expressing time reference, as in (16) or abstract situations, as in (17), which is comparable to expletives in other languages such as German *es*, French *il* or English *it* that are not assumed to be devoid of meanings (Langacker 2004, Smith 2005).

This is also the case for the Mandarin 3rd person singular *tā*, which too has expletive uses. For example, Dong (2005) points out that in colloquial Beijing dialect (also Mandarin), the 3rd person singular *tā* can be used expletively.

(18) *Tā wèi-shēn-me?*

3sg *why*

‘Why is it like that?’

Lit. It is why?’

(19) *Tā yǒu zème gè zhǔzhī.*

3sg *AUX_{EXISTENTIAL} this CL organization*

‘There has such an organization.’

(Puxian)

In (18) and (19), 3sg *tā* is placed before the interrogative *wèi-shēn-me* ‘why’ and the existential operator *yǒu* ‘have’ respectively. These two syntactic positions are normally kept empty in standard Mandarin. The expletive uses of 3sg *tā* in subject position is at odds with what would be expected of a pro-drop language (e.g. Spanish and Italian),

which generally do not allow overt expletives¹⁵.

The second type of impersonal construction in Puxian is the null subject construction, which has an implicit agent in subject position yet it is impossible to specifically identify its referent or lexicalize it with a pronominal form.

(20) \emptyset la-la²⁴ ɦia⁴, \emptyset la-la²⁴ phui²⁴

easy eat, easy fat

‘(One) eats freely, (one) grows healthily.’

(21) \emptyset ɦia⁴ kau⁴² lau¹¹, \emptyset o²⁴ kau⁴² lau¹¹

eat till old, learn till old

‘(One) lives to learn.’

(Puxian)

In the above two sentences, the null subjects (i.e. zero forms) exhibit some unique features. They are not referential or anaphoric but denote generic human referents, semantically similar to English *one* or *anyone*. Since there is no verbal agreement available in Puxian, the null subjects are mainly recovered through the shared knowledge between speaker and hearer, which are different from those in pro-drop languages that identify a null subject locally through inflectional features on the predicate verb (Tomioaka 2003, Speas 2004). In view of this, it is better to term these null subjects as ‘(agent) argument ellipses’¹⁶.

¹⁵ Cross-linguistically, null subject languages (e.g. Spanish and Italian) are generally not assumed to have an overt expletive pronoun, especially the nominal expletives such as *there* in English. Holmberg and Nikanne (2002) reports that Finnish, which is a null subject language, has overt expletives found in dialects.

¹⁶ It seems inappropriate to view these null subjects as *pro drop*. If they are so termed, there may be some unnecessary theoretical implication. Instead, *argument ellipsis* would be more suitable (see also Oku 1998, Kim 1999). Besides, the null subjects in Puxian also distinguish themselves from the other sentence-initial element, such as topic, because only a subject can have obligatory thematic relationship with the predicate while topic cannot.

The third type of impersonal construction is what I called the dative subject construction. The pronominal subjects in these constructions are typically phonologically fused with the dative marker $k\epsilon^{21}$ and exhibit non-canonical subject properties. To the best of my knowledge, such constructions have not been previously recognized in Puxian.

- (22) kua^{54} / kie^{453} / $k\epsilon^{21}$ hua^{24} - i^{21} $thua^{24}$ - $kiao^{42}$ - a^4 .
1sg:DAT / 2sg:DAT / 3sg:DAT rejoice much
 ‘I/you/he is much happy.’

- (23) $tsi\eta^{24}$ a^4 // kie_1^{453} $th\eta^{42}$ $kiao^{42}$ - a^4 , $liao^4$ \emptyset_1 $k\ddot{o}$ ai^{42} $k\omega\eta^{42}$
Money_{TOP}PRT 2sg:DAT earn satisfied, and dare again speak
 ‘You have earned money to satisfaction and \emptyset dare to complain more?.’
 Lit. ‘As to money, you have earned a lot and now (you) dare to complain
 (Puxian)

In (22), it is observed that the three-way person forms, i.e. 1st, 2nd and 3rd personal singular kua^{21} ‘I’, ty^{21} ‘you’ and i^{533} ‘he/she’ are phonologically fused with the dative marker $k\epsilon^{21}$, which results in new tones and forms. The fusion with first person singular kua^{21} is recoverable because an overt kua^{54} is still present (but with a higher tone e.g. 21 – 54 mostly); the fusion with 2nd person singular ty^{21} results in the new form kie^{453} as well as a new tone; yet for the 3rd person singular i^{533} is not even traceable either phonologically or morphologically, for the dative marker $k\epsilon^{21}$ remains the same tone. This is probably explained by the phonological rules in Puxian that require an unexpressed i^{533} following $k\epsilon^{21}$ or more likely because of the fact that languages tend to

have a difference between 1st and 2nd person as opposed to the distinctive nature of 3rd person in terms of reference, formal realization or case marking (Siewierska 2004: 5). In addition, only the singular personal forms, rather than the plural personal forms, are allowed in the construction with $k\epsilon^{21}$. Unergative verbs, such as $tsao^{42}$ ‘run’, $thiau^{24}$ ‘dance’ and $ki\tilde{a}^{11}$ ‘walk’, etc. often co-occur in the construction, profiling a human agent who experiences a state (e.g. happiness) or carries out an action (e.g. walking), which is to his own benefit and/or is commended/acknowledged (by the speaker).

On the other hand, the dative subject construction of (23) is conjoined with another clause to form a complex construction, in which the two clauses share the same subject, namely, 2nd person singular ty^{21} , though in a contracted form of kie^{453} . The reason why the 2sg ty^{21} is identified as subject is that the patient $tsij^{24}$ ‘money’ of the first clause is topicalized, which sets itself apart from the rest of the sentence (being optional and marked with the topic marker a^4 in this case). It is also believed that the null subject in the second clause will unmistakably refer back to the agentive subject ty^{21} of the first clause. If we view equi NP deletion or coreference as an indicator of subjecthood¹⁷, a

¹⁷ According to LaPolla (1993), Mandarin sentences do not have restriction on cross-clausal coreference, because the shared argument of the conjoined structure, i.e. the zero form, can have $P \rightarrow A$ or $A \rightarrow A$ without any grammatical constraints. Such a freedom in coreference is seen as evidence of lacking syntactic pivots (subject) in Mandarin. However, this may not be the case for Puxian. In Puxian, coreference with syntactic pivots seems to be obligatory. For example, in the following two sentences, Puxian does not have such liberty in free coreference while Mandarin does.

(a) $w\check{o}_{AG}$ $n\check{a}$ le $t\bar{a}$ de $qi\grave{a}n_{PAT}$, \emptyset_{AG} $ji\grave{u}$ $r\grave{e}ng$ \emptyset_{PAT} le .
Isg pick-up ASP 3sg GEN money then throw ASP
 ‘I picked up his money and threw it.’ (Mandarin; LaPolla 1993)

(b) i^{533} e^{21} $tsij^{24}_{PAT}$ // kua^{21}_{AG} no^2 $kiao^{21}$ $tshiu^{42}$ e^{21} , \emptyset_{AG} ti^{42} $pho\eta^{52}$ $the\eta^4$
3sg GEN money Isg just pick hand PRT, BE throw ASP
 ‘I picked up his money and threw it.’
 Lit. ‘His money, I_j pick up and \emptyset_j throwing.’ (Puxian)

In Mandarin (a), there is no overt syntactic constraints for the two zero forms to refer back to the agent $w\check{o}$ ‘I’ or the patient $t\bar{a} de qi\grave{a}n$ ‘his money’ (though semantically, such a freedom is impossible). In contrast, in (b), Puxian has the patient argument, $i^{533} e^{21} tsij^{24}_{PAT}$ ‘his money’ promoted to the sentence-initial topic position so that coreference of subject is realized in the second clause. As we already know that topics in Chinese do not enter grammatical relations with the main verb and if they are understood, they needn’t be expressed again (Li & Thompson 1989: 90), therefore ‘his money’ in (b), once topicalized, is set apart from the rest of the sentence or may become a secondary choice in cross-clausal coreference to the agent kua^{21}_{AG} ‘I’. Besides, more importantly, we notice that the predicate verb, $pho\eta^{52}$ ‘throw’ in the second clause is preceded by the copula ti^{42} ‘be’, which renders it much like an unergative verb

complex construction like (23) does lend some support to the fact that the dative marked arguments are indeed subjects of the clause rather than some complementary or prepositional phrases¹⁸ (see also Chapter 4 for further discussion).

In fact, many languages of the world have similar non-nominative marked subject constructions. For example, in the following sentences, pronominal or nominal subjects are marked dative (24-26), accusative (27) or genitive (28). Shibatani (1985) argues (from agent defocusing point of view) that these dative subject constructions are ‘less prototypical transitive clauses involving atypical agents’ and terms them ‘defective’ candidates for subject status because they are marked by cases other than the nominative.

(24) Boku ni eigo ga wakaru.

Isg DAT English NOM understand

‘I understand English’

(Japanese; Shibatani 1985: 833)

(25) Chelswu-eykey ton-I philyoha-ta.

Chelswu:DAT money:NOM need:DEC

‘Chelswu need money.’

(Korean; Lee 1992: 240)

allowing only one agentive argument. Thus, the zero form will unmistakably refer back to the agent of the immediate clause, viz. *ku*²¹_{AG} ‘I’ (i.e. A → A coreference). As a native speaker of Puxian, I will view sentences like (b) as unmarked expressions in the case. On the other hand, the structure like Mandarin (a) will sound unnatural or too ‘literary’ for most Puxianese.

¹⁸ It should also be pointed out that that *ke*²¹ is not likely to be confused with the causative or passive marker in this case, despite all of them being derived from the verb *give* and being pronounced more or less the same nowadays. Firstly, *ke*²¹, as a dative marker, has also acquired some benefactive function in the above case, which, according to Iwasaki and Yap (2000), can only be derived from the lexical verb *Give* via its function as a dative marker. Secondly, according to Chappell and Peyraube (2006), there are at least two different pathways for the verb *give* in Chinese: (i) *Give* > dative (ii) *Give* > causative > passive. Thus the benefactive function of *ke*²¹ should be seen as deriving from the dative *ke*²¹ and has a different grammaticalization path from the causative and passive markers. In Jieyang and Jinjiang Min, benefactive *give* is always pronounced differently from the causative and passive ones, while the latter are pronounced the same (see also Lien 2002).

(26) Mér likar ágætlega vid hann.
me:DAT like:3sg well with him:ACC
'I like him.'

(Icelandic; Barðdal 2004: 105)

(27) Ñuka-ta-ka uma-ta nana-wa-n-mi
me:ACC:TOP head:ACC hurt:OBJ:PRES:3:VAL
'My head hurts me.'

(Quechua; Hermon 2001: 151)

(28) Aamaar tomaake caai.
I.GEN you need
'I need you.'

(Bengali; Shibatani 1985: 833)

In the Japanese (24) and Korean (25), the patient arguments, *eigo ga* 'English' and *ton-I* 'Money' are marked nominative while the agentive arguments, *Taroo-ni* (Japanese) and *chelswu-eykey* (Korean) are marked with dative case. It is interesting to see that the nominative-marked NP is not viewed as subject of the sentence while the oblique-marked one is. The reason is that the dative-marked NPs in the two sentences are the highest relevant arguments on the semantic role hierarchy, namely agent, which is generally considered a subject candidate. In addition, according to a series of syntactic tests by Ura (1999), such as subject-oriented anaphora, control of missing subject in the adjunct-subordinate clauses, etc., these oblique subjects are indeed syntactic pivot of conjoined clauses (see also Shibatani 1977, 1978; Kageyama 1978, Perlmutter 1984 Kim (1990), and O'Grady (1991) for Korean).

Interestingly, comparing (24) and (25) in Japanese and Korean with (23) in Puxian, we see that all the patient arguments in the sentences are associated with some subject properties, such as nominative markings (in Japanese and Korean) or topicalization (in Puxian). Since Puxian has no case marking morphology to indicate the essential grammatical relations, a topicalization strategy may be an alternative choice to distinguish essential thematic relations such as Agent and Patient. Such a strategy may be functionally similar to the nominative marking of patient arguments in Japanese and Korean, though the former using syntactic means and the latter morphology. Yet further investigation is needed (see Chapter 4 for *word order* and *alignment*).

Turning to the agent defocusing approach, those constructions with an under-elaborated agent or rather the lack of an agent are viewed as impersonal. The chief impersonal constructions under this approach are passives, ‘notional passives’ and ‘middle constructions’.

Like other languages, passives in Puxian are related to a transitive clause, as in the active/passive correlation (29 – 30):

(29) $naŋ^{24}$ pha^{42} kua^{21}

man *hit* *Isg*

‘Someone beat me.’

(30) kua^{21} $k'ɛŋ^4$ pha^{42}

Isg *man:PASS* *hit*

‘I am beaten by someone.’

In the above active/passive sentences, the patient argument kua^{21} ‘I’ in the

monotransitive (29) is moved to the subject position and the agent *naŋ*²⁴ ‘man’ is demoted to a non-subject position and also phonologically fused with the passive marker *kɛ*²¹. As far as agent defocusing is concerned, the above passive construction should be viewed as a way of impersonalization.

However, the passives in Puxian, together with the majority of other passives in Sinitic languages, are not considered canonical passives (Siewierska to appear)¹⁹. This may be attributed to several factors. For instance, although agentless passives are preferred in many languages of the world e.g. English, Finnish, Cheremis, Turkish, etc. (Shibatani 1985), Puxian, along with many other southern dialects of China, has to express the agent obligatorily (see also Huang 1999). A typical case may be the expression of 3rd person singular agent as in (31).

(31) a. *kua*²¹ *kɛ*²¹ (*i*⁵³³) *pha*⁴²

Isg *3sg:PASS* *hit*

‘I am hit by someone.’

b. *kua*²¹ *kɛ*²¹ *i*⁵³³ *pha*⁴²

Isg *PASS* *3sg* *hit*

‘I am hit by someone.’

(Puxian)

In (31a), although the 3sg agent *i*⁵³³ is fused with the passive marker *kɛ*²¹ and there is no overt presence of it in most cases, the passive is not considered to be agentless, for it is believed that *i*⁵³³ is fused with *kɛ*²¹ and there is no substantial semantic difference when

¹⁹ According to Siewierska (forthcoming), Sinitic passives have at least the following non-canonical properties: a) incomplete subjectivization of patient; b) some experiencer-like properties of patient; c) obligatory expressibility of agent; d) lack of passive verbal morphology; e) formal ambiguity.

*i*⁵³³ is overtly present in (31b). Nevertheless, (31b) does have the pragmatic function of stressing the agent (being overtly present) from the speaker’s point of view, e.g. *It is him that hit me*. Such a function, however, further deviates from a canonical passive (i.e. stressing instead of defocusing an agent).

Another non-canonical property is that, since the primary function of passives is a defocusing of agents, passivization is thus assumed not to apply to non-agentive intransitive clauses. Yet Puxian, like other southern dialects, has passive constructions with intransitive verbs. For example, in the following Puxian sentences, the seemingly passive marker *kɛ*²¹ precedes the intransitive predicate *ɬi*²¹ ‘die’. (see the discussion of *kɛ*²¹-marked intransitive constructions in Chapter 4)

(32) *hua*⁵³³ *kɛ*²¹ *ɬi*²¹ *teŋ*⁴

flower *PASS* *die* *PFV*

‘The flower has died.’

(Puxian)

Similar passive constructions can be found in Jieyang of Chaozhou (a branch of Min dialects), where the passive marker *k’e* is seen to overtly mark the unaccusative predicate as well (Matthews et. al. 2005)

(33) *tsaŋ* *hue* *k’e* *i* *si* *k’w*

CL *flower* *PASS* *3sg* *die* *RVC*

‘The flower has died.’

(Jieyang; Matthews et al. 2005)

In view of these non-canonical properties of passives, which considerably diverge from the canonical ones, I will treat passive in Puxian as only a marginal device for impersonalizing.

Another type of impersonal constructions is what is referred to in Chinese linguistics as *notional passives* (see Wang 1958, Liu et al. 1983, 1996 on Mandarin). Notional passives, in this sense of the term, are both structurally and semantically linked to passives. They generally have a patient argument in sentence-initial position, followed by a predicate verb, yet without an explicit passive marker²⁰. Thus consider the passive (34) and the notional passive (35) in Puxian.

(34) ʈo²¹ kɛ²¹ yøŋ³² ʈie²¹ liau²⁴ lo²¹
clothes PASS 3pl wash ASP PRT

‘The clothes have been washed by them.’

(35) ʈo²¹ ʈie²¹ liau²⁴ lo²¹
clothes wash ASP PRT

‘The clothes washed.’

(Puxian)

The sentence (34) is a passive construction, in which the passive marker *kɛ²¹* precedes the 3pl agent *yøŋ³²* (*kɛ²¹* cannot fuse with the plural form). Although the agent in the passive is demoted to a less focused position, it still receives strong indexical readings. In this sense, passives like (34) are not a typical impersonalizing device. In contrast, the

²⁰ The structure of notional passives resembles English OSV topicalization with a null subject, e.g. ‘I hate oranges, but apples will do’.

so-called notional passive of (35) has a wider range of referent interpretation concerning the missing agent. It could refer to the speaker, the hearer or third parties, depending on the context. It is therefore believed that notional passives in Puxian are very similar to agentless passives in English, since the two have a central motivation in common, that is, ‘the speaker/writer does not wish to directly implicate himself or his interlocutor, but simultaneously does not want to exclude either one or the other from the range of possible agents’ (Siewierska 1984: 241). Yet, to what extent notional passives in Puxian or in other dialects differ from each other and from those in English remains to be seen. Such a situation regarding passive choices is reminiscent of the comments made by Siewierska (1984: 217) that ‘the conditions determining the use of the passive differ from language to language being dependent both on the language internal characteristics of the passive and the number of strategies available for expressing the above functions’.

The third type of impersonal constructions is the *middle construction*. The term ‘middle’ may involve two related notions: (i) a formal category: a morphological device that leads to different readings such as anticausative, reflexive, causative reflexive, etc. (Kaufmann 2007); (ii) a semantic category: denotation of non-eventive or dispositional properties of the subject from the verb (cf. Lyon 1969, Fagan 1992: 208, Keyser & Roeper 1984: 381, Kaufmann *ibid.*). For example,

(36) Okhisa at tinwah

Door open-MID

‘The door is open.’

(Choctaw; LaPolla 1995a)

(37) La puerta se abrió
the door REFL opened
'The door opened.'

(Spanish; Sansò 2009)

(38) The book reads well.

(English)

(39) Māntóu zuò qǐlái hén róngyì.
bread do IMPERF very easy
'Making bread is easy.'

(Mandarin)

The above middle constructions typically denote a kind of non-elaborated event or some spontaneous properties of the subject. The agentive participants are only implied or demoted from the surface constructions. Thus in terms of agent defocusing, middle constructions should be viewed as an impersonal strategy. Languages do not have consistent marking of middle situations. Some languages (a small number of them) use distinct markers for middle situations, e.g. (36), others (the majority of them) use prototypical reflexive markings e.g. (37) or prototypical transitive and intransitive clauses, e.g. (38) or (39) for middle markings (LaPolla 1995).

In the following Mandarin example (40), we see that there is an imperfective marker *qǐlái* 'going-on', following the predicate *zuò* 'do'. The construction is thus considered an intransitive clause with non-eventive middle readings. In fact, Mandarin

allows imperfective markers such as *qǐlǎi* 起来, *zhe* 着, etc. to be attached to most verbs, be it transitive or intransitive, the result of which is an imperfective reading of the verb.

(40) Ø_{TOP} dá qí-lǎi hén rǒngyì
hit IMPERF very easy

‘Hitting (something_{TOP}) is easy.’

(Mandarin)

In the above sentence, even a prototypical transitive verb such as *da* ‘hit’ can acquire imperfective meanings by being followed by *qǐlǎi*. In view of this, He (2005) argues that the presence of *qǐlǎi* is an obligatory criterion for most middle constructions in Mandarin, without which the construction should be interpreted otherwise.

However, Puxian, together with many other Chinese dialects (e.g. Yiyang of Xiang), does not have similar imperfective markers that can be attached directly to the verbs. It then appears to have two types of constructions semantically identical to middle readings. One is the counterpart of Mandarin *qǐlǎi* - constructions, as in (41); the other is to use reflexive morphology, as in (42).

(41) tsuo⁴² phiã²¹ na⁴² kãkãtaŋ⁴
make bread BE easy

‘Making bread is easy.’

(42) mui²⁴ e⁴ kai⁴²-kai¹¹ khi⁴²

door can self self open

‘The door is able to open itself.’

(Puxian)

Both Puxian (41) and Mandarin (40) express a proposition, namely *doing (something) is easy*. The difference lies in the structure. Puxian, due to the lack of similar imperfective markers, cannot change the verbal status, e.g. from transitive to intransitive, as easily as Mandarin does. Therefore, it has to resort to a different strategy, namely, having a non-finite clausal subject, e.g. *tsuo⁴² phiã²¹* ‘to make bread’, which is then predicated by the copula *na⁴²* ‘is’. The derived construction is functionally similar to middle constructions in that it denotes a property or attributes of the subject (e.g. bread-making) and crucially, as an agent defocusing device, it leaves the agent unexpressed.

In terms of (42), the ‘middle reading’ may be derived from reduplication of the reflexive marker *kai⁴²*. Such a construction is believed to be a type of middle construction, because, rather than denoting a particular action or event, the sentence depicts some dispositional properties of the sole argument *mui²⁴* ‘door’; in addition, the construction requires obligatory reduplication of *kai⁴²* to mark certain non-canonical semantic properties of the sole argument (i.e. the door), which not only results in a reduced argument structure but also a detransitivized event in contrast to a prototypical transitive one, e.g. *someone opened the door*. Thus I would refer to (41) & (42) as potential cases of middle constructions yet bona fide examples of impersonal constructions, by which an agent is demoted (see also Chapter 3 for reflexive middles).

To sum up so far, the discussion has arrived at a number of distinct impersonal constructions in Puxian, based on both the subject and agent approach. In the following

sections, I will focus on *pronominal impersonals* only, which is defined here as impersonal constructions that feature a pronominal subject with different morphosyntactic realizations.

2.4. The distribution of pronominal impersonals in Puxian

In this section, I will investigate the distribution of pronominal impersonals as against other pronominal uses in the subject position and seek to find out some important person and number features in Puxian. The data for analyses come from the transcribed speeches of six native Puxian speakers, aged between 50 and 70, who speak no other varieties of Chinese but Puxian. The genres include face-to-face conversation and oral narration (e.g. storytelling).

2.4.1. Identifying pronominal impersonals

In order to retrieve a maximal number of pronominal impersonals from the data, it is necessary to distinguish different pronominal functions in subject position²¹. These functions include *anaphoric*, *indexical*, *impersonal*, *emphatic*, *determiner* and *appositive*. We see that the first three functions are associated with thematic pronominals while the latter three are arguably not. Therefore, the first procedure is to weed out those non-thematic (thus non-impersonal) pronominals from the data, which are the *emphatic*, *determiner* and *appositive* pronominals. To illustrate, we have the following examples.

²¹ Non-subject pronominals do not belong to the category of pronominal impersonals.

(43) kuoŋ³² lauma⁴² ŋ-me²¹ tsi⁴

1pl.excl. wife not know letter

‘My wife is illiterate.’

(44) yøŋ³² ʔena⁴² lua²¹ u¹¹ tsin⁴

3pl teacher very have money

‘They, teacher(s) are/is rich / His (Their) teacher(s) are/is rich.’

(45) kua²¹ kai⁴² / naŋ¹¹ phe²¹ kiã⁴ lo⁴

1sg sefl:EMPH man:EMPH will walk PRT

‘I (really) am leaving’

(Lit. ‘I, myself, will walk away now.’)

(46) kai⁴² / naŋ²⁴ aŋ-mia⁴² li²⁴

sefl:2sg man:3sg not-want come

‘You don’t want to come./ he doesn’t want to come.’

In (43) and (44), both of the subject NPs consist of a plural person form and a regular noun, e.g. *kuoŋ³²lauma⁴²* ‘we wife’ and *yøŋ³²ʔena⁴²* ‘they teacher’. In (43), the 1st person exclusive *kuoŋ³²* and the kinship term *lauma⁴²* ‘wife’ form a *possessive determiner* construction (see also C. Lyons 1999: 141), which is interpreted as ‘my wife’ (rather than plural ‘our wives’); Differently, in (44), *yøŋ³² ʔena⁴²* ‘they teacher’ may receive two different interpretations: (i) *yøŋ³²* and the bare noun *ʔena⁴²* are in apposition, thus *they, teachers*; (ii) *yøŋ³²* is a possessive determiner of *ʔena⁴²*, which is interpreted as ‘his/their teacher’. Thus, we may have at least two translations of

(44), e.g. *They, those teachers, are rich* or *His teacher is rich*. The fact that (43) has only one interpretation while (44) has more, despite their structural similarity, is largely due to semantic associations of the subject NP. That is, it is understood that some kinship nominals such as *lauma*⁴² ‘wife’ are supposed to have a *one to one* relationship between the possessor and the possessee. Thus (43) does not result in ambiguity while (44) does. However, the *possessive determiner* and *appositive* constructions are not viewed as pronominal impersonals because the subject NP contains non-pronominal elements. In the following, they are grouped together and labeled *app.det.*, for the sake of convenience.

In (45) and (46), the pronominal subjects involving the morpheme *naj*²⁴ ‘man’ and the reflexive marker *kai*⁴², we see that both of them can have emphatic²², as in (45) or indexical uses, as in (46), without additional morphological changes. Both these uses of *naj*²⁴ and *kai*⁴² are not counted as impersonal as well (see Chapter 2 for the discussion of *naj*²⁴ and *kai*⁴²).

The second procedure is to rule out the majority of regular personal pronouns that are either indexical or anaphoric. Anaphoric pronouns with indefinite antecedents are generally viewed as referential (see also Hofherr 2003, Siewierska 2007). For example, in the following sentence, 3sg *i*⁵³³ ‘they’ is anaphoric to *u*¹¹ *tsij*²⁴ *e*⁴ *naj*²⁴ ‘rich people’, which is not considered impersonal.

- (47) *u*¹¹ *tsij*²⁴ *e*⁴ *naj*²⁴ *phuo*⁴ *tse*²¹ *thou*⁴, *i*⁵³³ *tshou*²¹ *a*⁴ *tsou*²¹
*have money*MOD *man not here live*, 3sg *house PRT rent*
 ‘The rich people do not live here. They rent the house.’

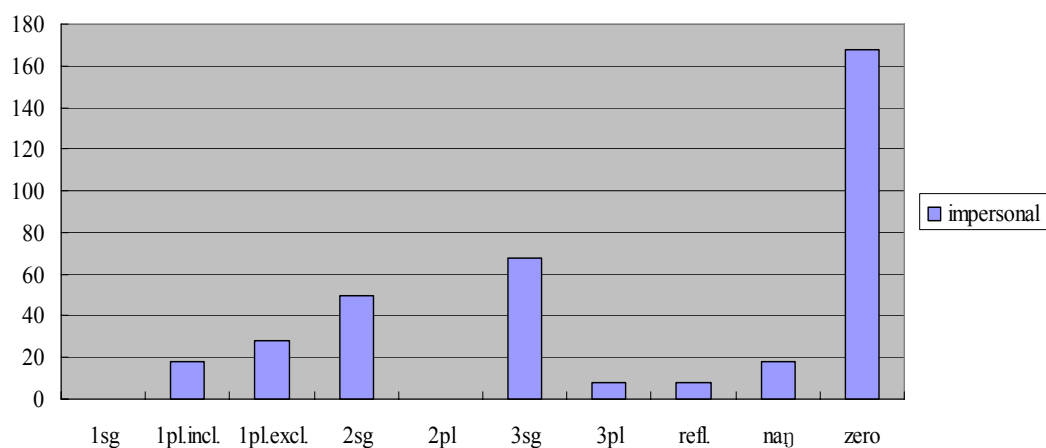
²² The reflexive marker *kai*⁴² ‘self’ is typically seen as a marker of coreference with the subject while *naj*²⁴ mostly as an emphatic. The functional division between them is reminiscent of Russian *sebja* and *sam*, expressing reflexive and emphatic meanings respectively (Kulikov 2007)

The last procedure is to identify a significant number of zero forms in subject position. Zero forms are one type of dependent person marking, which may be open to any person interpretation in a given context (Siewierska 2004). In Puxian, zero forms could be referential and deictic, corresponding to the three-way person forms or they could be non-specific and antecedentless, taking up any human referent. Obviously, the later uses of zero forms are excluded from this analysis²³.

2.4.2. The distribution

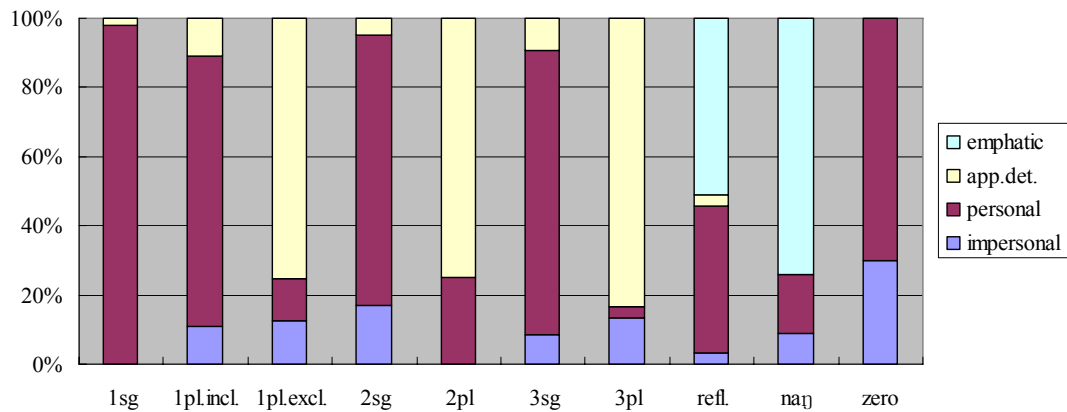
The overall distribution of impersonal pronominals is shown in the following two figures.

Figure 3 Distribution of impersonal pronominals by the number of instances



²³ In order to identify impersonal uses of zero forms, manual tagging is applied. For instance, every place of a possible zero form is marked with a number like '01' or '02'. '01' refers to referential zeros and '02', non-referential zeros. Further semantic differences among non-referential zeros (e.g. generic, expletive, etc) can be tagged with 021,022, etc.

Figure 4 Distribution of impersonal pronominals as against other pronominal functions



The above figures suggest some unique person and number features in Puxian. Firstly, almost all the pronominal forms that are involved in impersonal uses, zero forms are the most frequent, followed by the 3rd person singular and 2nd person singular while there is no instances of the 1st person singular²⁴ or 2nd person plural, though there are a few instances of the 3rd person plural and the reflexive marker being used impersonally. Overall, the impersonal uses among singular person forms (3sg: 70 > 2sg: 50 > 1sg: 0) appear to be subject to the constraints of the Person Hierarchy (1st > 2nd > 3rd), that is, 1st person being highest on the hierarchy is extremely referential and definite and is considered unlikely to be used in unspecific reference, while 3sg being further away on the other end of the hierarchy is considered much less referential and definite, therefore having more impersonal uses²⁵ (see Figure 3).

²⁴ 1st person singular can be used in impersonal constructions such as *dative subject constructions* but such uses are very rare in the data collected.

²⁵ Section 2.6 provides some detailed discussion of these impersonal pronominals. Here are some examples as well.

(a) kua²¹ bhe⁴ tha⁴² tsy¹¹
 1sg want read book
 'I want to study.'

(b) ty²¹ m'ŋ⁴ ke²¹ tsau⁴² e⁴ kv¹¹-lou²⁴ lo⁴
 2sg Aux:not KE run PRT success PRT
 'You cannot run away!' or 'One cannot run away.'

(c) i⁵³³ tshou⁴² phe⁴ thv²⁴ thia⁴² then⁴
 3sg house want all tear Perf

Secondly, apart from *naŋ*²⁴ and zero forms, which are open to a wide range of number interpretations, the singular person forms, especially 2nd person singular and 3rd person singular, have far more instances of impersonal usage than their plural counterparts. A Chi-square test shows that there is a significant difference between impersonal uses of singular and plural person forms²⁶ ($\chi^2 = 23.8$, $df = 1$ $p < 0.01$) (see also Figure 3). This is contrary to what would be expected as in many languages plural person forms and not singular ones tend to be used impersonally (cf. Siewierska 2004: 210)²⁷. However, as far as the first person is concerned, the plural is used impersonally while the singular is not. This is probably due to the apposition of *naŋ*²⁴ to 1st person plurals, which signals generic or non-referential reference (see (63) & (68) below); without the apposition *naŋ*²⁴, they are generally referential (but can be indefinite) (see (78-79) or (85) below)

Thirdly, although the majority of singular person forms in Puxian such as 1sg *kua*²¹, 2sg *ty*²¹ and 3sg *i*⁵³³ can be independent person forms in subject position, this is not the case for most plural person forms, such as 1pl.excl. *kuoŋ*³², 2pl *tyoŋ*³² and 3pl *yoŋ*³², for more than 70% of these forms appear in appositive or determiner-like constructions (see Figure 4).

The observation above raises the issue of whether person forms in Puxian are genuinely marked for number or rather for other functions. In order to answer this question, we need to have a comparison between Mandarin and Puxian. Both languages are assumed to have regular plural inflection for the three-way person forms.

‘They will tear down the house.’

We see from the above sentences that 1sg *kua*²¹ in (a) is referential and definite, while 2sg *ty*²¹ in (b) and 3sg *i*⁵³³ (c) are impersonal.

²⁶ A further Chi-square test shows that the difference between 3sg and 3pl is significant ($\chi^2 = 47.31$, $df = 1$ $p < 0.01$) as well. Yet there is no impersonal usage for 2pl.

²⁷ However, according to Siewierska (2004: 212), in European languages such as Germanic, Romance and Slavonic languages, 2nd person singular, in contrast to the non-singular, is a common means of impersonalization throughout Europe. The impersonal uses of 2nd person singular across Europe may be attributed to the influence of English or to some pragmatic reasons, which is much different from the situation in Puxian (see below).

Table 7 Number distinction in Puxian and Mandarin person pronouns

PERSON	SINGULAR		PLURAL	
	Puxian	Mandarin	Puxian	Mandarin
1	<i>kua</i> ²¹	<i>wǒ</i>	<i>kuoŋ</i> ³² <i>excl.</i>	<i>wǒmen</i>
2	<i>ty</i> ²¹	<i>nǐ</i>	<i>tyoŋ</i> ³²	<i>nǐmen</i>
3	<i>i</i> ⁵³³	<i>tā</i>	<i>yøŋ</i> ³²	<i>tāmen</i>

From Table 7, we see that both Puxian and Mandarin display some regularity in number expression with person. Person plurals in Puxian are formed through syllable contraction with the morpheme *naŋ*, meaning ‘man’ while Mandarin person plurals are formed through the morpheme *men*, which means ‘people of the same clan’ (Ōta 1958: 347). Corbett (2000) argues that Mandarin Chinese is a good example of inflectional regularity, because the plural marker *men* is spreading from personal pronouns to nouns²⁸. However, this is not true for Puxian because the so-called plural marker *naŋ* never extends to nouns. If any indication of plurality for nouns is necessary, plural demonstratives must be used.

Nevertheless, if we admit that the plural marker in Puxian is restricted to personal pronouns instead of spreading to nouns as is the case in Mandarin, there is still one question unanswered. As we know, many languages have irregular markings for number on personal pronouns. Such irregularity, namely, *suppletion*, is believed to be related to two factors: (i) words that are high on the Animacy Hierarchy; (ii) words of high frequency (Corbett 2000). It is obvious that both factors apply to the forms in Puxian

²⁸ In fact, the so-called plural marker *-men* is not used across the board. It often appends to nouns denoting human beings to give definite reference, which is different from English plurals that may denote generic meanings (Chan 2004).

but there is no extensive suppletion²⁹ for any of the person forms. In fact, regular marking of personal pronouns for number is extremely rare in the languages of the world (Cysouw, 2001: 66-69).

In view of this, Iljic (2001) argues that the different *naŋ* elements, appended to personal pronouns in Min dialects are in fact in apposition (rather than grammaticalized plural markers), since *naŋ*, with the meaning of ‘man’, specifies both humanness and multiple referents. Such an argument suggests that person forms in Min could be neutral for number or at least for number marking. An additional piece of evidence for such a view is that the main function of plural person forms, namely, an addition or multiplication of persons (Benveniste 1966/46: 235, 1971: 203) is in large part coded by singular person forms rather than plural ones in my data. A case in point is that even the 1st person singular, *kua*²¹ ‘I’, can have a plural interpretation.

(48) *kua*²¹ *ho-tshiã*²¹ *tsho*²¹ *theŋ-ŋøn*⁴

Isg *Fuqing* *produce* *oyster seed*

‘We, people of Fuqing, produce oyster seeds.’

(Puxian)

In (48), *kua*²¹ ‘I’ is in apposition to *ho-tshiã*²¹ ‘Fuqing’ (a city near Puxian) and denotes the people of Fuqing rather than the speaker alone (there are similar uses of the 1st person singular in standard Mandarin as well, e.g. *wǒ jūn* ‘1sg + army’ or ‘our army’).

In my opinion, Puxian does not have a fully grammaticalized plural marker and person forms do not need to be marked for number. This situation must be a direct inheritance from ancient Chinese which also lacks number marking as well (see also

²⁹ Some may argue that 1st person inclusive, *na*⁴² in Puxian should be viewed as a case of suppletion but others view it as a different form of syllable contraction.

Norman 1988: 120 -1; Goddard 1995: 119). According to some Chinese historical linguists, such as Wang (2005), the multifunctional morpheme *nay*²⁴ ‘man’ started as an emphatic pronoun, which later underwent phonological fusion with the three-way person forms and became 1st person exclusive *koŋ*³², 2nd person *tøŋ*³² and 3rd person *yøŋ*⁵⁴, etc. Further grammaticalization processes have enabled them to signify a plural sense but only occasionally.

2.5. Linking pronominal impersonals to the definiteness hierarchy

In the previous sections, I have discussed a number of impersonal constructions in Puxian conceived of from both the structural and semantic perspectives and from these impersonals, a category of pronominal impersonals is obtained. One common property of pronominal impersonals is the issue of referentiality, i.e. the reference of the pronominal subject. Siewierska (2007) points out that semantic characterization of impersonality consists of both agentivity and referentiality. Referentiality centers on the referential properties of an impersonal argument (i.e. a pronominal) but is different from agentivity, in that the former may be a subject but not necessarily an agent. By focusing on the notion of referentiality, Siewierska (ibid.) also attempts to establish how ‘pronominal impersonals’ differ from what she refers to as ‘verbal impersonals’³⁰. What she has found in the context of her discussion is that verbal impersonals as a group are freer in reference than pronominal ones, which is likely due to less morphological specification of the former as compared to relatively more specification of the latter³¹.

³⁰ For want of a better term, she refers to agentless passives, reflexive impersonals e.g. the *se-* construction in Portuguese and participle impersonals such as the Polish *no/to* construction as *verbal impersonals*, in contrast to *pronominal impersonals*, which she mainly refers to the *3rd person plural (3pl) construction*, a type of non-specific 3pl agent impersonals.

³¹ According to her, agentless passive and *3pl impersonals* are two endpoints of morphological specification and the reflexive impersonals and participle impersonals stand in-between. For instance, there is almost no morphological specification for the implied agent of agentless passives but there may be a default 3rd singular marking on the verb of

and, above all, there is a possible correlation between ‘the referential range of impersonal constructions and the degree of grammaticalization of the linguistic expressions of their referents’ (Siewierska 2007: 31).

Following her argument, I will also focus on various pronominal impersonals in Puxian by way of referentiality and attempt to establish some correlation, if any, between certain impersonal expressions and corresponding referential ranges.

2.5.1. Semantic characterization of pronominal impersonals

The semantic characterization of impersonals (on referentiality) is not particularly bound to the subject-based or agent-based approach, as it is primarily concerned with degrees of referentiality displayed by the relevant argument in a given impersonal construction. Linguistic literature in the past has contributed, from various dimensions, to the categorization of impersonal pronominals. For example, Kitagawa & Lehrer (1990) distinguish two types of unspecific reference by personal pronouns in English and term them ‘impersonal’ and ‘vague’, as in (49) and (50). The term ‘impersonal’ means a person form that can refer to *anyone* or *everyone* with possible inclusion of the speaker and addressee; the term ‘vague’, in contrast, refers to a particular set of unspecific individuals within speech act contexts. As we can see, the latter is much smaller in referential scope than the former.

Impersonal

(49) We should live to learn.

reflexive impersonals. As for *3pl* impersonals, more inflectional features on the verb are expected. That is, the more morphological specification, the narrower the impersonal reference is.

Vague

(50) They will close the road tonight.

(English)

Langacker (2004, 2006) also proposes a three-way classification for personal pronouns that are used impersonally, viz. *semi-impersonal*, *in-between impersonal* and *full impersonal*. *Full impersonals* have the widest range of reference. They refer to all human beings or some generalized source of narration/wisdom (e.g. *We are not alone in the universe* or *They say that being rich is better than the opposite*); *semi-impersonals*, on the other hand, refer to a set of individuals identifiable by a locative or other quantifiers (e.g. *They killed seals in Canada*); *in-between impersonals*, in turn, are more narrowly defined than *semi-impersonals* in that they refer to a particularly limited set of individuals (e.g. *They closed the library today*).

However, it should be pointed out that pronominal impersonals, contextualized in a wider context of impersonality, deserve finer semantic categorization. For example, expletive pronominals, usually assumed by 3sg pronouns, are traditionally viewed as semantically empty and have not been included in any referential categories in the past. However, consider the following sentences with expletive subjects in English and German.

(51) a. It is unfair. (*Ambient environment*)

b. It is raining. (*Weather*)

c. It is 5' o'clock. (*Time*)

d. It is good that you say so. (*Extrapositon*)

(52) a. Es gibt zwei Menschen da. (*ES GIBT* construction)

it gives two people there

‘There are two people there.’

b. Es ist mir kalt. (*Impersonal experiencer* construction)

it is I:DAT cold

‘I am cold.’

c. Es steht eine Vase auf dem Tisch. (*Indefinite extraposition*)

it stands a vase on the table

‘There stands a vase on the table.’

(German; Smith 2005)

We see that 3rd person singular pronouns *it* and *es*³² in both English (51) and German (52) are involved in different types of expletive subject constructions with noticeable semantic differences, though they are traditionally viewed as mere placeholders, lacking any semantic content. Recent studies in cognitive-functional linguistics suggest that expletive pronouns such as *it* or *es* are not just a syntactic subject but may fulfill some semantic functions as well such as ‘profiling a setting’ or ‘representing the endpoint on a scale of increasing vagueness and non-delimitation’ (Smith 2005). Langacker, as quoted in Smith (2005), also believes that ‘it (expletive) is not only definite but also referential, given that our mental world includes highly abstract entities. Its referent is maximally diffuse, being wholly undelimited within the immediate scope of discourse [...] still, its vagueness or generality of meaning is not the same as meaninglessness’.

³² *Es* in German is 3rd person singular neuter, typically used as an anaphoric pronoun, which contrasts with the masculine and feminine 3rd person singular pronouns *er* and *sie* (Smith 2005).

If we agree that expletive pronouns signify a vague setting or some highly abstract entities, then instead of treating them as being semantically empty, we may associate them with a unique type of reference, say *vagueness*, which is totally different from other human reference by personal pronouns. *Vagueness* can, therefore, stand for one endpoint of the referential scope represented by pronominal impersonals.

Furthermore, at the other end of the referential scope of impersonals, there are oblique-marked pronominal subjects, which profile, specific rather than non-specific referents. Let's recall two of the examples mentioned before.

(53) kua⁵⁴ / kɛ⁴⁵³ / kɛ²¹ hua²⁴-i²¹ thua²⁴-kiao⁴²-a⁴.

1sg:DAT / 2sg:DAT / 3sg:DAT rejoice much

'I/you/he is very happy.'

(Puxian)

(54) Mér likar ágætlega við hann

me:DAT like:3sg well with him:ACC

'I like him.'

(Icelandic; Barðdal 2004:105)

The obliquely-marked subject constructions have an agentive pronominal placed in sentence-initial fronted position while being marked with non-nominative cases. Despite their oblique markings, the pronominal agent still possesses some subject properties, such as coreference or equi-NP deletion. Bakker and Siewierska (2004) argue that obliquely-marked subjects in these languages are indeed a weaker version of subject than those of active sentences. Most importantly, from the referential point of

view, these constructions may represent another endpoint of the referential scope by impersonals, which, together with *vague*, fulfills a complete referential range, viz., from being specific/definite to being non-referential/vague, which is considered inherent with pronominal impersonals.

Therefore, different from what has been assumed, pronominals in impersonal constructions do not always profile non-specific human referents, as they include a variety of constructions, some being non-referential while others being *vague* or, the very opposite, being referential and definite.

In the following sections, I will turn to Givón's (1984: 390) hierarchy of referentiality and definiteness in order for a better semantic characterization of pronominal impersonals.

2.5.2. The referentiality and definiteness hierarchy

It is known now that pronominal subjects in impersonal constructions display different referential scopes, ranging from being *vague* to being somewhat *referential and definite*. For a better understanding of their referential properties, it is necessary to take into account some communicative factors, e.g. in view of the speaker's referential intent. Thus for example, a plural noun like *tables* normally refers to a number of countable entities. Yet a plural personal pronoun such as the 1st person plural *we*, does not refer to a number of distinct speakers at the time. Instead, it generally refers to a group of people, perceived from the speaker's point of view, which may include or exclude the other speech act participants. In this sense, pronominals, especially those functioning in impersonal constructions, are communicatively-oriented, closely tied to the speakers' referential intent. As a point of departure, I will base my discussion on the referentiality

& definiteness hierarchy³³ proposed by Givón (ibid.):

(55) *Referential definite* > *Referential indefinite* > *Non-referential indefinite*
> *Generic*

Following Givón's hierarchical view of reference, we see that there are four semantic domains of referentiality. Each domain is associated with consideration of speakers' referential intent. The term 'referential intent' refers to a communicative contract from the speaker to the hearer, in which the speaker may presuppose the existence or unique identifiability of a referent and assumes that the hearer share the same knowledge with him. Thus being referential means the speaker may have some particular referent(s) in mind while being non-referential means the speaker only assumes the existence of certain referents but, by no means, knows them specifically.

The other important notion related to the hierarchy is definiteness. By definiteness is meant how a speaker encodes his presupposed knowledge of a NP with certain grammatical means. A speaker will encode a NP as definite if he thinks the hearer can also assign unique reference to that NP; otherwise, it will be encoded as indefinite. Besides, how a speaker uses certain grammatical means to encode a NP correlates to some extent with the degrees of specificity of the NP. In other words, there is a relationship between certain grammaticalized linguistic expressions, i.e. NP encodings and degrees of specificity they represent (See also Chafe 1994: 93, Lambrecht 1994: 77–79, Chen 2004, Siewierska 2007).

As a matter of fact, pronominal impersonals should be considered to be one kind of morphosyntactic encoding for indefiniteness, apart from other known devices such as

³³ Given that the hierarchy proposed by Givón are related to NPs that include both nominal and pronominal phrases, it is therefore appropriate to apply it to impersonal pronominals.

articles, demonstratives, universal or existential quantifiers. For example, in the following sentences from English, German, Spanish and Mandarin, we can see that languages tend to have different impersonal devices for non-specific referents. These devices include phonological³⁴ (56), lexical (57), morphological (58), positional³⁵ (59) and many others that have been discussed.

(56) You can't control a kid like Thibault. (English; Stanley Whitley 1978)

(57) Man behauptete, man habe meine Akte verloren.

man claimed man had(subj.) my file lost

‘They claimed they had lost my file.’ (German; Kratzer 1997)

(58) Se llega cansado después de un viaje tan largo

REFL arrives tired after of a trip so long

‘One arrives tired after such a long trip.’

(Spanish; Jaeggli 1986: 51)

(59) a. Lǎi rén le

arrive man ASP

‘A man arrived.’

³⁴ The term ‘phonological’, as exemplified by (56), refers to a pronominal subject with indefinite readings is likely to be achieved by an unstressed and reduced phonological form [jə] rather than the full form [ju:] (Stanley Whitley 1978).

³⁵ The term ‘positional’, as exemplified by (59a & b), refers to assigning a subject to a non-canonical position as in the Mandarin inverted subject construction. The inversion enables the subject *rén* ‘man’ to acquire indefinite meanings while *ren* in non-inverted construction (59b) remains definite and referential.

b. Rén lái le.
man arrive ASP
 ‘The man arrived.’

(Mandarin; Chen 2004)

Therefore, given that pronominal impersonals are a kind of formal encoding of referentiality and definiteness and considering that they include expletive pronouns signaling maximal vagueness and obliquely-marked person subjects being definite, I propose that, in addition to the four semantic domains on Givón’s hierarchy, a *vague* domain should also be included. Thus, a total of five semantic domains are identified with respect to pronominal impersonals. Examples of these semantic domains with corresponding impersonals are illustrated as follows.

Table 8 Referential domains with corresponding impersonals

Domains	Typical examples in English & Puxian
<i>Vague</i>	It is unfair. /It is raining now.
<i>Generic</i>	We are not alone in the universe.
<i>Non-referential indefinite</i>	You can't control public opinion. They say being rich is better than otherwise.
<i>Referential indefinite</i>	They kill seals in Canada.
<i>Referential definite</i>	$k\varepsilon^{21} hua^{24} -i^{21} thua^{24} -kiao^{42} -a^4$ ‘3sg:DAT is much happy’ (Puxian)

From Table 8 we see that the domain, *vague*, represents maximal indefiniteness and abstractness. It is uncountable, non-anaphoric and non-referential. Mostly it represents a

special setting within the immediate scope of discourse and is based on the shared knowledge between the speaker and hearer. Within the setting, a referent is presented or an event takes place. Most expletive pronouns across languages belong to this category.

The domain, *generic*, refers to the whole humanity of indiscriminate referents of a kind or genus. Different from common-sense indefinites that refer to *anyone* or *everyone* in context, generic pronominals express law-like propositions without association with specific time or locative quantifiers. It also includes all speech act participants.

Much similar to *generic* is the domain of *non-referential indefinite*. It typically denotes *anyone or everyone* in the sense that the speaker does not have a specific entity in his mind and won't assume the hearer can by any means infer one. Distinctively, pronominal impersonals in the domain are often associated with some non-assertive contexts such as irrealis, non-factual, negated, habitual, and potential and deontic contexts (Vendryes 1916: 186, cf. also Meillet 1948: 277, Sansò 2006) or with reported structures (see also Siewierska 2007).

The domain *referential indefinite* is considered the most prevalent domain, where the speaker has in his mind some entities but cannot identify them more specifically. Pronominal impersonals in this domain are generally bound by a spatial -temporal setting and thus they are more identifiable than *non-referential and indefinite*. Most pronominals with impersonal uses are found in this domain.

The last domain, *referential definite*, is the domain of most indexical pronouns and definite NPs. It is associated with impersonal constructions mainly because of the obliquely-marked subject constructions, which has a referential pronominal subject as well.

2.6. Grading pronominal impersonals in Puxian

In the previous section, I have identified five semantic domains, i.e. *vague*, *generic*, *non-referential indefinite*, *referential indefinite*, and *referential definite*, with which properties of the pronominal referents are associated. In this section, I will evaluate these five semantic domains by assuming that they correlate with morphosyntactic realizations of pronominal impersonals.

2.6.1. Pronominal impersonals with *generic* reference

The term ‘generic’ has two senses: (i) a noun phrase with reference to a genus or a species as a whole (e.g. *dogs*, *human beings*, *plants*, etc.); (ii) a *generic* sentence with a regularity or some general property being attributed to the relevant argument in it (e.g. *Men are intelligent.*) (Krifka et al. 1995, Papafragou 1996).

Pronominal impersonals belonging to this category display both of these two senses of genericity. Firstly, a pronominal subject is deemed generic if it refers to all human beings or people in general in circumstances without time or locative quantification; secondly, this genericity is also a property derived from the whole construction rather than the pronominal alone. It is important to note that most personal pronouns are deictic in nature. Extended uses of them are not so much attributed to this deictic nature as to the property of an impersonal construction, which is encoded with speakers’ referential intent.

In Puxian, zero forms and the impersonal pronoun *nan*²⁴ ‘man’ are often used in this category³⁶. Most of the instances are proverbs, maxims or folk sayings that describe

³⁶ Only in traditional Chinese do we see a corresponding morpheme *ren* ‘man’ that are used as an impersonal subject. In Mandarin, the morpheme *ren* should be reduplicated into *renren* ‘man man’ in order to acquire a generic meaning.

some general propositions. For example:

(60) \emptyset o²⁴ ho⁴⁵³ ɬo⁴² niŋ²⁴, \emptyset o²⁴ kai²⁴ ɬo⁴² li⁴
(one) learn good three year (one) learn bad three day

‘It is harder to be a good person than bad one.’

Lit. ‘One needs three years to learn to be good while only three days
to be bad.’

(61) phuai²⁴ kau-kau⁴, \emptyset ɬia⁴ lau-lau⁴
skin thick (one) eat old

‘One lives longer if he is shameless.’

Lit. ‘if one’s skin is thick, (he) will live longer.’

(62) naŋ²⁴ phe²⁴ ɬeŋ-na⁴² ti²¹ theŋ-kui⁴ e.
man will how BE destined PRT

‘One will be destined.’

(Puxian)

In addition, 1st person inclusive na⁴² followed by the empathic naŋ²¹ (in low tone) can sometimes be used generically.

(63) na⁴² naŋ²¹ phe²⁴ ɬeŋ-na⁴² ti²¹ theŋ-kui⁴ e.
1pl.incl. EMPH will how BE destined PRT

‘We are destined’

Although both *naŋ*²⁴ ‘man’, e.g. (62) and *na*⁴² *naŋ*²¹ ‘we_{incl.}’, e.g. (63) are generic in the above sentences, the former seems to be more common than the latter. This is because *na*⁴², as a personal pronoun, is mostly referential and it only becomes generic because of the morpheme *naŋ*²¹, which, apart from being empathic, is a strong *kind* or *genus* suffix for nominals (e.g. *tha-tsy*²¹⁻ *naŋ*²¹ ‘learner’, *kuo fia*⁴⁻ *naŋ*²¹ ‘beggar’). Thus *na*⁴² *naŋ*²¹ is also associated with generic meanings, though this is less natural than *naŋ*²⁴.

In comparison to independent pronominals with generic meanings, there is one type of generic NP consisting of a plural pronominal and a generic nominal appearing in an appositive structure, as in (64).

(64) *ylu*⁴ *thoŋ-oŋ*⁴ *ni*¹¹ *na*²¹ *na*⁴² *te*⁴⁵³ *kiu*²⁴ *naŋ*²⁴.

universe in, not only 1pl.incl. earth man

‘We are not alone in the universe.’

(Lit. ‘We, earthmen, are not the only in universe.’)

The sentence (also an inverted construction) is generic but it is not one of the pronominal impersonals, because of the involvement of the generic nominal *te*⁴⁵³ *kiu*²⁴ *naŋ*²⁴ ‘earthmen’ that contributes mainly to the overall generic reading of the 1pl *na*⁴².

2.6.2. Pronominal impersonals with *non-referential indefinite* reference

Pronominal impersonals in this category denote groups of indiscriminate human referents in a given situation, similar to *anyone* or *anybody* in English. Different from generic impersonals, they correlate significantly with non-assertive contexts (e.g. negative, conditional, hypothetical, etc.) as well as with speech act verbs in reported

structures. Thus they have a slightly circumscribed range of reference in contrast to the more universal reference by generic impersonals. The group of pronominals in this domain is found to be zero forms, *naŋ*²⁴, 1st person inclusive + EMPH. *na*⁴² *naŋ*²¹, 2nd person singular, *ty*²¹, 3rd person singular + EMPH *i*⁵³³ *naŋ*²¹ and reflexive pronoun *kai*⁴². Here are some relevant examples.

zero forms

(65) \emptyset_i *pho*²⁴ *tshij*²⁴, \emptyset_i *mo*²¹ *phaŋ*²¹ *to*⁴.

no money, hard do thing

‘If (you) have no money, (you) can do nothing.’

***naŋ*²⁴**

(66) *naŋ*_i²⁴ *na*²¹ *phe*²¹ *kε*²¹ *phoŋ*⁴ *thiau*²⁴, \emptyset_i *na*²¹ *e*⁴ *li*¹¹

man if will PASS hit ASP, then can die

‘If one is hit, (he) is sure to die.’

1st person inclusive + EMPH. *na*⁴² *naŋ*²¹

(67) *ŋtsho*²¹ *na*⁴² *naŋ*²¹ *naŋ*²⁴ *yøŋ*¹¹ *kaie*⁴

therefore 1pl.incl. EMPH not pamper child

‘Therefore, we should not pamper (our) children.’

2nd person singular, *ty*²¹

(68) *tsiu*⁴ *ty*²¹ *e*⁴ *tena*²¹ *kiau*²¹, *di*⁴ *pho*⁴² *liua*¹¹

regardless 2sg will how count, BE not working

‘No matter how you calculate, it won’t work.’

3rd person singular + EMPH *i*⁵³³ *naŋ*²¹

(69) *i*⁵³³ *naŋ*²¹ *kɛ*²¹ *laulya*⁴² *ko*²¹, *dake*¹¹ *naŋ*²⁴ *di*⁴ *huŋ*⁴ *ʃuo*¹¹ *a*⁴ *po*²¹

3sg EMPH PASS snake bite every man BE use rope to tie

‘Anyone who is bitten by snake, use a rope to tie (the wound).’

It is necessary to point out that Puxian always use the 2nd person singular *ty*²¹ as a means of impersonalization without resorting to 2nd person plural, which is also the case in many European languages (Siewierska 2004: 212). The singular form typically signifies that ‘the speaker is included among the set of referents’ and ‘the emphasis is on the addressee’ (Siewierska *ibid.*). Nevertheless, the impersonal uses of singular *ty*²¹ in Puxian are related to another factor as well, namely, the unique number markings or arguably the lack of it in Puxian. In fact, the majority of 2nd person plurals in Puxian are used in appositive or determiner-like constructions instead of being an independent subject pronoun (see Figure 4).

Another point worth mentioning is that the impersonal subjects in (67) and (69), viz. *na*⁴² *naŋ*²¹ ‘we’ and *i*⁵³³ *naŋ*²¹ ‘they’ always require the presence of the emphatic *naŋ*²¹, without which the two person forms are only personal and cannot function in non-assertive contexts.

In addition to regular person forms, the reflexive marker *kai*⁴² is also seen as belonging to this category. For example:

(70) *kai*_i⁴² *na*²¹ *po*¹¹ *ai-li*⁴, *ø*_i *ti*⁴ *naŋ*²⁴ *iau*²¹ *kɛ*²¹ *pe-naŋ*¹¹.

REFL. if not love, BE not give to others

‘If you dont like(it), (you) shouldn’t give (it) to others.’

we will see that the impersonal *kai*⁴² is also a way of marking empathic point of view, as the speaker identifies himself with the participant.

Apart from the above non-assertive contexts of *kai*⁴² and other pronominals, there are the reported structures where 3rd person singular *i*⁵³³ and zero forms are used with the speech act verb *kɔŋ*²⁴ ‘say’ denoting a generalized narrative source or certain acknowledged wisdom. For example,

(73) *tha*⁴² *∅* *thi*⁴ *a*²¹ *kɔŋ*²⁴ *kɔŋ*²⁴ *tse*⁴ *ɬen-niu*¹¹ *tielou*²¹ *e*⁴ *kiŋ*²¹
 then *BE PRT say say this Xianyou soil BE poor*
 ‘Then (they) said Xianyou is not a fertile land.’

(74) *i*⁵³³ *kɔŋ*²⁴ *kɔŋ*²⁴ *ɬia*⁴ *thiŋ*¹¹ *e*⁴ *huo*⁴²
3sg say say eat sweet BE good
 ‘They say that eating sweet is good.’ (Puxian)

It is interesting to see that *kɔŋ*²⁴ ‘say’ in both (73) and (74) are juxtaposed. Following Chappell’s (2006, 2007) discussion of the grammaticalization of SAY verbs in Southern Min³⁸, I will argue that in Puxian the first *kɔŋ*²⁴ is a full lexical ‘report’ verb while the second *kɔŋ*²⁴ is grammaticalized into a quote marker or a complementizer, structurally similar to the English *say that...*³⁹. It should be mentioned that the non-referential readings of the pronominal subjects in the two sentences seem to be dependent on the presence of the second *kɔŋ*²⁴, which, if deleted, results in referential interpretation of

³⁸ According to Chappell (2006, 2007), in Taiwanese Southern Min the complementizer can be directly attached to its related quotative verb, as *kong kong* ‘say that’, which suggests a higher degree of grammaticalization than standard Mandarin that does not have an similar overt complementizer.

³⁹ In other languages, grammaticalization of a ‘say’ verb into a quote maker or complementizer is found in Austronesian languages (Kamer 2002) and Georgian (Harris and Campbell, 1995).

the subjects.

2.6.3. Pronominal impersonals with *referential indefinite* reference

Pronominal impersonals in this category suggest that the speaker may have a particular group of referents in mind but is either unable or unwilling to more specifically identify them. They are typically bound to a specific spatio-temporal setting and mostly appear in the past tense (a few in the present tense). Considerably more pronominals are available in this category (including some plural forms). These are *zero forms*, *naŋ*²⁴ ‘man’, 1st person plural inclusive & exclusive *na*⁴² and *kuoŋ*³², 2nd person plural *tyøŋ*³², 3rd person singular & plural *i*⁵³³ and *yøŋ*³².

zero forms

(75) †uã-leŋ²¹ ø_i u⁴ tsai²⁴ †y¹¹ , ø_i a⁴ u¹¹ tsai²⁴ ou¹¹.
mountani- top have plant potato, too have plant taro
‘They planted potatos and taros in the mountains.’

*naŋ*²⁴

(76) naŋ²⁴ iau²¹ he⁴ thai⁴⁵³ a⁴ , ny⁴ ti⁴ phe²⁴ phe⁴² kui-pha²¹.
Man take there kill PRT, meat BE sell several hundred
‘They killed (the snake) there. The meat will be sold hundreds.’

1st person plural inclusive & exclusive *na*⁴² and *kuoŋ*³²

(77) *na*⁴² *tsiniau*⁴² *ti*⁴ *ɬe-kie-wun*²¹, *i*⁵³³ *hŋnau*²⁴ *ɬe-ko*²¹ *ti*⁴ *ɬepa*¹¹

Ipl.incl. here BE one-Yuan, 3sg there one-CL BE one-hundred.

‘We use one Yuan (coin); they use one-hundred (coins).’

(78) *kuoŋ*³² *tsiu*³*a*²¹ *thø*²⁴ *lo*¹¹.

Ipl.excl. before collect wood

‘We collected fire woods in old times’

(79) *kuoŋ*³² (*naŋ*²⁴) (*ho-tshiã*²¹) *tsho*²¹ *then-ŋøn*⁴

Ipl.excl. (EMPH) (Fuqing) produce oyster seed

‘We (people of Fuqing) produce oyster seeds.’

2nd person plural *tyøŋ*³²

(80) *tyøŋ*_i³² *tse*²¹ *huai-thau*²⁴ *tziau*⁴², *ø*_i *ti*⁴ *ŋ-nai*²¹ *hiu*¹¹.

2pl these age little, BE not know.

‘You are young people and not able to know it.’

3rd person singular & plural *i*⁵³³ and *yøŋ*³²

(81) *i*⁵³³ *li*⁴ *loumin*²¹, *thuo*⁴² *anã*¹¹ *nøɬi*⁴ *ŋnɬi*⁴

3sg BE noodles, like these meat two-pieces

‘They provided noodles, with two pieces of meat(on the plane).’

(82) i⁵³³ phokiã²¹ ti²⁴ ɬiu²¹ tse²¹ kɲn⁴²

3sg passport BE collect here hide.

‘They collected (my) passport and keep it (at the Customs).’

3rd person plural $y\emptyset\eta^{32}$ can occasionally be used impersonally, provided that $y\emptyset\eta^{32}$ is followed by the emphatic $na\eta^{24}$ or there is an immediate context where the referents can be recovered, as in (83) and (84).

(83) $y\emptyset\eta^{32}$ $na\eta^{24}$ u¹¹ $y\emptyset\eta^4$ tshu η^{42} a²¹ pha⁴²

3pl EMPH have use gun to:PAST hit

‘They used gun to kill (the snake).’

(84) $y\emptyset\eta^{32}$ kalou²¹ k η^{24} , tsi²¹ pha η^{24} e⁴ na η^{24} k η^{24}

3pl back say, breed bee MOD man speak

‘They said (this thing) on arrival, those bee keeper said (it).’

2.6.4. Pronominal impersonals with *referential definite* reference

Pronominal impersonals in this category mostly refer to dative subject constructions, as in (85) and (86) discussed in previous sections. The dative-marked subjects are referential and definite, representing one endpoint of the referential range by pronominal impersonals.

(85) kua⁵⁴ / kie⁴⁵³ / kɛ²¹ hua²⁴-i²¹ thua²⁴-kiao⁴²-a⁴.

1sg:DAT / 2sg:DAT / 3sg:DAT rejoice much

‘I/you/he am/are/is very happy.’

(86) tsiŋ²⁴ kie₁⁴⁵³ then⁴² kiao⁴²-a⁴, liao⁴ ø₁ kō ai⁴² gong⁴²

Money 1sg:DAT earn satisfied, and dare again talk

‘You have earned money to satisfaction and ø dare to complain.’

Lit. ‘As to money, you have earned a lot and now (you) dare to complain.’

The reason why these constructions qualify as impersonals is not because they have a non-referential agent/subject but because of a non-canonical subject or a defocused agent, that is, the pronominal subject is phonologically fused with the dative marker *kɛ*²¹ with changed tones.

2.6.5. Pronominal impersonals with *vague* reference

The domain of vagueness typically represents an abstract setting, where an event takes place or an entity is presented. Its maximal non-specificity becomes one endpoint of the referential scale (the other being *referential definite*). In the data, 3rd person singular *i*⁵³³ is used as an expletive subject denoting time or other abstract entities. Two examples mentioned earlier are repeated here.

(87) i⁵³³ tsiu³a²¹ hy²¹ ton²⁴-i⁴ thi²¹ puai²¹ kai²⁴ hon⁴

3sg before that at-the-time BE not liberate

‘It is not liberated at that time.’

(88) i⁵³³ thi²¹ ɬena²¹.

3sg BE how

‘It is like this.’

In addition, zero forms are extensively used as well referring to time, weather, location or a general situation, similar to the English expletives *it* or *there*. For example,

(89) ø ŋou²⁴ liã²¹ lo⁴. (*Time*)

five o'clock PRT.

‘(It) is five o’clock.’

(90) ø luohou²¹ lo⁴. (*Weather*)

rain PRT.

‘(It) is raining.’

(91) ø u²⁴ ɬiaulau²⁴ kɛ²⁴ luan¹¹ luo²¹ lo⁴. (*Location*)

have stone PASS roll down PRT.

‘(There) are stones rolling down.’

(92) ø_i thiau²⁴ ana²¹ tse²¹, ø_i phuo²⁴ phe²⁴ liu²¹ a⁴. (*Situation*)

must how this if not not-work PRT.

‘(It) must be like this or (it) won’t work.’

(93) \emptyset e⁴ ɿ²¹ a⁴ (*Situation*)

will die PRT.

‘(It) is dammed.’

In comparison to *i*⁵³³, zero forms are used with a variety of *vague* meanings that one would expect to feature null expletives. This may be supported by Huang (1987), who argues that existential sentences in Mandarin have an empty ‘expletive’ subject. Partee (1999) also posited that such an empty expletive subject in Mandarin existentials is an ‘indefinite LOC’, i.e. existentially quantifying over locations (or metaphorical ‘locations’).

Although empty expletive subjects (expletive *pro*) are widely attested in pro-drop languages such as Italian and Spanish, their presence in languages such as Puxian, Mandarin, Korean, Japanese, etc. is still subject to controversy. The reason is that null expletives are heavily dependent on the adherence to Chomsky’s (1981, 1982) Extended Projection Principle (EPP), which states that every finite clause should have a syntactic subject in a specific structural position. However, the EPP is a theoretical construct and its relevance for Chinese is disputable. Clearly, there is no overt agreement to predict a locally-recoverable NP. If we are to admit that zeros in the above are null expletives, we are about to enter an area of debate with respect to whether Chinese languages are pro-drop, topic drop or both and to what extent *pro* is related to agreement features.

In addition to the above, null subjects in some weather constructions can be filled with a nominal agent depending on the speaker’s perception in a given context.

(94) \emptyset luo^{21} hou^{453} lo^4
fall rain PRT

‘(It) is raining.’

(95) $thi\eta^{24}$ phe^{24} luo^{21} hou^{453} lo^4
sky will fall rain PRT

‘It will rain.’

(Lit. ‘Sky will descend rain.’)

(96) $l\emptyset-\eta^{21}$ ko^{42} lo^4
Thunder-man hit PRT.

‘It thunders.’

(Lit: The thunder-man is hitting.)

(Puxian)

We see that (94) is a typical weather construction in Chinese, which does not require an overt NP as subject and if translated, mostly patterns like the expletive *it* in English,. In (95), the subject position is filled by a nominal $thi\eta^{24}$ ‘sky’, acting like a locative subject. Nonetheless, in (96), there appears a highly volitional agent $l\emptyset-\eta^{21}$ ‘thunder-man’ as subject, which is probably due to the fact that thundering is such an awe-inspiring phenomenon that an animate agent is perceived appropriate in that context. All the examples show that it would be unnecessary to claim that all null subject positions in the *vague* settings are for expletives, for they may be filled by a nominal as well. This is at least true for weather constructions.

Therefore, I would not insist that zero forms are null expletives or the covert

versions of English *there* or *it* but I will term them *unexpressed vague subjects*, functionally similar to expletives in other languages.

Now to sum up my discussion, the characteristics of pronominal forms in Puxian (both personal and impersonal) with respect to their semantic properties are shown in Table 9, where the number of instances attested in the data is provided. These pronominals include zero forms, the three persons, the impersonal pronoun *naŋ*²⁴ and the reflexive marker *kai*⁴², which correlate with different semantic domains: *vague*, *generic*, *non-referential indefinite*, *referential indefinite*, and *referential definite*.

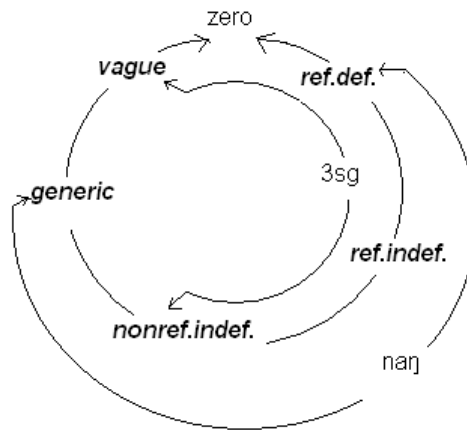
Table 9 Association between the pronominal forms and meanings

	<i>Vague</i>	<i>Generic</i>	<i>Non-ref. indef.</i>		<i>Ref. indef.</i>	<i>Ref. def</i>	
			<i>Report</i>	<i>non-assertive</i>		<i>Personal</i>	<i>Oblique-sub.</i>
<i>zeros</i>	22	11	4	66	66	398	/
<i>naŋ</i> ²⁴	/	2	/	12	4	34	/
<i>i</i> ⁵³³	7		24		36	658	1
<i>na</i> ⁴² <i>naŋ</i> ²¹	/	2	/	2	/	0	/
<i>ty</i> ²¹				48		232	2
<i>i</i> ⁵³³ <i>naŋ</i> ²⁴				18		48	
<i>kai</i> ⁴²	/	/	/	8	/	112	/
<i>na</i> ⁴²	/	/	/	/	18	130	/
<i>kuoŋ</i> ³²					28	28	
<i>yøŋ</i> ³²	/	/	/	/	8	2	/
<i>tyøŋ</i> ³²	/	/	/	/	0	6	
<i>kua</i> ⁵⁴	/	/	/	/	/	1270	0

We see from Table 9 that while the pronominal forms spread over every semantic category, they do concentrate on those domains close to *ref.def.*. It is fairly self-explanatory that, due to the deictic nature of these pronouns, they are more likely to be used in referential environments. We also see that, with the increasing degree of non-specificity, some pronominals have to be morphologically marked (viz. being attached with an emphatic marker, *naŋ*²¹, while others are simply phased out in a more unspecific domain (e.g. in the case of 1sg *kua*²¹ and 3pl *yøŋ*³²).

Givón (1984: 387), in his discussion of the definiteness hierarchy, posits that although languages have a variety of morpho-syntactic devices to code (in)definiteness, they tend to have two adjacent semantic domains (on his hierarchical scale) coded in the same way. He also argues that there is a possibility of re-formulating the linear scale as a ‘helical hoop’ so that *generic* and *ref.def.* are treated as adjacent ‘meta-levels’ that share the same coding devices. In the previous discussion, I have shown that, as far as pronominals are concerned, there is a possibility of having a new parameter, i.e. *vagueness*, which denotes maximal abstractness and is therefore believed to be the new endpoint of the (in)definiteness scale rather than *generic*, as it is often thought to be the case for nominals (with physical entities). Therefore, in terms of the contiguous coding possibilities, we find that 3sg *i*⁵³³ and *naŋ*²⁴ are able to code at least four consecutive semantic domains while *zero*, noticeably, can code all the five domains, the details of which are shown in Figure 5.

Figure 5 Semantic domains coded by i^{533} , $naŋ^{24}$ and zero



2.7. Further thoughts on pronominal impersonals in Puxian

The semantic characterization of pronominal impersonals in Puxian has revealed some interesting findings. In this section, I will discuss these findings and provide some further thoughts on their typological significance.

2.7.1. The semantic range of zero forms

One important feature of Puxian is that it permits extensive uses of zero forms, which is also a common feature of other Sinitic languages. In my data, I have retrieved about 560 instances of zero subjects. Among these zero subjects, about 30% are impersonal while the remaining 70% are either indexical or anaphoric (thus personal).

There has been little discussion in the literature on the impersonal uses of zero forms (i.e. non-anaphoric zeros). By contrast, anaphoric zeros, recoverable at the sentential or discourse level, have received an enormous amount of attention. For example, in the generative literature, zero forms, or in the theory-specific terms *pro* or *PRO*, have been studied mainly in the areas of syntactic constraints, e.g. co-indexing

(Chomsky 1980, Reinhart & Reuland 1993, etc.). The exact semantic import of them has remained under-investigated (Ovalle 2001). In the well known cognitive-discourse theory (e.g. the accessibility theory), zero forms are associated with the highest level of accessibility and are rather treated as being anaphoric to the most salient entity in the previous discourse. There has been little discussion of non-anaphoric zeros as well. For instance, Ariel (1991) noticed that some zero forms in Chinese can refer ‘extra-textually’ but she did not explain these extra-textual zeros in detail. Instead, she argued that ‘they too are heavily restricted – to highly salient objects and from the discourse setting, to topics, speaker or addressee’. In other words, zeros are viewed as being referential in discourse- related frameworks. My investigation of zeros in Puxian on the other hand, suggests that impersonal zeros are not so much motivated by the most salient entity ever introduced as by the speaker’s referential intent, with which he is either unable or unwilling to specifically identify the referents for the hearer. Consider, for instance, the following discourse in sequence of (a –e),

(97) a. Aŋ-thi⁴² na²¹ e⁴ tshao²⁴ ki⁵³³.

brother only can play chess

‘Brother X_i can only play chess.’

b. ø_i t̄emui²¹ thi⁴ phiau²⁴-li²¹.

what BE not-able-to-do

‘(He_i) can do nothing else.’

c. ta⁴ t̄e²⁴ kaŋ¹¹ a⁴, kɛ²⁴ ø_i iuã²⁴ t̄ephamaŋ²¹

then one day PRT, DAT win one million

‘The one day, (he_i) won one million (by playing chess).’

e. ŋtsho²¹ ø_j kɔŋ²¹ ø_k t̄o²¹ thou²⁴ tsin¹¹ ø_i e⁴ tso²⁴ kin²¹

thus say a way skillfull can produce gold

‘They say being good at one thing is gold.’

Lit. ‘Therefore (they) say that (one) should be good at one thing and (there) is gold.’)

The discourse (97) is an excerpt from a speaker’s narrative of the story of *Aŋ-thi*⁴² ‘brother X’. We see that the two zeros ‘ø_i’ in (b) and (c) are intersentential anaphora, referring back to *Aŋ-thi*⁴² ‘Brother X’, which is a salient entity (i.e. subject) in the previous discourse. However, the three zeros in (e) do not follow the same referential pattern of the two zeros in the previous discourse, for all of them have impersonal uses. For instance, ø_j is non-referential indefinite in that it denotes a generalized source of wisdom in the reported structure ø_j kɔŋ²¹ ‘they say’; ø_k is generic, referring to people in general of the proverbial sentence; zero ø_i is only ‘vague’, because it refers to a situation or proposition, e.g. ‘being good at one thing’. Thus all the zeros in (e) are not subject to any anaphoric patterns and it is unnecessary or impossible for the speaker to lexicalize their nominal referents specifically.

Besides, for all the discussion of zeros, it is necessary then to distinguish three different types: *deictic*, *anaphoric* and *non-anaphoric* (see also Hofherr 2006). Non-anaphoric or impersonal zeros demonstrate the most comprehensive semantic features. My data of Puxian has shown that as many as 30% of the non-anaphoric zeros

take up four out of the five semantic domains. The semantic features of zeros in Puxian are listed in Table 10.

Table 10 Semantic domains and the related features of Puxian zeros

Referentiality	Vague	Generic	Non-ref. indef.		Ref .indef.	Ref. def.
			reporting	non-assertive		
zero forms	4% (22)	2% (11)	0.7% (4)	11% (66)	11% (66)	71% (398)
referents		Speaker, hearer, 3 rd party	3 rd party	Speaker, hearer, 3 rd party	3 rd party	speaker, hearer, 3 rd party
clausal contexts		proverbial sentences	reported structures	non-assertive sentences	assertive	personal sentences.

We see that zeros in Puxian have consistent engagement with the five semantic domains, though most of them concentrate on the domain of *ref. def.* Yet it should also be pointed out that the current study is limited to non-anaphoric zeros in subject positions. There are an estimated 40% of the various zero forms in non-subject positions, e.g. being a demoted agent in passives (i.e. being phonologically null vs. salient). Further research is necessary in order to have a more complete picture of them.

2.7.2. Impersonal uses of *naŋ*²⁴ as an indefinite pronoun

In the previous sections, *naŋ*²⁴ is viewed as an impersonal pronoun functioning in the

three semantic domains: *generic*, *non-ref.indef.* and *ref.indef.* Let's recall some of the examples discussed before.

(98) $naŋ^{24}$ phe^{24} $ɬeŋ-na^{42}$ ti^{21} $theŋ-kui^4$ e .

man will how BE destined PRT

‘One will be destined.’

(99) $naŋ^{24}$ yau^{21} he^4 tia^{453} a^4 , $nø^4$ ti^4 phe^{24} phe^{42} $kuipha^{21}$.

man take there kill PRT, meat BE sell several hundred

‘They killed (the snake) there. The meat will sell hundreds.’

(100) i^{533} $phia^{42}$ $naŋ^{24}$ ti^4 bhe^{24} e^{11} kai^{42} $leŋ^{21}$.

3sg compared to man BE will can strong.

‘He always wants to be stronger than others.’

In the three sentences above, $naŋ^{24}$ shows some pronominal properties. For example, it cannot take modifiers such as adjectives, deictics, genitives, articles or relative clauses; it is an independent pronominal form, available for the most syntactic functions such as subject⁴⁰ as in (98) and (99) or prepositional object as in (100) (see also Siewierska 2004: 40-42).

In fact, it is not uncommon for languages to have words like *man*, *people* or other generic nouns such as *thing* or *place* as sources for indefinite pronouns (Haspelmath 1997: 26, Heine and Kuteva 2003: 232-233)⁴¹. It is therefore believed that $naŋ^{24}$ in

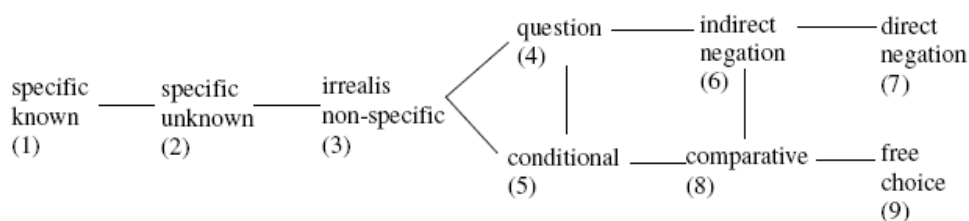
⁴⁰ $naŋ^{24}$ as a personal subject can refer to 1st person singular and 3rd person singular but not to 2nd person.

⁴¹ Egerland (2003) proposes a grammaticalization path for impersonal pronouns: Lexical DP > Impersonal generic pronoun > Impersonal arbitrary (i.e. specific) pronoun > referential pronoun. The path he proposes is consistent with the semantic domains found with $naŋ^{24}$ in Puxian.

those impersonal contexts is an indefinite pronoun, derived from its lexical origin of *man* or *people*.

If *naŋ*²⁴ is an indefinite pronoun in impersonal contexts, then what about the other indefinite functions of *naŋ*²⁴ apart from the impersonal ones? In other words, to what extent do the functions of impersonal *naŋ*²⁴ overlap with those of the indefinite *naŋ*²⁴? In order to find out the answer, it would be better to turn to the well-known semantic map for indefinite pronouns developed by Haspelmath (1997a). According to Haspelmath's methodology, there are nine functions (or meanings) possible for indefinite pronouns. These functions are arranged in a particular spatial graph of distances or connections based on their similarities and grammaticalization pathways (see also Zwarts 2008). The spatial representation is shown in Figure 6.

Figure 6 Semantic Map of indefinite pronouns



In Puxian, *naŋ*²⁴ is truly polyfunctional, for it can be an intensifier, a determiner, a plural marker or a *kind* or *genus* suffix. Yet, as an indefinite pronoun, it covers at least seven functions in the semantic map. To illustrate, I will provide Puxian sentences of *naŋ*²⁴ with the nine indefinite functions, as in (101)-(109), corresponding to the examples of the relevant semantic functions of indefinite subjects in English.

Specific, known

(101) a. Somebody called just now, guess who! (English)

b. tsiku²¹ u'ŋ²⁴ tshuai⁴² ty²¹. ty²¹ tsai²⁴ ti⁴ dian²⁴

Just-now, have:man look 2sg 2sg know BE who

‘Somebody called you just now. You know who?’

(Puxian)

Specific, unknown

(102) a. I know there must be somebody here.

(English)

b. naŋ²⁴ yau²¹ he⁴ tia⁴⁵³ a⁴, nø⁴ ti⁴ phe²⁴ phe⁴² kuipha²¹

man take there kill PRT, meat BE sell several hundred

‘They killed (the snake) there. The meat will sell hundreds.’

(Puxian)

Non-specific, irrealis

(103) a. Please talk to someone else. (English)

b. naŋ²⁴ tha²⁴kaŋ²¹ tia²⁴ nouli²¹

man everyday must work-hard

‘One must work hard everyday.’

c. nan²⁴ phe²⁴ ɬeŋ-na⁴² ti²¹ theŋ-kui⁴ e.
man will how BE destined PRT
 ‘One will be destined.’

d. nan_i²⁴ na²¹ phe²¹ kɛ²¹ phon⁴ thiau²⁴, ø_i na²¹ e⁴ ɬi¹¹
man if will PASS hit ASP, then can die
 ‘If one is hit, (he) is sure to die.’

(Puxian)

Polar question

(104) a. Can somebody help? (English)

b. U'ŋ²⁴ kɛ²¹ ty²¹ kɔŋ²⁴ pho⁴
have: man DAT 2sg speak not
 ‘Did someone talk to you(about this)?’

(Puxian)

Conditional protasis

(105) a. If somebody came, tell me immediately. (English)

b. na²¹ u'ŋ²⁴ li⁴, ti⁴ kɛ²⁴ kua²¹ kɔŋ²⁴
if have:man come, BE DAT 1sg speak
 ‘If someone come, speak to me.’

c. nan_i²⁴ na²¹ phe²¹ kɛ²¹ phon⁴ thiau²⁴, ø_i na²¹ e⁴ ɬi¹¹
man if will PASS hit ASP, then can die
 ‘If one is hit, (he) is sure to die.’

(Puxian)

Comparison

(106) a. He is better than anybody (else).

(English)

b. i⁵³³ phiã⁴² naŋ²⁴ ti⁴ bhe²⁴ e¹¹ kai⁴²leŋ²¹.

3sg compared to man BE will can strong.

‘He always wants to be stronger than others.’

(Puxian)

Direct negation

(107) a. Nobody knows the answer.

(English)

b. pho'ŋ²⁴ e⁴ tsai²¹ tha²⁴ an⁴

not:man can know answer

‘Nobody can know the answer.’

(Puxian)

Indirect negation

(108) a. I don't think that anybody knows the answer.

(English)

b. kua²¹ ŋ¹¹ nai⁴² u'ng²⁴ phe²¹ li⁴

Isg not know have:man will come

‘I don't know there is someone will come.’

(Puxian)

Free choice

(109) a. Anybody can come in.

(English)

b. hŋ-naŋ²⁴ ti⁴ e⁴ li²⁴ ou²¹ e⁴

anyman be can come PRT.

‘Anybody can come in.’

(Puxian)

We see from the nine indefinite contexts, *naŋ*²⁴ does not always appear as an independent form in subject position, suggesting that impersonal uses of *naŋ*²⁴ do not altogether coincide with its indefinite functions. For the function *comparison*, *naŋ*²⁴ is simply a prepositional object rather than the subject, as in (106b); for the other functions such as *specific known*, *question* and *indirect negation*, an existential operator *u* ‘have’ is required before *naŋ*²⁴, which results in an contracted form of *u’ny* ‘have man’, as in (101b, 104b and 108b). *naŋ*²⁴ in these contexts are not viewed as an independent form used as subject. And in terms of the functions *direct negation* and *free choice* (*any-series*), *naŋ*²⁴ is either prefixed with the negative marker *pho* ‘not’ or combined with the morpheme *hŋ* ‘any’ to form two new indefinite pronouns: *pho’ny* ‘nobody’ and *hŋ’naŋ* ‘anybody’⁴². Therefore, all the six indefinite functions mentioned are not impersonal uses for *naŋ*²⁴ as an independent form.

The remaining three functions *specific unknown*, *non-specific irrealis* or *condition* are supposed to be linked to impersonal *naŋ*²⁴, which, in turn, correlate with the impersonal contexts of *ref. indef.*, *non-ref. indef.* and *generic*. As far as I have been able

⁴²Just like English *nobody* and *anybody*, which are considered two words and it is impossible to insert any morpheme between *no/any* and *body* to separate them, it is also the case of *pho* and ‘*ny* ‘nobody’ and *hŋ* and ‘*naŋ* ‘anybody’ (see also Haspelmath 1997)

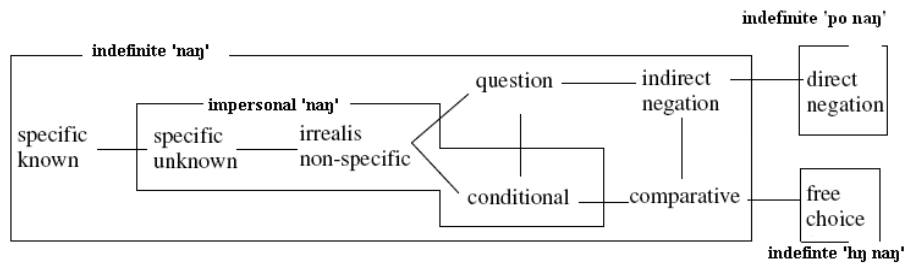
to determine, the first impersonal context, *ref. indef.* roughly corresponds to the function *specific, unknown*, as in (102b) and *non-ref. indef.* and *generic* should be subsumed under the function of *non-specific, irrealis* or *conditional*, as in (103b, c, d & 105c).

The crucial concept here is the notion of *non-specificity*. According to Haspelmath (1997a: 119), a *non-specific* phrase is a phrase which has a referent only in a dependent irrealis or distributive space. Thus an *irrealis, non-specific* space, according to him, should at least refer to the unknown or indefinite conceptual domain set up by the future tense, modal verbs (e.g. *want, can, must*) or even the imperative. That is, the event described is in a conceptual stage and hasn't really happened yet. For example, *someone* in the sentence *she will marry someone* is unspecific and ambiguous (i.e. irrealis), while it is specific or referential (i.e. specific known or unknown to the speaker) in another sentence like *she married someone*.

In fact, the impersonal *naŋ*²⁴ constructions discussed in this chapter, be they *generic* or *non-referential indefinite*, are always associated with some non-assertive, futuristic or hypothetical clausal environments, which corresponds to the function of *non-specific, irrealis*. In addition, considering some *naŋ*²⁴ impersonals are frequently associated with *if-conditionals*⁴³, as in (103 d & 105c), it is necessary to have *condition* as part of the functions of impersonal *naŋ*²⁴. A graphical representation of the relationship between the indefinite *naŋ*²⁴ and the impersonal *naŋ*²⁴ is shown in Figure 7.

⁴³ But not all if-conditionals with *naŋ*²⁴ are impersonal, as in (93c).

Figure 7 Semantic map of *nay*²⁴



We see from Figure 7 that the impersonal *nay*²⁴, delimited by its own structural and semantic properties (e.g. an independent form or a human agentive subject) is different from the indefinite *nay*²⁴ in that the former is a subcategory of the latter, having only three functions *specific unknown*, *irrealis non-specific* and *condition*. As far as I know, there has been little discussion elaborating the semantic differences between indefinite pronouns and impersonal pronouns. Future research may be needed to obtain knowledge from other languages e.g. German *man*, French *on*, etc.

2.7.3. The typology of 3rd IMPs

3rd person impersonal constructions (3rd IMPs) is a subgroup of pronominal impersonals (see e.g. Creissels 2007, Malchukov 2008, Siewierska 2008). They typically have a non-referential human subject, which crucially exclude the speaker and hearer as potential referents. Morphologically, the 3rd person subject can be a full form (e.g. *they*), a reduced form (e.g. a person clitic) or even a zero form. The impersonal use of 3rd person forms is characteristic especially of 3pl forms. This is the case in English and many other European and non-European languages. There are also languages in which the third person is neutral with respect to number. Puxian may be considered one of these. For instance, the 3rd person plural subject may be expressed by the 3rd person

singular i^{533} instead of 3rd person plural $y\theta\eta^{32}$ (see also Section 4). Therefore, as in English and other languages with 3pl forms, the relevant constructions would be more aptly termed ‘3pl IMPs’. Yet for Puxian and other related languages without genuine 3pl forms, it is better to use the term 3rd IMPs for the relevant cases.

From the referential point of view, 3rd IMPs in Puxian only pertain to the domain *referential indefinite* or part of *non-referential indefinite* (i.e. reported structures), because of their restrictive referential nature (e.g. +human, +non-referential, +plural, -speaker, -hearer, etc.). It is obvious, therefore, that 3rd IMPs will be inconsistent with the domain that lacks human referents (e.g. *vague*) or denotes a human referent but involves the speaker and hearer (e.g. *generic* and *non-referential indefinite*). As to the *referential definite*, it is also ruled out simply because it has a personal, rather than impersonal subject. Hofherr (2003, 2006) proposes a five-way typology on the semantics of 3plMPs (i.e. 3pl arbitrary readings):

(110) a. *universal*, e.g.

In Spain, they speak Spanish.

b. *corporate*, e.g.

They collect one’s passport for a new visa.

c. *vague existential*, e.g.

They’ve found his bike in the back of a barn.

d. *inferred existential*, e.g.

They must have been eating here.

c. *specific existential*, e.g.

They’re calling you.

According to her typology, the identification of 3pl referents is largely dependent upon the formal or semantic properties of the sentence, e.g. with respect to time, location or even the meanings of predicate verbs. For example, in (a), the universal reading of 3pl *they* refers to all Spanish people, which is primarily due to the locative phrase *in Spain*; for the corporate reading of (b), the 3pl *they* refers to a designated group of people, which is much related to the verbal association of *collect*, a distinctive move from certain authority, services, companies, etc.; by contrast, the vague, inferred and specific readings lack overt referent identification features, they either denote a certain group of people doing joint activities as in (c) or need a situational inference between the speaker and the hearer as in (d) and (e) (see also Siewierska 2007, 2008).

In order to find out whether Hofherr's typology is able to accommodate a non-European language like Puxian, I will recall some 3rd IMPs discussed in the previous sections and group them according to the typology.

Universal

(111) i⁵³³ hŋ-nau²⁴ ti⁴ ɬai²¹ oŋueŋya²¹

3sg there BE use coins

'They use coins there (Taiwan).'

Corporate

(112) i⁵³³ li⁴ loumin²¹, thuo⁴² anã¹¹ nɔɬi⁴ ŋnɬi⁴

3sg BE noodles, like these meat two-pieces

'They provided noodles, with two pieces of meat(on the plane).'

(113) i^{533} phokiã²¹ ti²⁴ ɿiu²¹ tse²¹ kɿn⁴²

3sg passport BE collect here hide.

‘They collected (my) passport and keep it (at the customs).’

Vague existential

(114) nan²⁴ kɔliã²¹ kie⁴⁵³ tshuai²¹ tiau²⁴ lo⁴

man bike DAT:2sg seek ASP. PRT.

‘They found the bike for you.’

Inferred existential

(115) u’nɿ²⁴ tse²¹ phu²⁴ ɿy⁵³³.

Have: man here fry potato

‘They (someone) were frying potatoes here.’

Specific existential

(116) u’nɿ²⁴ he²¹ ko²¹ mui²⁴.

have: man there knock door

‘They (someone)’re knocking at the door.’

We see that the universal and corporate 3rd IMPs have a 3rd person singular subject i^{533} (denoting plural referents as well). For the vague, inferred and specific impersonals, the impersonal pronoun nan^{24} has to be applied, either as a free form subject in (124) or as phonologically fused form with the existential operator u ‘have’ as in (125) and (126).

Therefore it seems there is a dividing line between *universal/corporate* and *vague/inferred/specific*, in terms of 3pl coding devices, i.e. i^{533} vs. nan^{24} in the case of

Puxian. Siewierska (2008), in her elaborate examination on Hofherr's typology, points out that the universal and corporate impersonals 'provide a relatively clear indication of the referents of the subject by identifying the collective to which the referent belongs' while the vague, inferential and specific existentials may 'provide no or virtually no information about the referents of the subject either relating to the collective or the individuals involved'. It is therefore reasonable to believe that this difference in referent identification has led to different coding possibilities (e.g. syntactic or morphological ones).

Furthermore, Siewierska also finds that while all the nine languages in her data have universal, corporate and vague 3pl IMPs(of European languages), the specific functions are at best marginal in English, Dutch, French, German and Polish, as are also the inferred in English, French and German.

Indeed, what she has found on the status of the specific and inferred impersonals may be applicable to Puxian as well. For instance, 3rd IMPs are not so adapted to the specific and inferred readings that the existential *u*- constructions have to be used, as in (125) and (126)⁴⁴. Her findings, together with the Puxian evidence, may have called into question the status of specific and inferred as separate types of 3rd IMPs.

Yet, both Hofherr's five-way readings and Siewierska's later examination have greatly enhanced our knowledge on pronominal reference, especially on the most important semantic domain, namely, referential indefinite.

2.8. Concluding remarks

Benefiting from the existing framework of impersonality, the investigation of

⁴⁴ In fact, some languages do not clearly distinguish *inferred existential* and *specific existential*. In the case of Puxian, the same *u'ny*²⁴ construction is used. Whether there is any justification for positing distinct constructions is not clear. The basic distinction between the two, specific time reference, is only contextual.

pronominal impersonals has arrived at a number of impersonal constructions that are characteristic of Puxian. These impersonals are the pronominalized subject constructions, null subject constructions, expletive subject constructions, dative-marked subject constructions, etc. In order to unify them from a functional point of view, I resort to the five semantic domains *vague*, *generic*, *non-referential indefinite*, *referential indefinite* and *referential definite*. The results of characterization have shown that there is a correlation between pronominal impersonals and their impersonal reference. For example, most pronominals concentrate on the relatively referential domains, e.g. *referential indefinite* and with the increasing degree of non-referentiality, the availability of them decreases. Besides, there are a few pronominals, e.g. *zero*, having a consistent engagement with most of the semantic domains, while many others, e.g. 3pl, are only used in some limited domains. In addition, the investigation also reveals that the impersonal pronoun *naŋ*²⁴ ‘man’ shares three consecutive functions on the semantic map with the indefinite *naŋ*²⁴, which is different from what was assumed in the past that there are no differences between them. The data also shows personal pronouns in Puxian are likely to be neutral for number because almost all singular person forms have plural meanings, while the so-called plural forms are rather restrictive in independent person uses. The unique number feature also enriches the typology of 3pl IMPs found across European languages, which, in the face of actual variation by number-neutral languages, is more aptly termed 3rd IMPs than 3pl IMPs.

Chapter 3 - Reflexives in Puxian

3.1. Introduction

Linguistic literature in the past rarely offers a systematic study on reflexive markers across Sinitic languages. Most studies available so far have focused primarily on Mandarin *ziji* ‘self’ and are overwhelmingly influenced by the generative tradition, where syntactic environments of binding or anaphoricity are the main concerns. Although there are merits with the generative approaches, there is no denying that reflexives forms have more important functions than just anaphoricity, as widely observed in both the typological and grammaticalization approaches to reflexives in different languages.

In view of this, I will not follow the widely-used generative approach in Chinese linguistics (yet not resisting them completely) and choose instead the functional-typological framework (Faltz 1985, Siewierska 1984, König et al. 2000, Lehmann 2002, Haspelmath 2008, etc). My discussion will be structured as follows. In section 3.2, I will briefly discuss the influential generativist approach to Mandarin *ziji* by C. –T. J. Huang, yet from a critical point of view. The next section will then turn to the phenomena of *anaphor*, viz. the reflexive markers *kai*⁴²-*kai*¹¹ or (*x-*) *kai*⁴² as direct object of transitive verbs. In section 3.4, the group of reflexive verbs, consisting of a transitive verb and the reflexive morpheme *kai*⁵³³- will be investigated in terms of a series of syntactic and semantic properties. In section 3.5, I will focus on the issue of intensification by different reflexive markers. Section 3.6 is devoted to the discussion of viewpoint markings among reflexives, concerning the known topics of long-distance binding, logophoricity and empathy. A generalized grammaticalization perspective to

the reflexives in Puxian will be provided in section 3.7, where *kai*⁴², from its lexical source to more grammaticalized functions will be scrutinized and compared. Some concluding remarks will be offered in the final section.

3.2. C.-T. J. Huang's syntactic approach to Mandarin *ziji*

Since C. -T. J. Huang (1982), studies on Chinese reflexives have been dominated by Chomsky's (1981, 1986) binding theory (BT), seeking a syntactic characterization of *ziji* with respect to its antecedents and binding domains. Following the generative tradition, Huang (ibid.) argues that *ziji* in Mandarin is an *anaphor*, subject to binding condition A:

- (i) Binding condition A (BCA) (Chomsky 1981)

An anaphor is bound in its governing category.

- (ii) The Governing Category (quoted in Huang 2001)

α is the governing category for β if and only if α is the minimal category containing β , a governor of β , and a SUBJECT accessible to β .

However, there have been some serious challenges from a number of Chinese linguists, who argues that *ziji* can be bound within/outside the local domain pragmatically (e.g. Y.-H. Huang 1984, 1994). In view of this, Huang et al. (2001) proposes that the reflexive *ziji* can be divided into two types: *anaphor* and the *logophor*, with the governing category as the dividing line. The *anaphor* is claimed to be constrained by BCA, as in (1) and the *logophor* is subject to pragmatic knowledge such

as ‘state of consciousness’ or ‘speakers’ perspective’, as in (2)¹.

(1) Zhāng Sān_i pīpíng-le zìjǐ_i

Zhang san criticize-PERF self

‘Zhang San_i criticized himself_i.’

(2) Zhāng Sān_i shuō [páshǒu tōu-le zìjǐ_i-de píbāo]

Zhang San say [pickpocket steal-Perf self’s purse

Lit. ‘Zhang San_i said that the pickpocket stole self_i’s (his) purse.’

(Mandarin)

Essentially, Huang sticks to formal solutions and proposes an ‘IP-adjunction analyses’ to *ziji* in long-distance binding environments (e.g. some logophoric environments). According to his analyses, the relevant long-distance reflexive (LDR) adjoins an IP at LF by movement so as to form an IP-adjoined position where it is ‘co-indexed with--rather, predicated on--its antecedent’. Under this analysis, the LDR in (3) can have the following LF representation in (4), where it is a coargument with the matrix subject *Zhang San*:

(3) Zhāng Sān_i shuō Lísì yǒu zài pīpíng zìjǐ_i le.

Zhang San say Lisi again at criticize self ASP

‘Zhang San said that Lisi was again criticizing him.’

Lit. ‘Zhang San_i said that Lisi was again criticizing self_i’

¹ An anaphor, in the typical sense, is a DO of a monotransitive verb while a logophor is ‘locally-free’, and refers to an NP outside the immediate clause.

(4) Zhāng Sān shuō [zìjǐ_i [Lísì yǒu zài pīpíng t_i le]]

Zhang San say self Lisi again at criticize (self) ASP

Lit. ‘Zhang San_i said [self_i [Lisi was again criticizing t_i ASP]]

(Mandarin)

However, Huang’s generative approaches to Mandarin *ziji* may be problematic on several accounts. On the one hand, according to Huang et. al (2001), a precondition for the IP-Adjunction analysis is that *ziji* must be *monomorphemic*, for cross-linguistically, ‘languages go to great lengths to avoid simple reflexive instantiations of transitive predicates’ (Schladt 2000, quoted from Reuland 2001). In other words, a LDR is supposed to be simplex or monomorphemic while an anaphor (direct object of transitive predicates) should be complex or polymorphemic (see also Y.-H Huang 1984). It is thus assumed by Huang that Mandarin has the simplex *ziji* ‘self’ and complex *ta ziji* ‘himself’ (i.e. pronoun + *ziji*) to account for long-distance binding and local binding respectively.

Yet as far as Mandarin is concerned, treating *ziji* as a simplex reflexive and *ta ziji* as complex is misleading. First of all, the use of complex *ta ziji* ‘himself’ in standard Mandarin is far less frequent than that of simplex *ziji* ‘self’, as the latter can replace the former in almost all syntactic positions. Based on the corpus of two novels, Liu (2008) shows that *ziji* is 14 times more frequent than *ta ziji* as a locally bound anaphor. Then, such a result is in direct conflict with cross-linguistic patterns observed by Schladt (2000) that languages tend to have complex reflexive forms in the local domain (although one may always argue that Chinese is ‘exceptional’).

On the other hand, historically, it was not until the 17th century AD that the

so-called complex form of the *pronoun + ziji* began to appear (Niu 2000). What we need to ask is how the Chinese had managed to do without the complex form *ta ziji* before the 17th century AD or have there been some other complex forms that are not recognized by Huang?

In fact, many linguists disagree with Huang's basic position that *ziji* is monomorphemic. For example, Hashimoto (1991: 110) argues that Mandarin *ziji* is a combination of two separate morphemes *zi* and *ji*. Chen (1999) also argues that *ziji* is a compound word consisting of a reflexive form *zi* and a generic pronoun *ji*. Even within generative grammar², for instance, Burzio(1991)proposes a principle of *maximal under-specification* for reflexives, which specifies two types of reflexives: (i) those with complete number and gender agreement with the antecedent to achieve accurate reference, such as English *himself, themselves*; (ii) those with no gender or number agreement but morphologically underspecified, e.g. Icelandic *sig*. As for *ziji* in standard Mandarin, it does not fit into either type of *maximal under-specification*. Not only can we find a great number of monomorphemic *zi*- 'self' used as non-argumental reflexive marker, such as *zi-li* 'self-manage', *zi-ai* 'self-respect', etc. but also there are many instances of the other morpheme *ji* 'self' as an argumental reflexive marker, e.g. the famous slogan *hǎo bù lì jǐ* 'never benefit self'³ from Chairman Mao (1939). Although one could argue that separate uses of *zi* and *ji* were an inheritance of ancient Chinese, one cannot prove that they are now obsolete in standard Mandarin. It is therefore believed that *ziji* is bimorphemic.

On the other hand, one common weakness of generative grammar is that most

² From the generative grammar, such as Bouchard (1984) and Reinhart and Reuland (1993), it is believed that a reflexive form (i.e. anaphor) is deficient in its person, number, gender or other thematic features, which causes it to actively 'seek out' an antecedent.

³ According to Dong (2005), in ancient Chinese, both *zi* 自 'self' and *ji* 己 'self' can be used as anaphor of transitive verbs. However, in most cases, *zi* requires a preverbal position while *ji*, a post-verbal one; *ji* can be either short- or long-distance bound while *zi* prefers short-distance binding only; *ji* is often used as a generic subject or an adnominal possessor while *zi* cannot.

versions of the binding conditions do not ‘provide an independent, universally applicable definition of the basic categories’ such as *anaphor* or *pronominal* (Haspelmath 2008+c: 40-63). When an element is classified as an *anaphor*, there are two immediate questions that need to be addressed: (i) why is it an anaphor and (ii) how can its properties be derived? In this respect, Huang provides a considerably loose definition of anaphor as follows⁴.

- (5) a. When it is bound by a co-argument subject.
- b. When it is contained in an argument NP and bound by a coargument of that NP.
- c. When it is contained in an adjunct and locally bound by an argument outside.
- d. When it is locally bound by a sub-commanding NP.
- e. When it is the subject of an embedded clause, or contained in the subject of an embedded clause, and is locally bound in the matrix clause.

The fact that Huang’s definition of anaphor involves *ziji* in adjunct /non-argument positions, as in (5c) & (5d), is significantly different from other definitions in the main generative literature. Although Huang accuses Reinhart & Reuland (1993) and Xue et.al. (1998) of having a narrower definition of anaphor that leads to a wider conception of logophoricity, his own definition seems to suggest that anaphor and logophor is an either-or matter. That is, if a reflexive cannot undergo LF movement, it should then be classified as an anaphor. For example, he argues that ‘(in sub-commanding conditions), the absence of logophoricity effects on sub-command binding thus leads us to the

⁴ According to Huang, *ziji* is a syntactic anaphor (5a – b), subject to BCA and is a logophoric pronoun that is ‘A’ –bound by an operator which is itself anaphoric (5e).

conclusion that it must be a case of anaphoric binding'. Y.-H. Huang (1994) criticizes Huang's definition, which, according to him, will amount to a mere practice for empirical benefits and there would be some serious consequences that no structurally definable domain for an anaphor is available. In view of this, I will not base the study of Puxian reflexives within Huang's generative approach, though it is influential in Chinese linguistics. Instead, my discussion will be functional-typological and positioned in the context of grammaticalization as well.

3.3. *kai*⁴² as an anaphor

3.3.1. Definitions of anaphor

The notion of anaphor is well-known through Chomsky's (1981, 1986) classical version of the Binding Theory (henceforth BT), which specifies the following division of argument types on the basis of their distributional properties:

- (6)A. An anaphor is bound in a local domain.
- B. A pronominal is free in a local domain.
- C. All NPs that do not fall into (a) or (b) are free.

Thus BT attempts to be a theory that predicts the complementary distribution between anaphoric expressions within the same binding domains. Although the BT captures some important linguistic facts, it has a number of shortcomings. Chief among them is that it fails to provide an adequate definition of *binding* and *local domain*. One of the consequences of this is that some of the important notions, such as *anaphor* or

pronominal, are only loosely defined (Haspelmath 2008: 40-63)⁵.

Reinhart and Reuland (1991, 1993) (henceforth, R & R), however, provide a radical departure from the BT by proposing a predicate-centered reflexive theory. They believe that reflexivity operates on coarguments of the same predicate and is as much a property of the predicate as of its arguments. Thus, according to them, reflexive markers in a language are primarily applied to reflexivize the predicate rather than to express binding relationships of arguments to their antecedents. The central claims of this conception can be formalized into two Conditions (Lidz 2001):

(7) Condition A

A reflexive-marked syntactic predicate is reflexive.

Condition B

A reflexive (semantic) predicate is reflexive-marked.

The conditions depend on the following interpretation:

- a. A predicate is *reflexive* iff two of its arguments are coindexed.
- b. A predicate is *reflexive-marked* iff
 - i. it is lexically reflexive, or
 - ii. one of its arguments is SELF anaphor.
 - iii. A SELF anaphor is a morphologically complex anaphor⁶.

According to Condition A and B, there are two types of anaphors: SELF anaphors and

⁵ According to Haspelmath (2008:40-63), 'the usual versions of the binding conditions do not provide independent, universally applicable definitions of the categories that figure in them ("anaphor," "pronominal"), so that the binding conditions cannot be empirically tested with cross-linguistic data.' (see the controversial definitions of Mandarin *ziji*).
⁶ Although many languages show such a property, Reuland (2001) argues that 'this fact follows neither from the canonical Condition B, nor from the canonical Condition A'. For instance, the Dutch counterpart of *Everyone hated him* is *iedereen haatte zichzelf/*zich*, where the complex SELF anaphor is required. Reuland argues that this only reflects a general tendency in languages to avoid 'simple reflexive instantiations of transitive predicate'. (See also Schladt 2000 for his survey of 140 languages).

SE anaphors. The former reflexivize the predicates they are arguments of and the latter only mark intrinsically reflexive predicates they are barely arguments of (Lidz 2001). Thus, for example,

(i) *SELF anaphors*

(8) a. He saw himself.

(English)

b. Max haat zichzelf.

Max hates self-self

‘Max hates himself.’

(Dutch)

(ii) *SE anaphors*

(9) a. He behaves himself.

(English)

b. Max wast zich.

Max washes self

‘Max washes himself.’

(Dutch)

In (8), the predicate is *reflexive* and is *reflexive-marked*, that is, it has two coindexed arguments and one of them is a SELF anaphor. In (9), the predicate is *lexically reflexive* and is *reflexive-marked* by a SE anaphor (i.e. *himself* or *zich*), which are barely arguments (i.e. direct object) of the respective predicate. Although English makes no formal distinction between SELF anaphor and SE anaphor, as in (8a) and (9a), Dutch clearly shows such a distinction by having a complex form *zichzelf* as a SELF anaphor and a simplex one *zich* as a SE anaphor. Schladt (2000) points out that, languages tend

to use special markings for reflexive forms that are DO of transitive predicates⁷. Therefore, for languages such as Dutch, a SELF anaphor, which is direct object, is required to be morphologically more complex than the other reflexive form, namely, SE anaphor. In other languages, alternative means are used to express the difference between SELF anaphor and SE anaphor. As shown in (10), in Hebrew, for example, non-argumental reflexives are expressed by a verbal suffix and the argumental ones by a reflexive pronoun.

(10) a. Dan hitraxec.

Dan wash:PAST:REF

‘Dan washed.’

b. Dan raxac et acmo

Dan wash:PAST OM himself

‘Dan washed himself.’ (Hebrew; Reinhart et al. 2005: 389-436)

Also in Mandarin (11), the non-argumental reflexive form is *zi* ‘self’ while the argumental one is *ziji* ‘self’.

(11) a. Tā nuè-dài zìjǐ

3sg abuse self

‘He abused (him)self.’

⁷ Schladt (2000) surveys over 140 languages from many different language families, all of which require special marking for reflexive predicates instead of simply having a locally bound simplex anaphor or pronominal. The means languages employ to license reflexive predicates are varied (reflexive clitics, verbal affixes, body part expressions, putting the reflexive in a PP, etc.)

b. Tā xǐhuān zì-nuè.

3sg like self-abuse

‘He like to self-abuse.’

The distinction between SELF anaphors and SE anaphors or argumental and non-argumental anaphors is also captured by König & Gast (2002), who propose the following definition for reflexive pronouns (anaphors) in English⁸.

Reflexive pronouns (anaphors) are self-forms used in order to indicate that a semantic or a syntactic argument of a predicate is co-referent with another argument of the same predicate (a co-argument), typically with the subject. This co-argument is called the antecedent of the reflexive pronoun.

According to this definition, *semantic anaphors* are those: (i) *self*-forms that mark co-reference between two participants assuming different thematic roles of the same predicate such as Agent and Patient (12a) or Agent and Recipient (12b); or (ii) *self*-forms that indicate co-reference between subject and direct object or subject and prepositional object (e.g. with the role of Beneficiary), as in (12c). In all the cases, the reflexive positions can be replaced by a NP.

⁸König & Gast (2002) believes the *self*-forms in English can be divided into reflexive anaphors, intensifiers and locally free *self*-forms, based on various syntactic and semantic criteria. In this section, I will only focus on the concept of reflexive anaphors.

- (12) a. John hit himself.
b. John pours himself a cup of tea.
c. John work for himself.

On the other hand, *syntactic anaphors* refer to *self*-forms that are not semantic arguments of the predicates they follow (e.g. not assuming the thematic role of Patient), though they are conjoined to the predicates like direct objects, as in (13a) and (13b) below.

- (13) a. John considers himself to be good.
b. The child cried himself to sleep.

In (13a), the reflexive marker *himself* is only a syntactic anaphor in the sense that it is syntactically conjoined to the predicate *consider* but not semantically. In fact, it is the subject of the infinite clause *to be good*. In (13b), *himself* is even more unlikely to be the direct object of the intransitive predicate *cried*; yet the clause *himself to sleep* as a whole is treated as the direct object of the matrix predicate *cried*. Constructions like (13b) are *reflexive resultative constructions* that are formed with unergative verbs denoting body activities of the human subject.

Yet despite the non-argumental status of syntactic anaphors, they are all anaphoric to the subject of the matrix predicate (König & Gast 2002) or under Reuland's (2001) view, non-argumental SE anaphor are also locally bound like SELF anaphors.

It has always been of interest to linguists to capture the nature of syntactic anaphors in terms of their volatile argument structures (see e.g. Belletti & Rizzi 1988, Dowty 1991, etc.), which has much to do with the properties of the verbal predicates they are

associated with. Semantically these predicates could be (i) psychological or mental verbs, such as *think, see, regard, be surprised at, fear, frighten*, etc. (Postal 1970, Croft 1986), as in (14); or (ii) intransitive agentive (unergative) verbs, such as *laugh, run, work*, etc. in the resultative constructions of English and other Germanic languages⁹, as in (15).

Syntactic anaphors with psych-verbs:

(14) a. Jean se considère intelligent

Jean SE considers intelligent

‘Jean considers himself intelligent.’ (French)

b. Giovanni si preoccupa di questo.

Giovanni si worries of this

‘Giovanni worries about this.’ (Italian)

c. Jean se plaît /déplaît sur cette photo.

Jean SE pleases/displeases on this picture

‘Jean is pleased /displeased in this picture.’ (French)

Syntactic anaphors with unergative verbs:

(15) a. Er lachte sich tot.

He laughed himself dead

(German; Oya 2002)

⁹The Romance languages have long been noted to contrast with English and other Germanic languages in that they exclude resultative constructions (Kayne 1984, Levin & Rapport 1988).

b. Hun arbeidet seg svelt.

She worked herself sweaty

(Norwegian; Lødrup 1999: 371)

c. Hij werkte zich suf.

He worked himself drowsy

(Dutch; Hoekstra 1988: 115)

Although König & Gast (2002) do not further distinguish among syntactic anaphors, Reinhart & Siloni (ibid.) argue that cases like (14) involve *syntactic binding* while cases like (15) involve *lexical reflexivization*¹⁰. Yet such distinctions could be minimized by believing that these reflexive forms are not only co-referent with the subjects of the matrix predicates but resemble direct objects and thus are altogether subsumed under the term *anaphor*.

3.3.2. Anaphors in Puxian

Partee (1989) points out that languages tend to have remarkably similar systems of anaphoric expressions, and therefore studies of anaphora across languages can be framed in terms of notions such as ‘binding domain’ or ‘antecedent requirement’. However, as Faltz (1977) has pointed out, the notion of ‘binding domain’ or ‘antecedent requirement’ are *lexical* properties of individual anaphors in a language rather than a syntactic parameter of the language as a whole. Based on Faltz’s (1977, 1985) arguments, I will divide Puxian anaphors into two types: (i) primary reflexive markers and (ii) syntactic anaphors.

¹⁰ According to them, the reflexive operation can be lexical or syntactic. Languages like Hebrew, English, Dutch, Russian, and Hungarian have lexical reflexivization while languages like Romance languages, German, Serbo-Croatian, Czech, and Greek have syntactic reflexivization, which depends on the inventory of reflexive morphology.

3.3.2.1. *kai*⁴²-*kai*¹¹ as the primary reflexive marker

The so-called *primary reflexive marking* strategy is taken from Faltz (1985: 4, quoted in Haspelmath 2008), which refers to the reflexive marking strategy for direct objects of **extroverted** transitive verbs, e.g. *herself* in *She admires herself*. The transitive action of extroverted verbs, such as ‘see’, ‘kill’, ‘hate’, ‘criticize’, etc. is ‘typically directed toward another referent’, whereas that of **introverted** verbs, such as ‘dress’, ‘shave’, ‘defend’, etc. is ‘typically directed towards the self’ (see e.g. Haspelmath 2008a, Kemmer 1993, etc.). Primary reflexive markings are also referred to as *true reflexives* (Rivero 2000, Sansò 2009, forthcoming), denoting that a performer’s action is clearly acting on himself/herself. The primary reflexive markings thus correspond to SELF anaphors (R& R *ibid*) or semantic anaphors (König & Gast *ibid*.) in that all of them involve co-reference between coarguments¹¹.

In Puxian, it is observed that not all direct objects of extroverted verbs display the same reflexive morphology, which suggests that more specific semantic properties of extroverted verbs may play a part in choosing anaphoric expressions. In view of this, I will define the *primary reflexive markings* as follows:

In Puxian, the primary reflexive marking involves the use of the reflexive form of *kai*⁴²-*kai*¹¹ ‘self-self’, which occurs predominantly in primary transitive sentences that have clear instances of Agent and Patient (see also Andrews 1985, Hopper & Thompson 1980).

Such a definition thus rules out the possibilities of having the primary reflexive marker

¹¹ It is important to note that *the primary reflexive markings*, *SELF anaphors* and *semantic anaphors* are not exactly the same, as they have different theoretical orientations. For example, the primary reflexive markers may exclude a reflexive form at the prepositional object position, though it could be a semantic anaphor.

*kai*⁴²- *kai*¹¹ in other transitive sentences that have the thematic roles of Agent and Recipient or Experiencer and Patient. As will be discussed below, the latter two types of transitive sentences do not use *kai*⁴²- *kai*¹¹ as reflexive markers, though they could be SELF anaphors or semantic anaphors as well. To put it simply, the individual reflexive marker *kai*⁴²- *kai*¹¹ prefers to mark a reflexive predicate that has prototypical Agent properties, e.g. being volitional or denoting causation (Dowty 1979). The following examples illustrate the typical syntactic environments, where *kai*⁴²- *kai*¹¹ can be used, as in (16 a-e) below.

(16) a. *i*⁵³³ *kai*⁴²-*kai*¹¹ *pha*⁴²

3sg self-self hit

‘He hit himself.’

b. *I*⁵³³ *kai*⁴²-*kai*¹¹ *mɔ*⁴²

3sg self-self scold

‘He scolds himself.’

c. *I*⁵³³ *kai*⁴² *kai*⁴²-*kai*¹¹ *pha*⁴²

3sg self.INT self-self hit

‘He hit himself.’

d. **I*⁵³³ *pha*⁴² *kai*⁴²-*kai*¹¹

3sg hit self-self

‘He hit himself.’

e.* I⁵³³ ɬua⁴² koŋ²⁴ kai⁴²-kai¹¹ kai-leŋ²¹

3sg think SAY_{THAT} Bself- self tough

‘He considers himself tough.’

(Puxian)

Compare

f. Tā rènwěi zìjǐ hén lihài.

3sg think self very tough

‘He considers himself tough.’

(Mandarin)

We see that both (16 a-b) manifest typical instantiations of the primary reflexive marker *kai*⁴²- *kai*¹¹. The relevant constructions denote an event, where the agent performs an action on itself and (most likely) affects itself adversely¹²; The example in (16c), is of interest due to the presence of three instances of the *kai* morpheme. However, the first *kai*⁴² is a non-obligatory adnominal intensifier. Its presence suggests that the primary reflexive marker *kai*⁴²-*kai*¹¹ is an independent reflexive marker, rather than some compound form of intensification¹³ (see Section 3.5 below). (16d) shows that *kai*⁴²-*kai*¹¹ is obligatory preverbal and cannot be realized in the postverbal direct object position¹⁴. As to (16e & f), we see that both the English translation and the Mandarin sentence involve syntactic anaphors, e.g. the DO of *rènwěi* ‘consider’. But this is not the case for Puxian, as the primary reflexive marker *kai*⁴²- *kai*¹¹ can not follow a non-primary transitive verb, e.g. *ɬua*⁴² ‘think’ in the (16e)¹⁵.

In addition, *kai*⁴²- *kai*¹¹ is not possible with predicate verbs specifying the thematic

¹² Most of the adversity effect comes from the semantic properties of the predicates, which has an agent of volition and causation.

¹³ If *kai*⁴²- *kai*¹¹ is an intensifier, it won’t be able to have another adnominal intensifier, as in (16c).

¹⁴ In traditional Chinese, the reflexive marker *zì* ‘self’ is always preverbal when it is a direct object (Chen 1999, Dong 2005)

¹⁵ The verb *ɬua*⁴² ‘think’ in Puxian is generally followed by a complementizer *koŋ*⁴² ‘say’ that introduces an embedded clause, where a simplex *kai* is used as a *logophoric* subject of the clause.

roles of Agent and Recipient, for only a simplex *kai*⁴² is allowed, which is dative-marked by the dative morpheme *kε*²¹, as in (17a); or as in (17b), *kai*⁴²-*kai*¹¹ becomes an *adverbial intensifier*(see discussion in Section 3.5),

(17) a. I⁵³³ kε²¹ kai⁴² khiŋ⁴² tho²⁴.

3sg DAT self pour tea

‘He poured himself some tea.’

b. I⁵³³ kai⁴²-kai¹¹ khiŋ⁴² tho²⁴.

3sg self-self pour tea

‘He poured himself some tea.’

Also, *kai*⁴²-*kai*¹¹ is not possible with predicate verbs specifying an experiencer subject, i.e. the Agent role of a sentience or perception verb, as in (18a). In this case, other reflexive markers, the argumental *kai*⁴² ‘self’ or the ‘pronoun + intensifier’ *i*⁵³³ *kai*⁴² ‘himself’ should be used in the postverbal direct object position, as in (18b). The two reflexive forms, i.e. *kai*⁴² and pronoun+ *kai*⁴² are in essence the same, that is, the former is an economical expression of the latter (see section 3.6.4 for further discussion).

(18) *a. ty²¹ kai⁴²-kai¹¹ kuã⁴²/iuan⁴²/tshiau⁴²

2sg self-self see /blame/love

‘You saw/blames/loves himself.’

b. ty²¹ kuã⁴² /iuan⁴² /tshiau⁴² (i⁵³³) kai⁴²

2sg see /blame /love (3sg) self

‘You saw/blames/love himself.’

From the above examples, we see that the primary reflexive marker *kai*⁴²- *kai*¹¹ is different from the simplex reflexive *kai*⁴² ‘self’ or the complex reflexive *i*⁴² *kai*⁴² ‘him + self’. The former is only restricted to the preverbal object position with *extroverted verbal predicates*, while the latter are not, though all of them are viewed as SELF anaphors or semantic anaphors in the literature.

In contrast, the reflexive marker *ziji* (bi-morphemic) in Mandarin is able to be associated with different types of verbs and always appears in the postverbal object position, as shown in (19) below, where the transitive verbs, such as *dá* ‘hit’, *mà* ‘scold’, *kànjiàn* ‘see’, *ài* ‘love’ and *xiǎng* ‘think’ are used.

(19) tā dá / mà /kànjiàn /ài /xiǎng zìjǐ.

3sg hit / scold/ see /love /think self.

‘He hits/scolds/sees/loves/thinks himself.’

3.3.2.2. Syntactic anaphor

From the above discussion, we know that ‘syntactic anaphors’ are similar to the non-argumental ‘SE anaphors’, in that they are associated with intrinsically reflexive verbs, e.g. psychological verbs or some intransitive agentive (unergative) verbs with resultant complements. In Puxian, the primary reflexive marker *kai*⁴²- *kai*¹¹ is never used as a syntactic anaphor. In these syntactic environments, other functional

morphemes, such as, the reflexive-intransitivizer *kai*⁵³³ – , which compounds with a transitive verb to form a complex reflexive predicate (see also *reflexive verbs* in next section) or the *give* morpheme *kɛ*²¹ , which marks psych-verbs or unergative verbs, are required (see detailed discussion in next chapter). Thus for example:

(20) a. John *kai*⁵³³-*lia*²⁴

John self-eat

‘John lives by himself.’

Lit. ‘John self-eats.’

b. *tsai*⁴² *kai*⁵³³-*ly*²⁴

food self-cook

‘one prepares food himself.’

Lit. ‘As to food, (one) self-cooks.’

In the above sentences, the predicates *kai*⁵³³-*lia*²⁴ ‘self-live/eat’ (20a) and *kai*⁵³³-*ly*²⁴ ‘self-cook’ (20b) are termed *reflexive verbs* in linguistics (see e.g. Reinhart & Siloni 2005). In (20a), the subject *John* is viewed as an agent who does an action that applies to itself. In (20b), the subject *tsai*⁴² is a Theme/Patient, which is characterized by the reflexive predicate *kai*⁵³³-*ly*²⁴ ‘self-cook’. What is important here is that the reflexive marker *kai*⁵³³-, rather than being argumental, is a functional morpheme that reflexivizes/intransitivizes the verb.

Turning to psych-verbs, such as *aili*²⁴ ‘like’, *kiã*⁴² ‘fear’, *luan*⁴² ‘think’, *tshɔ*⁴² ‘be disturbed’, etc. or the unergative verbs, such as *tshiau*²¹ ‘laugh’, *hau*⁴² ‘cry’, *tsau*⁴² ‘run’, etc., these are generally intransitive verbs, expressing some perception/sentience of the

former or agentive-intransitive action of the latter. Although these verbs may be associated with reflexive morphology in some languages, this is not the case in Puxian. In the following examples (21 a -f), the predicates are marked by the grammaticalized *give* morpheme $k\varepsilon^{21}$

(21) a. kua^{21} $k\varepsilon^{21}$ $thsiau^{42}$ e^{24} ɦi^4 .

Isg give laugh PRT dead.

‘I laughed (myself) to death.’

b. ɦ^{533} $k\varepsilon^{21}$ $tsau^{42}$ kau^{453} $phuai^{21}$

3sg give run to end

Lit. ‘He made himself run to the end.’

c. John $k\varepsilon^{21}$ hau^{42} $th\emptyset^{24}$ ɦeŋ^{11} $theŋ^{42}$

John give cry to thin PERF.

‘John cried and made himself ill.’

In the above sentences, the $k\varepsilon^{21}$ -marked predicates express some inchoative-stative event (Croft 1986a) as well as exhibiting some reflexive effect, as if the action were instigated/caused by the subject himself, that is, ‘the agent causes himself into a state by some self-directed action’. The reason why the above sentences exhibit both reflexive and causative effects is only because of the polysemous morpheme $k\varepsilon^{21}$, which is a grammaticalized marker in a large set of constructions, e.g. causative, passive or intransitive constructions (see the $k\varepsilon^{21}$ -marked intransitive constructions in the next

chapter). Thus, the above constructions of (21 a- c) resemble those reflexive-marked constructions in other languages (i.e. with syntactic anaphors), as in (15) of the above.

In addition, there is a different type of psych-verb with *stimulus* subjects, such as *hiã*⁴² ‘frighten’, *tsh v*⁴² ‘disturb’, etc. These verbs, nonetheless, seem to profile a volitional agent that has the ability to control the performance of the action and inflict some changes on the experiencer subject. In this sense, these verbs do resemble the primary transitive verbs in terms of having an agent of volition and causation. Therefore, the primary reflexive marker *kai*⁴²-*kai*¹¹ is used, as in (22a). However, the fact that these verbs feature an experiencer in the argument structure also enables them to have *kai*⁴² or the ‘pronoun + intensifier’ e.g. *i*⁵³³ *kai*⁴² ‘himself’ in the postverbal position, as in (22b) (just like (18b) in the above). Therefore, two types of reflexive markings are available with these verbs.

(22) a. *ty*²¹ *kai*⁴²-*kai*¹¹ *hiã*⁴²,
 2sg *self-self* *frighten*
 ‘You frighten yourself.’

b. *ty*²¹ *hiã*⁴² (*i*⁵³³) *kai*⁴²
 2sg *frighten* *self*
 ‘You frighten yourself.’

The discussion of anaphors, especially SE anaphors or syntactic anaphors naturally leads us to a consideration of *reflexive verbs*, which we take up in the next section.

3.4. Reflexive verbs

3.4.1. The typology of reflexive verbs

From the previous discussion, we know that there are verbs that are ‘lexically reflexive’ (R & R 2005) and are associated with ‘SE anaphors’ or sometimes ‘syntactic anaphors’. In grammar, these verbs are generally referred to as *reflexive verbs*, though a unified definition of them has not been available so far. In terms of morphology, reflexive verbs may contain a reflexive clitic or a reflexive pronoun, such as *si/se* in Romance and Slavic languages, as in (23) and (24), *self*-forms in English¹⁶, as in (25) or *zich /sich* in other Germanic languages, as in (26) and (27); they may also be indicated through a verbal suffix, such as *-ся* in Russian (28) or even zero reflexive morphology as in the cases in English (29) or Mandarin (30)¹⁷.

(23) Jean s'est lavé.

Jean se is washed

‘Jean washed.’

(French)

(24) On se oprao

3sg SE washed

‘He washed.’

(Serbo-Croatian)

¹⁶ Sometimes it is not easy to tell whether the reflexive form *himself* is an object or a marker of reflexivity for English may use the same reflexive morphology for both semantic anaphors (true reflexives) and reflexive verbs (so as to mark unaccusativity/valence reduction operation, see below).

¹⁷ Based on the morphological differences between reflexive verbs, Reinhart & Siloni (2005) argues that reflexive verbs can be divided into two types: languages such as Hebrew, English, Russian, Hungarian, and Dutch, apply lexical strategy (i.e. the parameter of ‘lexicon’) while languages such as the Romance family of Serbo-Croatian, Czech, Greek, and German, apply a syntactic strategy (i.e. the parameter of ‘syntax’). Yet some languages may have a variety of reflexive marking strategies, as in English.

(25) He shaves himself.

(English)

(26) Max wash zich.

Max washes zich

‘Max washes.’

(Dutch)

(27) Max wäscht sich..

Max washes sich

‘Max washes.’

(German)

(28) Ваня гордит-ся сыном.

‘Vanya is proud of his son.’

(Russian)

(29) Max washes.

(English)

(30) Tā xǐ le.

3sg wash ASP

‘He washes.’

(Mandarin)

Typically, the semantic agent and patient of a reflexive verb are the same (23 – 30).

However, considering the variety of reflexive verbs, the reflexivization processes are better viewed as a kind of syntactic operation, by means of which the argument structure of the base verb can be altered. For example, in the following French sentences, the reflexive verb differs from the corresponding transitive verb in terms of its argument structure.

(31) a. Je le ferai laver à Paul.

Isg 3sg_{CL} make:FUT wash to Paul

‘I will make Paul wash him.’

b. Je ferai se laver Paul.

I make:FUT SE wash Paul

‘I will make Paul wash himself.’ (French; Reinhart and Siloni 2005)

In the causative sentences of (31), it is observed that there is a different positioning of the pronominal clitic *le* and the reflexive clitic *se*, suggesting that *se* should not be treated as an object clitic like *le*. According to Reinhart and Siloni (2005), *se laver* ‘wash himself’ is no longer a transitive verb but a reflexive predicate, which blocks its mapping of internal and external thematic roles of the transitive entry through certain lexical operation (i.e. reflexivization). In other words, the argument structure of *laver* ‘wash’ is altered or reduced.

Chierchia (2004) argues that reflexive operation not only accounts for the changing valency but also derives an unaccusative verb, which induces an internal property of the subject, as in (32) (see also Siewierska 1984: 77).

(32) La branche s'est cassée.

The branch SE is broken

‘The branch broke.’

(French; Reinhart & Siloni 2004)

However, not all reflexive operations are in accordance with this unaccusative analysis, as in (33).

(33) Jean s'est évanoui.

Jean SE is fainted

‘Jean fainted.’

(French; Reinhart & Siloni 2004)

According to Reinhart & Siloni (ibid), the reflexive predicates in (32) and (33) have different derivational mechanisms. The verb *se casser* in (32) is derived from its transitive counterpart of *casser*, by reducing the external argument, while the reflexive predicate *s'évanouir* in (33) has an unergative source (though arguably) with the subject being external argument. Such an analysis is different from Chierchia (1989, 2004) believes that the common morphological marking shared by reflexive verbs and unaccusatives can be explained by the fact that both of them are one place predicates, derived from a two place predicate¹⁸, which calls for unaccusative derivation for reflexive verbs only.

Turning to Sinitic languages, Chief (1998) believes that reflexive verbs in Mandarin are derived from similar lexical operations, viz. thematic role fusion as well as an unaccusative derivation. He argues that the reflexive morpheme *zi-* in Mandarin involves a lexical binding operation, where the agent and patient roles fuse into one role

¹⁸ As in the case of *s'évanouir*, the reduction applies to an ‘abstract transitive alternate’, by reducing the internal role and keeping the external role.

(according to him, valence reduction being a by-product). In addition, the reflexive operation turns the predicate into an unaccusative one. A typical reflexive operation in Mandarin is illustrated with the transitive verb *sha* ‘kill’ as in (34 - 35) below.

(34) Zhāng Sān shā le zìjǐ.

Zhang San kill ASP self

‘Zhang San killed himself.’

(35) Zhāng Sān zuǒtiān zì-shā le.

Zhang San yesterday REFL-kill ASP

‘Zhang San committed suicide yesterday.’

Lit. ‘Zhang San self-killed yesterday.’

(Mandarin)

In (34), the reflexive pronoun *ziji* ‘self’ (bimorphemic) is the direct object of *sha* ‘kill’ in postverbal position. In (35), the morpheme *zi-* ‘self’ (monomorphemic) reflexive-marks the transitive verb *sha* ‘kill’ and turns the verb into a reflexive/intransitive one. Although the subject *Zhāng Sān* in either sentence has the ability to control the performance of the action (suicide), they are not the same in terms of thematic roles. In (35), *Zhāng Sān* is depicted as being causally affected by the event or undergoing the change of state. In view of this, Chief (ibid) insists that the sole argument of reflexive verbs in Mandarin consists of both patient properties and agent properties. Based on some syntactic or semantic evidence¹⁹, he claims that the

¹⁹ The so-called syntactic evidence includes the fact that reflexive verbs cannot co-occur with the durative marker *-zhe*, the progressive marker *zai* but are able to be modified by *hén* ‘very’, which suggests that reflexive verbs can not denote an event of activity (e.g. by some unergative verbs) but are unaccusatives denoting state. Semantic evidence includes the fact that the subjects of reflexive verbs have relatively low agentivity as in (13) than those of transitive ones like (12).

intransitive reflexive verbs in Mandarin are unaccusative verbs²⁰.

However, both valence reduction/fusion and unaccusative derivation seem untenable under Reinhart & Siloni's (2005) analyses. For example, according to the valence reduction point of view, it appears that reflexivization only involves two arguments of a transitive verb, namely, the agent and patient. However, as has been discussed in the previous section, syntactic anaphors, such as the NP *Pierre* in the following (36a) is not the direct object of *considère* 'consider', which means the corresponding reflexive operation *se considère* in (36b) cannot be easily explained by the theory of argument role fusion or reduction (concerning the A and P roles).

(36) a. Jean considère Pierre intelligent.

Jean considers Pierre intelligent

b. Jean se considère intelligent

Jean SE considèrs intelligent

'Jean considers himself intelligent.'

Thus according to Reinhart & Siloni, the reflexive operation, such as (36), is an *arity operation*, which affects the valence of a predicate but does not necessarily reduce it. It bundles two thematic roles (of one transitive predicate or possibly from two distinct predicates) through the reflexive morphology. Therefore, although the predicate *considère* 'consider' in (36a) does not support the usual reflexive operation occurring with a bivalent transitive verb, it is able to bundle the thematic roles from the sentence together.

²⁰ However, not all people agree that reflexive verbs are unaccusative in Mandarin. This is the view held by Tang (1992), who believes that reflexive verbs in Mandarin are unergative.

In addition, they argue ‘an unaccusative derivation of reflexive verbs is simply impossible’. For example, according to them, in Hebrew, the possessive dative structure can only have an internal argument (i.e. subject of unaccusative predicates), as in (37). However, the fact that some reflexive verbs, such as *hitgared* ‘scrach’ are not allowed in the structure, as in (38), only suggests that they are unlikely to be unaccusative.

(37) Ha-sefer nafal le-Dan.

the-book fell to-Dan

‘Dan’s book fell.’

(38) *Ha-xatul hitgared le-Dina.

the-cat scratch:REFL to-Dina (Hebrew; Reinhart & Siloni 2005)

Another counter example is from English, as in (39), where they also argue that the reflexive verb *run herself* is proved to be an unergative by the fact that the agentive nominal ‘runner’ can only be derived from an unergative verb.

(39) She runs herself out of breath to the finish line. What a tough runner!

Therefore, it seems that there is controversy concerning the properties of reflexive verbs. In my opinion, it is unlikely that an unergative or an unaccusative derivation can be posited on a universal basis, but rather each should be considered as language specific options. In what follows, I will show that reflexive verbs in Puxian are of different categories and are associated with several grammatical functions²¹.

²¹ Crosslinguistically, reflexive verbs are responsible for several distinct grammatical constructions such as reciprocals, anticausatives, passives or impersonals. With these constructions, for instance, they could be predicates

3.4.2. Reflexive verbs in Puxian

Reflexive verbs in Puxian are defined as follows, which has much to do with its unique linguistic features:

A reflexive verb in Puxian is an intransitivized verbal predicate which consists of the reflexive marker *kai*⁵³³- and a monosyllabic transitive verb, denoting self-initiated action from the subject or some property of the subject.

To illustrate, we have the following examples (40) and (41), where the argumental *kai*⁴² (as an agent) and the non-argumental *kai*⁵³³- (as a reflexive marker) are contrasted.

(40) **Kai**⁴² ʃia⁴² ma²⁴
Self *eat* *meal*
‘You eat meal.’

(41) John **kai**⁵³³-lia²⁴
3sg *self* *eat*
He lives by himself.
Lit. ‘He self-eats’

In (40), the reflexive marker *kai*⁴² is a subject, corresponds to the 2nd person singular *ty*²¹ ‘you’ in Puxian²². Semantically, the subject *kai*⁴² is an agent showing the

of an animate or inanimate subject expressing ‘actions or states, which immediately affect the subject or its interests’, as in the cases of anticausatives (thus unaccusatives) (Siewierska 1984: 77, 165-172; Haspelmath 1987:7) or they could be predicates of impersonal constructions that are of unergative nature (see section 5 for a detailed discussion).²² It can nonetheless be interpreted as a headless intensifier or a form pronominal ellipsis (see also Baker 1995), as discussed in the following section.

proto-agentive properties, e.g. volition and causation; in (41), the predicate *ɦia*²¹ ‘eat’ is reflexive-marked by *kai*⁵³³ - and becomes *kai*⁵³³ - *ɦia*²⁴ ‘self-eat’, metaphorically meaning ‘self-live’. The subject *John* is an agent as well. Yet by the reflexive operation, the bivalent transitive verb *ɦia*²¹ ‘eat’ is reduced to a monovalent intransitive verb with a sole S (i.e. the object *ma*²⁴ in (40) is reduced). What is noticeable is that there are some distinct morphophonological variations on the reflexive predicate: not only does the reflexive marker *kai* change its original tone from 42 (argumental) to 533 (non-argumental), but the verb *ɦia*⁴² changes from 42 to 24 as well (a distinctive tone sandhi pattern). In addition, there is a significant phenomenon of *consonant mutation*²³, as the consonant ‘*f*’ of the verb *ɦia*⁴² ‘eat’ in (40) is replaced by ‘*l*’ as in ‘*ɦia*²⁴’ of (41)²⁴. Thus, the reflexive operation in Puxian qualifies as valence reduction, by which the reflexive marker *kai*⁵³³ - intransitivizes a bivalent transitive verb.

There is a very limited group of transitive verbs that can be transformed into reflexive verbs. These verbs are *tsy*⁴² ‘cook’, *pan*⁴² ‘organize/manage/hold’, *tsø*⁴² ‘do/work/act’, etc., as shown in (42 – 43) below.

(42) *tsiu*²⁴ ***kai*⁵³³-*ly*²¹**
banquet self manage
‘(He) self-caters the banquet.’

(43) *I*⁵³³ *ɦil*²⁴ ***kai*⁵³³-*lø*⁴²**
3sg like self-do
‘He likes to act by himself.’

²³ It is known that consonant mutation refers to the change of a consonant in a word according to its morphological and/or syntactic environments, as observed in Hebrew, Welsh and many other languages.

²⁴ The phoneme ‘*f*’ sounds like the ‘*s*’ in English, which is quite different from ‘*l*’.

Lit. ‘He likes to self-act.’

Considering the fact that these *kai*⁵³³- verbs in Puxian, as shown in the above, generally have multi-meanings, they can be used in a variety of occasions. For example, *tsø*⁴² ‘do’ in combination with *kai*⁵³³- can have the meanings of ‘self-cooking’, ‘self-managing’, ‘self-handling’, ‘self-working’, etc. depending on a specific context. Interestingly, typical reflexive verbs in Mandarin, such as 自杀 *zì shā* ‘to commit suicide’, 自爱 *zì ài* ‘to respect oneself’, 自卫 *zì wèi* ‘to defend oneself’, etc. do not have any *kai*⁵³³- form correspondents in Puxian. Instead, Puxian may have to borrow them in transliterate forms, e.g. 自杀 *tsø*⁴ *ʃa*⁴² ‘to commit suicide’, without tonal changes and consonant mutation (e.g. *ʃ* is the same, unlike that of (42)).

Apart from the morphophonological features on the reflexive verbs, they are some noticeable syntactic properties, which distinguish them from their transitive counterparts. For example, ‘VP ellipsis’ is allowed only with the predicate of reflexive verbs but not with that of a transitive verb, as shown in (44).

(44) a. I⁵³³ ʃia⁴² ma²⁴, kua²¹ thø⁴² ʃia⁵³³ ø

3sg eat meal, 1sg too eat

Lit. ‘He eats meal, I eat (meal) too.’

b. I⁴⁵³ kai⁵³³-lia²⁴ kua²¹ thø⁴² ʃa⁴².

3sg self eat, 1sg too so

Lit. ‘He self-lives, I do so.’

In (44), although the ellipses occur in both of the sentences, they are not the same. In

(44 a), it is an instance of object-drop, by which the argument *ma*²⁴ ‘meal’ is filled with a zero form in the second clause and the transitive predicate *ʃia*⁴² has to be repeated. Differently, in (44b), the first clause has a reflexive predicate *kai*⁵³³-*lia*²⁴ ‘self-eat’ and is considered an intransitive verbal complex. In the second clause, it is replaced altogether by the particle *ã*, roughly meaning ‘so’. Thus, reflexive verbs in Puxian should be considered an integral verbal category, available for VP ellipsis.

In addition, the subject NPs of the reflexive verbs may assume different thematic roles: some are agent-like while others are theme/patient-like, as shown in (45) below.

(45) a. *i*⁵³³ *kai*⁵³³-*ly*²¹
 3sg *self cook*
 Lit. ‘He self-cooks/self-lives.’

b. *Tsai*⁴² *kai*⁵³³-*ly*²¹
 dishes self cook
 Lit. ‘food self-cooks’

c. *Tsai*⁴² *i*⁵³³ *kai*⁵³³-*ly*²¹
 food 3sg self cook
 ‘He cooks the food himself.’
 Lit. ‘As to food, He self-cooks.’

d. i^{533} $tsai^{42}$ kai^{533} - ly^{21}

3sg food self cook

‘He cooks the food himself.’

Lit. ‘As to him, (his) food self-cooks.’

We see that the sentences in the above involve the reflexive verb kai^{533} - ly^{21} ‘self cook’, yet the subjects are all different. In (41a), the subject i^{533} ‘he’ is an agent (i.e. the external argument), who is determined to carry out an action of ‘living by himself’ (in the metaphorical sense of self-cooking). It is therefore believed that the reflexive predicate is most likely an unergative one. In (41b), the subject $tsai^{42}$ ‘dishes’ is a theme/patient-like argument (i.e. the internal argument) and the reflexive predicate denotes some properties of it, that is, ‘the kind of dishes that is/will be cooked by oneself’. Therefore, kai^{533} - ly^{21} in this case is assumed to be unaccusative rather than unergative. However, in (41c) and (41d), both arguments of the transitive verb tsy^{42} ‘cook’ are present (i.e. $tsai$ ‘food’ or i ‘he or she’), though only one of them enters into obligatory thematic relationship with the reflexive predicate and the other is topicalized (see Chao 1968, Li and Thompson 1976, Chappell et al. 2007 for the notion of Topic). Thus, by selecting different arguments for the subject, the same reflexive verb will exhibit different semantic properties, i.e. unaccusative or unergative. Generally, the reflexive predicates with a human subject, as in (41a) or (41c), can be interpreted as unergative, whereas those with an inanimate/non-human subject, as in (41b & d), are likely to be unaccusative²⁵. Such findings are, nevertheless, different from Chief’s

²⁵ In terms of the unaccusative derivation, there are some syntactic means to test it. For example, the unaccusative-reflexive verbs can be placed in a modifier position preceding the NP, e.g.

kai^{533} - ly^{21} e ma^{24}
Self-cook MOD food
‘Self-cooked food’

In this construction, the reflexive verb kai^{533} - ly^{21} modifies the NP ma^{24} , as indicated by the modifier marker e .

discussion on reflexive verbs in Mandarin²⁶ but in partial accordance with R& R's argument that not every reflexive verb has unaccusative derivation.

Furthermore, there are some instances of reflexive verbs in both Puxian and Mandarin that cannot be easily explained by the above analyses, either by the valence-reduction or thematic role 'bundling' theories. Thus consider the following sentences:

(46) kai⁵³³ koŋ⁴² kai⁵³³ niã⁴².
self speak self act
'One is self-willed.'

(47) zì bào jiā-mén.
self report identity
'One identifies/reveals himself.'

(48) zì qú qí rǔ.
self get DET insult
'One incurred insults.'

(49) zì huǐ cháng-chéng.
self destroy Greatwall
'One destroys something he build.
Lit. 'One destroys the Greatwall.'

(Mandarin)

²⁶ Chief's (1998) main example is the reflexive verb *zì-shā* 'self-kill/ to commit suicide' in Mandarin. He argues that the subject of the reflexive verb has both agent and patient properties and denotes a state and it is better to be analyzed as 'unaccusative'. However, in the Puxian case of *kai⁵³³-ly²¹* 'self-cook', the human subject can by no means be analyzed as a patient of the verb 'cook'. Therefore, it had better be analyzed as 'unergative'.

It is known that all the above sentences are ‘set phrases’ in Chinese (inherited from traditional Chinese). In Puxian (46), the two reflexive verbs *kai*⁵³³ *oŋ*²¹ ‘self-speak’ and *kai*⁵³³ *niã*⁴² ‘self-act’ are unlikely to undergo the same reflexive operation of valence reduction discussed above, because both of the verbs *koŋ*⁴² ‘speak’ and *thiã*⁴² ‘act’ are intransitive verbs²⁷, profiling only one valency in the argument structure; in Mandarin (47 -49), although all the verbs, i.e. *bào* ‘report’, *qú* ‘get’ and *huǐ* ‘destroy’ are transitive verbs, the same reflexive operation is not possible as well, for all the reflexive-marked verbs still keep the direct objects in postverbal position. In other word, despite their similarity with reflexive verbs, they must be derived by a different mechanism. In fact, all the above constructions are reminiscent of the impersonal constructions discussed in the previous chapter, especially those in Romance and Slavic languages, where the reflexive clitics *si/se* not only exhibit some nominative properties but are semantically similar to an indefinite pronoun with human reference (Siewierska 1984: 175, 2008; Kibort 2008).

(50) *Si lavora sempre troppo*

Si work:3sg always much

‘One always works too much.’

(Italian; Sigüesson & Egerland 2009)

In the Puxian and Mandarin cases (46 -49), the reflexive marker *kai*⁵³³ and *zi* also have subject properties and indefinite human reference (see the English translation). Instead of valency reduction, they profile an unspecified human subject with transitive or intransitive verbs. The constructions are therefore impersonal constructions, resembling the *si/se* constructions in Slavic and Romance (though without agreement markings).

²⁷ These two are the original verbs without ‘consonant mutation’.

The same reflexive operation applied to reflexive verbs, such as valency reduction or unaccusative / unergative derivation, cannot be applied to the impersonal constructions, as the predicate verb may still profile an A (intransitive) or both A and P, though the A is realized by the reflexive marker *kai*⁵³³ or *zi* as impersonal subjects. Different reflexive-marked predicates will be further discussion in Section 3.7 on grammaticalization.

3.5. Intensifiers

3.5.1. The intensifiers *kai*⁴² and *kai*⁴²-*kai*¹¹ in Puxian

In the previous sections, I have discussed the argumental *kai*⁴²-*kai*¹¹ as the primary reflexive marker and the non-argumental *kai*⁵³³- as a marker of reflexive verbs. In this section, I will turn to some discourse functions of *kai*, viz. intensification and emphasis, roughly meaning ‘none other than’, ‘even’, ‘the very person’, ‘on one’s own’, ‘alone’, ‘without help’, ‘also and too’ (Siewierska 2004: 67).

The reflexive morpheme *kai* with the above functions is termed an *intensifier* (König 1991, Siemund 2000, König and Siemund 2000a, König 2001). Although languages tend to have a variety of phonological and grammatical means to express intensification, it is not uncommon to see identical forms of intensifiers and reflexive markers (Siewierska 2004). For instance, German *selbst*, Russian *sam*, Turkish *kendi*, Mandarin *ziji*, or English *self*-forms are not only used for reflexive markings but also for intensification. In terms of morphosyntactic features, there are two types of intensifiers: (i) adnominal intensifiers and (ii) adverbial intensifiers (König & Siemund 1999). The adnominal intensifier is an adjunct, always adjoined to a NP in the appositive position, as illustrated in Puxian (51).

(51) John **kai**⁴² thi²¹ ɬena⁴²

John self_{INTF} be teacher

‘John himself is a teacher.’

In (51), the reflexive marker *kai*⁴² is adjacent to the subject *John* and is considered an adnominal intensifier in simplex form. In addition, Puxian has another intensifier form of *naŋ*²⁴. Together with *kai*⁴², they can precede or follow each other and serve as an adnominal intensifier of the other, with one being an argumental deictic pronoun (see the detailed discussion in section 3.5.3 below).

The adverbial intensifier, on the other hand, is adjoined to a VP yet in different syntactic positions (e.g. preverbal or postverbal). In Puxian, the adverbial intensifier is the reduplicated form²⁸ of *kai*⁴²-*kai*¹¹, which is always positioned on the left periphery of the VP, as in (52) below.

(52) I²¹ **kai**⁴²-**kai**¹¹ ŋya²⁴ uai²¹

3sg self-sefl_{INTF} burn fire

‘He tend the fireplace himself.’

Although the primary reflexive marker *kai*⁴²-*kai*¹¹, the adverbial intensifier *kai*⁴²-*kai*¹¹ and the adnominal intensifier *kai*⁴² involve the same morpheme *kai*, they can be distinguished in the following sentences, as shown in (53 - 55).

²⁸ According to Lehmann (2002), full reduplication tends to signify intensification; for instance, with nouns, a multitude or collectivity, and with verbs, an intense or repeated action.

(53) John **kai**⁴² kai⁴²-kai¹¹ pha⁴².

*John self*_{INTF} *self-self*_{INTF} *hit*

‘John hits himself.’

Lit. ‘He **himself** hit himself.’

In (53), the adnominal intensifier *kai*⁴² is distinguished from the primary reflexive marker *kai*⁴²-*kai*¹¹, because the former is a non-obligatory adjunct, the omission of which induces no substantial change in the grammaticality of the sentence²⁹, whereas the latter is the DO of the transitive verb *pha*⁴² ‘hit’, without which the sentence is ungrammatical.

(54) I²¹ **kai**⁴² phe²⁴ kai⁵³³-lia²⁴.

*3sg self*_{INTF} *want* *self-eat*

‘He wants to live alone.’

Lit. ‘He **himself** wants to self-live.’

In (54), the adnominal intensifier *kai*⁴² has the usual 42 tone, whereas the reflexive marker *kai*⁵³³ - not only has a different 533 tone but causes consonant mutation on the verb (e.g. *tia* to *lia*). In addition, the adnominal intensifier *kai*⁴² is optional while the reflexive marker *kai*⁵³³ - is not.

²⁹ It is sometimes difficult to apply non-obligatoriness and argument status as universal criteria for identifying intensifiers. For example, *himself* in the sentence *And that was exactly it, he really did not care too much what happened to himself* (Zribi-Hertz 1989, quoted in Siewierska *ibid.*) may be seen as an obligatory argument as well as a headless intensifier at the same time (Baker 1995).

(55) a. John **kai⁴²-kai¹¹** tsy¹¹ ma²⁴

John self-slef_{INTF} cook food

‘He eats/cook food **alone/by himself/exclusively**’

b. Tse²¹ phou²⁴, I²¹ phe⁴ **kai⁴²-kai¹¹** khun⁴².

this bed, 3sg want self-self_{INTF} sleep.

‘He wants to sleep on the bed alone.’

Lit. ‘As to this bed, he wants sleep (on) **alone.**’

In (55a), the adverbial intensifier *kai⁴²-kai¹¹* is adjacent to the VP *tsy¹¹ ma²⁴* ‘cook food’, yet it does not affect the tone or consonant of the following verb, *tsy¹¹* ‘cook’, as is different from the reflexive verb *kai⁵³³-ly²¹* ‘self-cook’ mentioned earlier. The reason that it is viewed as an intensifier, rather than a primary reflexive marker (although both are of the same form) is that the argument structure of *tsy¹¹* in (55a) remains bivalent, i.e. <agent: *John* patient: *ma²⁴*>, whereas the primary reflexive marker is a P in the preverbal position. The intensifier *kai⁴²-kai¹¹* emphasizes the fact that John cooked the food all by himself. In (55b), the intensifier *kai⁴²-kai¹¹* is associated with the intransitive verb *khun⁴²* ‘sleep’, meaning ‘sleep alone/exclusively’. Thus, it immediately distinguishes itself from the primary reflexive marker *kai⁴²-kai¹¹*, because the latter can only function with transitive verbs.

Semantically, the adnominal intensifier *kai⁴²*, apart from having the function of *focus/emphasis*, is associated with meanings such as *alone/exclusive/without assistance/of one’s own will* as in (56)

(56) a. John kai⁴² thi⁴² e¹¹ †iuli²¹

John self_{INTF} be can repair

‘John can repair (it).’

Lit. ‘John himself is (the one that) can repair (it).’ (Focus /emphasis)

b. I⁵³³ kai⁴² phe⁴ †iuli²¹

3sg self_{INTF} want repair

‘He wants to repair (it) himself.’

Lit. ‘He himself wants to repair.’

(Exclusive/without assistance)

c. Tse²¹ †ø¹¹, yøŋ³² kai⁴² ŋ-o⁴² tshy-li⁴².

This matter, 3pl self_{INTF} NEG- dare handle

‘They dare not handle this matter themselves.’

Lit. ‘As to this matter, they themselves dare not handle.’

(Of one’s own will /alone)

Take (56c) for example, it may be paraphrased as *without authorization, they dare not handle* or *they lack the will to handle it*.

Similar meanings are also found with the adverbial intensifier *kai⁴²-kai¹¹*, with the meanings of *alone, without assistance*, etc. but not with the meanings of *focus/emphasis*.

For example,

(57) a. Tse² nyø¹¹ thi⁴² **kai⁴²-kai¹¹** tsø²¹ e¹¹

This cake be self-self_{INTF} do PRT

‘This cake is all done by (my)self.’ (*Alone/without assistance/exclusive*)

b. tse²¹ ɬø¹¹, yøŋ³² ŋ¹¹ ɒ⁴² **kai⁴²-kai¹¹** tshy-li⁴²

this matter, 3pl not dare self-self_{INTF} handle

‘They dare not handle this matter by themselves.’

(*Alone /without assistance/exclusive*)

Another semantic division among intensifiers is probably the contrast between *exclusive* and *inclusive* readings (König 1991, Siemund 2000, König 2001, Hole 2002), as illustrated by the English adverbial intensifiers in (58)

(58) a. John always repairs his car himself.

b. To her surprise he had answered the telephone himself.

(*Exclusive*)

a. If he’s busy breaking the rules himself, he could hardly demand that they do otherwise.

b I was not in a terrific shape myself and I had a hard time hauling him up the stairs.

(*Inclusive*)

While exclusive intensifiers suggest readings such as *alone*, *without help*, etc., inclusive intensifiers have the reading of *too*. In Puxian, the *inclusive* vs. *exclusive*

distinction occurs only with the adnominal intensifiers (while all the adverbial ones suggest exclusiveness). For example,

(59) a. I⁵³³ kai⁴² au⁵³³ ky⁴².
 3sg self_{INTF} too go
 ‘He himself goes there too.’ (Inclusive)

b. John kai⁴² (a⁴²) li⁴ tɛna²⁴.
 John self_{INTF} too be teacher
 ‘He himself is a teacher too.’ (Inclusive)

c. John kai⁴² pe²⁴ thø²⁴ lia²⁴
 John self_{INTF} want all eat
 ‘John wants to eat it all himself.’ (Exclusive)

It is important to note that the inclusive reading above is frequently associated with the adjunctive particle *au*⁵³³ or *a*⁴², corresponding to the meaning of ‘too’ in English, without which the inclusive readings may be lost (esp. in the case of (59a)).

In comparison, Mandarin uses the same reflexive morpheme *zìjǐ* as an adnominal intensifier (60 a & b) or an adverbial intensifier (60c). For example,

(60) a. Tāmēn zìjǐ xiǎng-yào.
 3pl self_{INTF} want
 ‘It is they who want.’
 Lit. ‘They themselves want.’ (Focus/Emphasis)

b. Tāmēn zìjǐ bù gǎn chǔlí.

3pl self_{INTF} not dare handle

‘They dare not handle it themselves.’ (of one’s own will)

c. Tāmēn bù gǎn zìjǐ chǔlí.

3pl not dare self_{INTF} handle

‘They dare not handle it themselves.’

(Alone / without assistance)

As we can see in Mandarin the adverbial intensifier *ziji* (60c) is morphologically identical to the adnominal *ziji*. The adnominal intensifier *ziji* ‘self’ has the meaning of ‘focus/emphasis’, as in (60a), as well as ‘of one’s own will’, as in (60b), which is similar to the adnominal intensifier *kai*⁴² in Puxian. The adverbial intensifier *ziji* shares the same readings such as *alone/privately* with those the adnominal *ziji*, except *focus/emphasis*. Thus (60c) can be interpreted as ‘they do not handle the matter by themselves/among themselves /privately’. In fact, it may be difficult to tell whether there is an absolute correlation between the positions of an intensifier and its interpretation (e.g. *ziji* in the above). As pointed out by Edmondson and Plank (1978) and König (1991), English may appear to be so as well. In the following sentences, the intensifier *himself* may receive the same readings, e.g. *personally/out of his own will* or even *emphasis*. For example,

(61) a. The king himself invited me.

b. The king invited me himself.

3.5.2. Semantic distinctions of the adverbial intensifier *kai*⁴²-*kai*¹¹

It is known that full reduplication tends to signify intensification (Lehmann 2002). This is the strategy adopted by the adverbial intensifier *kai*⁴²-*kai*¹¹. In the following sentences it has a variety of functions/meanings that are not only related to the predicates but to the subject NPs.

(62) a. tse²¹ phaŋ-pi²⁴ i²¹ phe²⁴ **kai**⁴²-**kai**¹¹ ɦia²⁴ .
*this honey*_{TOP} *3sg want self-self*_{INTF} *eat*
‘He wants to have the honey alone.’

b. I²¹ phe²⁴ **kai**⁴²-**kai**¹¹ khui²⁴ mui²⁴,
*3sg want self-self*_{INTF} *open door*
‘He wants to open the door by himself.’

(63) a. mui²⁴ e²⁴ **kai**⁴²-**kai**¹¹ khui²⁴
*door can self-self*_{INTF} *open*.
‘The door opens itself.’

b. tsui⁴² e⁴ **kai**⁴²-**kai**¹¹ lau²⁴
*water can self-self*_{INTF} *flow*
‘Water flows (itself).’

In (62 a & b), the adverbial intensifier *kai*⁴²-*kai*¹¹ is associated with a human subject. In (62a) the direct object *phaŋ-pi*²⁴ ‘honey’ or in (62b) the direct object *mui*²⁴ ‘door’ can be either topicalized (in the former) or remain in postverbal object position (in the latter)

(see the difference from reflexive verbs as well). The adverbial intensifier is thus associated with readings such as *exclusive/alone/by oneself*, as shown in the English translations. However, when it comes to inanimate subjects, as in (63), the exclusive readings are lost. The two sentences, with the presence of the auxiliary *e* ‘can’ can be understood as depicting some properties predicated on the subjects and the adverbial intensifier *kai*⁴²-*kai*¹¹ acquires some middle meanings such as *naturally* or *automatically*. (see section 3.7 for the discussion of middle constructions).

3.5.3. Contrast between the intensifier *naŋ*²⁴ and *kai*⁴²

Apart from the distinction between adnominal and adverbial intensifiers³⁰, Puxian has a different intensifier, namely, the grammaticalized noun *naŋ*²⁴ ‘man’, which is used as an adnominal intensifier as well, as in (64) below.

(64) a. I²¹ **naŋ**²⁴ thi²⁴ ʔena⁴²
 3sg *man*_{INTF} *be* *teacher*
 ‘He is a teacher himself.’

b. I²¹ **kai**⁴² thi²⁴ ʔena⁴²
 3sg *self*_{INTF} *be* *teacher*
 ‘He is a teacher himself.’

We see that both *naŋ*²⁴ ‘man’ and *kai*⁴² ‘self’ are adnominal intensifiers in appositional position. Yet there are some pragmatic differences between them. The use of *naŋ*²⁴ is

³⁰ Gast & König (2004) propose that languages tend to have *invariant intensifiers*, e.g. German *selbst* or *inflecting intensifiers*, e.g. Spanish *misma* ‘self_{INTF:FEM:SG}’, based on inflection and agreement features

(67) nan²⁴ John / John nan²⁴ thi²⁴ tenna⁴².

man_{INTF} John/ John man_{INTF} be teacher

‘He/John himself is a teacher.’

(68) John kai⁴² / kai⁴² John an²⁴ mia⁴² li²⁴ .

John sefl_{INTF}/ self_{INTF} John not want come

‘John himself doesn’t want to come.’

We see that the intensifier *nan*²⁴ can either precede or follow the subject *John*, which is also the case for *kai*⁴². The placement of intensifiers in sentence-initial position has a stronger effect of intensification than otherwise. In fact, the ability to assume flexible positions by intensifiers is also found in Swedish and Spanish, as shown in (69).

(69) a. själv-e chef-en var här

INT-DEF boss-DEF was here

b. chef-en själv-ø var här

boss-DEF INT-INDEF was here

‘The boss himself was here.’

(Swedish; Gast & König 2004)

(70) a. llegó el presidente mismo

arrived the president INT.MASC.SG

‘The president himself arrived.’

b. el mismo presidente lo dijo

the INT.MASC.SG president it said

‘The president himself said so.’ (Spanish; Gast & König 2004)

Interestingly, *naŋ*²⁴ and *kai*⁴² could also serve as adnominal intensifiers mutually, as in (71).

(71) a. *naŋ*²⁴ *kai*⁴² *na*²⁴ *tshaŋ* – *tshaŋ*⁴²

Isg/3sg self_{INTF} be poor

‘I/He is poor myself/himself.’

b. *kai*⁴² *naŋ*²⁴ *na*²⁴ *tshaŋ* – *tshaŋ*⁴²

Isg/3sg man_{INTF} be poor

‘I/He is poor myself/himself.’

In fact, both *naŋ*²⁴ *kai*⁴² ‘man self’ and *kai*⁴² *naŋ*²⁴ ‘self man’ in the above sentences have the same NP structure, i.e. ‘pronoun + intensifier’. The first element of the NP has a deictic function, corresponding to pronominals, such as 1st person *kua*²¹ or 3rd person *i*⁵³³. At the same time, the second element becomes an adnominal intensifier³¹. Thus both *naŋ*²⁴ and *kai*⁴² can have alternating uses of being an adjunctive intensifier and a deictic pronominal.

In English, as pointed out by König and Siemund (2000), some *self*-forms can be deictic and argumental as well. For instance, *myself/yourself* in the sentence *And don't*

³¹ Such a flexible NP structure may be partly explained by the bimorphemic flexibility existed in both Min dialects and Middle Chinese. For example, Li (2005:150) gives the evidence that some stable words such as *jiàn kāng* ‘health’, *zōng gòng* ‘total’ in Mandarin can have flexible word orders in various parts of Min dialects, a tradition since Middle Chinese.

forget: all letters should be addressed to myself/yourself do not require antecedents and can be replaced by a personal pronoun, e.g. *me* or *you* in the argument position (e.g. as complements of the preposition). Such a syntactic phenomenon, according to them, is linked to Baker's (1995) claim that they are simply 'intensifiers without pronominal heads'. The 'deictic intensifiers' in the (prepositional) object position (e.g. English) or in the subject position (e.g. Puxian) suggest that they may be *logophors* or *viewpoint reflexives* without the involvement of pronominal heads (cf. Zribi-Hertz 1995: 339), which will be discussed in detail in the next section.

3.6. Viewpoints and the untriggered reflexive *kai*⁴²

It is known that long-distance reflexives (LDRs) in many languages are often termed 'viewpoint reflexives', for they tend to reflect the perspectives of different sources. In this section, I will argue that the LDR *kai*⁴² in Puxian belongs to the category of *untriggered reflexives* (Parker et al. 1990, König & Siemund 2000), which is able to mark three different kinds of viewpoints, *logophoricity*, *empathy* and *inter-empathy*. Also, following (Baker 1995) and Siemund (2000), I believe that *kai*⁴² as an untriggered reflexive is a 'headless intensifier', derived from a structure of 'pronoun + intensifier' under the 'Economy Principle II' (Siemund *ibid*) or 'Disjoint Reference universal II' (Haspelmath 2008).

3.6.1. The typology of viewpoint markings

Siewierska (2004: 201) points out that 'most utterances in discourse are egocentric, that is the situation or event depicted in the utterance is presented from the point of view of

the speaker.’ In other words, a narrator may depict a situation or event through his objective ‘camera angle’. In addition, there are also utterances in natural languages that are expressed from egos other than the speaker, e.g. from one of the participants in the clause or even non-participants. Cross-linguistically, there have been a variety of grammatical means to encode viewpoints. The most common one is through pronominal expressions. For example, in Ewe of Kwa (Niger-Congo), there exists a special person form for the sole purpose of referring back to the source of a reported statement or thought, as in (72).

(72) a. *kofi* *be* *yè-dzo*

Kofi *say* *LOG-leave*

‘Kofi_i said that he_i left.’

b. *Kofi* *be* *è-dzo*

Kofi *say* *3sg-leave*

‘Kofi_i said that he/she_j left.’

(Ewe; Clements 1975: 142)

In (72), the pronominal *yè-* is used in the indirect speech environment only to mark the perspective of and intra-sentential coreference with the matrix subject *kofi*. *yè-* is thus a *logophoric* pronoun; on the other hand, if the indirect speech environments have the 3rd person pronoun *è-* ‘he/she’, instead of the logophor *yè-*, as in (b), only disjoint reference of the pronoun with the subject *Kofi* is expected.

Many other languages, however, lack a special pronoun like *yè-* in Ewe to indicate viewpoints. They therefore resort to different strategies to signal perspectives. One of

them is through the alternation between reflexives and regular personal pronouns (Culy 1994, 1997). English is a case in point, as shown in (73).

(73) John sees Mary as ill disposed towards him / himself.

(English; König & Siemund 2000)

In (73), the choice between *him* and *himself* determines whether the indirect discourse is reported from the point of view of the current speaker (though *him*) or the secondary speaker *John* (through *himself*). Such an alternation between reflexives and personal pronouns for viewpoint marking is also well-known in some Eastern Asian languages as well, as illustrated in Mandarin (74), Korean (75), Japanese (76) and Puxian (77), where the reflexive forms may refer to the matrix subject or one of the participants in the clause.

(74) Zhāng Sān_i shuō pāshǒu tōu-le zìjǐ de píbāo

Zhang San shuo pickpocket steal-PERF self DE purse

‘Zhang San_i said that the pickpocket stole his (self_i’s) purse.’

(Mandarin; Huang et al. 2001)

(75) John_i Mary_j-eykey Tom_i-i_k caki-lul_{i/j/k} coaha-n-ta-ko

JohnNOM Mary-DAT Tom-NOM self-ACC like-PRES-DECL-COMP

malha-yess-ta.

say-PST-DECL

‘John_i told Mary_j that Tom_k likes self_{i/j/k}’

(Korean; Sohng 2003)

(76) Yasuo_i wa zibun_i wa tereya da to itte-iru/omotte-iru
Yasuo TOP self TOP shy.person COP QUOT say-STAT/think-STAT
 ‘Yasuo_i says/thinks that he (self_i) is shy.’

(Japanese; Hirose 2002)

(77) Andi_i koŋ⁴² kai⁴²_i na²⁴ kou²⁴-kou²⁴-i⁴².
Andi say self be shy
 ‘Andi_i says he(self)_i is shy.’

(Puxian)

These reflexives are commonly referred to as long-distance reflexives (LDRs henceforth), when they seek the antecedents in the matrix subject position outside the immediate clause. They typically have 3rd person referents, favor predicates of communication, thought, mental state or perception and fulfill a number of grammatical functions such as subject (76) & (77), object (75) or adnominal possessive positions (74). In fact, they are often treated in the same way as the logophoric pronouns mentioned above³².

Apart from logophoric pronouns and LDRs, grammatical markings of viewpoints are extended to *give* verbs. This is the case in Japanese with respect to, *yaru* and *kureru* ‘give’: the verb *yaru* reflects the speaker’s point of view (78a), while *kureru* indicates that of its dative object. (Oshima 2004, 2007).

³² But there are some crucial differences between them, for example, non-subject oriented coreference is possible with LDRs in Japanese or Puxian but not in Ewe.

(78) a. Taro-ga Hanako-ni hon-o yat-ta.
T.-Nom H.-Dat book-Acc give-Past
 ‘Taro gave Hanako a book.’

b. Taro-ga Hannako-ni hon-o kure-ta
T.-Nom H.-Dat book-Acc give-Past
 ‘Taro gave Hanako a book.’

(Japanese; Oshima 2004)

In Puxian, there are some ditransitive constructions that are associated with the adverbial element *kuai*⁴, indicating the speaker’s viewpoint³³. For example,

(79) a. muino²⁴ iau⁴² kuai⁴.
things take to:him
 ‘(You) give the things to him.’

b. muino²⁴ iau⁴² ke²¹ i⁴.
things take to him
 ‘(You) give the things to him.’

*kuai*⁴ in (79a) emphasizes the speaker’s locus of perspective, whereas such an emphasis of viewpoint is not seen in (79b). A detailed discussion of *kuai*⁴ is provided in the context of ditransitive constructions in the next chapter.

³³ In fact, *kuai*⁴ encodes the recipient role as well, for the detailed discussion see the next chapter.

3.6.2. Previous studies on Mandarin LDR *ziji*

It is interesting to see that the best known study of Mandarin LDR *ziji* comes from C.-T. J. Huang (1984, 2001) in the generative tradition. Huang proposes a set of logophoric conditions for Mandarin LDR *ziji*, following the three-way taxonomy of Source, Self and Pivot elaborated by Sells (1987). To begin with, Sells' taxonomy is presented in (80).

- (80) a. Source: the one who is the intentional agent of the communication.
b. Self: the one whose mental state or attitude the proposition describes.
c. Pivot: the one with respect to whose (time-space) location the content of
the proposition is evaluated.

Sells views these roles as 'primitive roles' by which logophoric expressions can be categorized. The following English sentences may provide an illustration.

(81) John speaks highly of everyone except himself.

(82) Bill thought they would talk of himself.

(83) The picture of himself caused Tom to think.

In (81), *John* may be understood as the Source antecedent (i.e. the intentional agent) of the logophor *himself*. In (82), *Bill* is the internal protagonist or the Self antecedent, whose mental state is being reported. In (83), *Tom* is the Pivot by whom the whole sentence is evaluated; also in (83), *himself* is also an instance of backward reference in comparison to (81) and (82), which have forward reference. Sells suggests that there exists some one-way implicational relationship between the three primitive roles. If a

sentence is interpreted as reporting on the speech or thought of a Source antecedent, the same antecedent must also be a Self and a Pivot but not the other way around³⁴.

Based on Sells' taxonomy, Huang et al. (2001) offer an extended version of logophoricity:

‘a logophor refers to a person³⁵ whose (a) speech or thought, (b) attitude or state of consciousness, and/or (c) point of view, or perspective, is being reported. The person may be the speaker (the external Source, Self, or Pivot) or an internal protagonist denoted by an argument of the sentence (e.g. the matrix subject)’.

The following Mandarin sentences illustrate his points.

(84) a. John_i shuō Bill cháng pīpíng zìjǐ.

John say Bill often criticize self

‘John_i says that Bill often criticizes him (self_i).’

b. zìjǐ de jiǎng de xiāoxí shǐ John_i hén gāoxìng.

self get prize DE news make John very happy

‘The news that he (self_i) got the prize made John_i very happy.’

c. zìjǐ chóngcǐ yào nǚlì-le.

self from now on must work hard

‘I (self) must work hard from now on.’

³⁴ The reason why the reverse relation is impossible is partly due to the polyfunctional notion of Pivot, which could be either logophoric or empathic (see below for detailed discussion).

³⁵ Huang would not choose the term ‘antecedent’ because there are some logophors that can have backward or forward reference.

e. John_i kanjian le daguo ziji_i de na ge ren
John see PERF beat-PERF self DE that CL man
 ‘John_i saw the man who beat him (self_i) before.’

f. Yīnwèi John dǎ-le zìjǐ, suǒyí Bill_i hén shēngqì.
Because John beat-PERF self, so Bill very angry
 ‘Because John beat him (self_i), Bill_i was very angry.’

In (84 a) and (84b), the participant *John* may be understood as the Source or the internal Self respectively, to which the logophor *ziji* refers back. In (84c), *ziji* is completely unbound. Yet, given that it has a default Source - the external 1st person speaker ‘I’, it is also considered a logophor. As for (84e) and (84f), they represent Huang’s extended notion of Pivot, that is, apart from Source and Self, there exists another pragmatic role ‘Consciousness’. One implication of the notion of Consciousness is that the logophor is able to function not only in typical verbal contexts such as *say*, *think* or *see*, as in (84 a-e) but also in other verbal contexts as long as the referent’s Consciousness is involved. Thus according to Huang, the explicit causal relation of (84f) strongly implicates *Bill*’s awareness or consciousness of *John*’s negative action upon himself through the logophor *ziji*. In fact, *ziji* in (84f) can also be viewed as reflecting the Pivotal viewpoint of *Bill*, despite the involvement of multiple participants. The other implication of the role of Consciousness is that a possible logophoric interpretation will have to depend on ‘real-world knowledge’, such as whether the envisaged referent is alive or dead³⁶(Reuland 2001: 446). In my view, Consciousness is a highly promising aspect of Huang’s notion of logophoricity.

However, if what is involved with LDRs across languages can be attributed to

³⁶ In common sense, a deceased participants won’t be able to assume a consciousness center.

logophoricity in the sense of Huang et al, then the notion must itself be broader than originally assumed. Thus consider,

(85) The new picture of himself caused Bill to come towards me.

In (85), the content of the proposition is evaluated from the speaker's location (space-time), i.e. the Pivot, *me*, yet the so-called logophor *himself* does not refer to the speaker at all, as the verb 'come' reveals the clause is perceived from the speaker's perspective. Nor does it refer to any argument of Source (one who is the intentional agent of communication) or a Self (one whose mental state or attitude is being described). The only explanation is that the speaker, rather than maintaining his own perspective, empathizes with the participant *Bill*, that is, takes *Bill* as the Pivotal referent of *himself*.

Unfortunately, Huang does not elaborate on similar cases in Mandarin but insists that the status of a Pivotal antecedent/referent should be 'marginal' (Huang & Liu 2001), echoing Reuland's (2001) remark on English that they (the like sentences) are 'not an exception but an anomaly'. However, if marginality is exempt from logophoricity, then it is rather surprising to see that Huang excludes the following Mandarin sentences from logophoricity and treats them as involving anaphors.

(86) a. Bill hen ziji de pengyou.

Bill hate self DE friend

'Bill hates his own (self's) friend.'

b. Bill dǎo-le yī-bēi chá gěi zìjǐ de érzi.

Bill pour-PERF one-CL tea to self DE son

‘Bill poured a cup of tea for his own (self’s) son.’

Huang argues that (86a) and (86b) are instances of locally bound anaphors rather than logophors, for they do not exhibit coreference with the argument of Source, Self or Pivot. However, provided that they are indeed anaphors (which they are not for me), there hasn’t been any grammatical rule to prevent anaphors from taking logophoricity or at least viewpoints. In my opinion, both anaphors and LDRs display various degrees of Consciousness of the subject. A case in point is from the notion of *syntactic anaphor* discussed previously. Thus see (87),

(87) John considers himself good.

It is obvious that that notion of syntactic anaphor in the sense of König & Gast (2004) is much stricter than that of Huang’s definition on anaphor. Thus it is rather puzzling why *himself* in (87) should not exhibit Consciousness or other logophoric effects of the subject *John*. In my opinion, Huang may have unwittingly confused the pragmatic concept of logophoricity with the syntactic concept of anaphor, which results in an unnatural dichotomy between them.

Unlike Huang et al. (ibid), Kuno (1978) and Oshima (2004) in their study of the Japanese reflexive *zibun* propose a two-way distinction (88), viz. *empathy* and *logophoricity*, so as to license the pragmatic conditions of *zibun*. The refined definitions are summarized as follows.

(88) a. **Logophoricity** (à la Siewierska 2004: 201):

The marking by grammatical means of the perspective of a secondary ego.

b. **Empathy** (à la Kuno 1978)

The speaker's identification, which may vary in degree, with a person /thing that participates in the event or state that he describes in a sentence.

Thus the following sentences from Icelandic (89), Japanese (90) and English (91) may illustrate the distinction.

(89) Jóh_i segir að María elski sig_{i/*j}.

‘John_i says Mary loves (subj.) him/self_i.’

(Icelandic; Maling 1984: 212)

(90) Yasuo_iwa zibun_i ga tomodati kara karita hon o nakusita.

Yasuo TOP self NOM friend from borrowed book ACC lost

‘Yasuo lost a book that he (self) borrowed from a friend.’

(Japanese; Hirose 2002)

(91) John saw someone who carried a picture of himself.

In (89), the Icelandic reflexive *sig* occurs in the indirect-discourse of a saying verb and refers back to the secondary ego *John*. It is thus known as a canonical case of

logophor³⁷. Differently, in (90), the Japanese reflexive *zibun* appears outside the context of indirect discourse and is used to indicate the speaker's empathy with the subject *Yasuo* in the said event. On the other hand, the English reflexive *himself* in (91) could have either a logophoric or empathic interpretation. If we view the antecedent of *himself*, that is, the matrix subject *John* as a protagonist who possibly has conscious knowledge of the event, then *himself* is a logophor (see Minkoff 2004, Huang & Liu 2001); if we think the speaker's Pivotal viewpoint must be emphasized, that is, based on his/her time and location, *himself* becomes an empathic form, suggesting the speaker's identification with the participant *John*. Sentences like (91) may suggest that empathy and logophoricity share some blurred boundary. But they still play a distinct role in most cases which should not be confounded. For example, in the following English sentence, only empathy can explain the use of *yourself*.

(92) a. Anyone but yourself would have noticed the change.

b. There are groups for people like yourself.

(Parker et al. 1990: 50)

The reflexive *yourself* may be viewed as 'completely unbound'. Therefore, it does not comply with any logophoric conditions. Yet the fact that *yourself* may refer to one of the participants in the event is seen as a type of empathy from the part of the speaker (Kuno 1987: 26).

³⁷ Siewierska(2004) points out that logophoric person markers often occur in the sentential complements of verbs of saying, reporting or implicit reporting and are typically anaphoric to the agent of the matrix subject, given the fact that 'people have a strong predilection to talk about themselves rather than others'

3.6.3. The empathic and logophoric *kai*⁴² in Puxian

Following the above discussion, I will argue that there is a distinction between empathy and logophoricity among the uses of the LDR *kai*⁴² in Puxian. Their distributions in Puxian and Mandarin, based on the data³⁸, are shown in Figure 8 below.

Figure 8 Distribution of the empathic and logophoric reflexives in Puxian and Mandarin

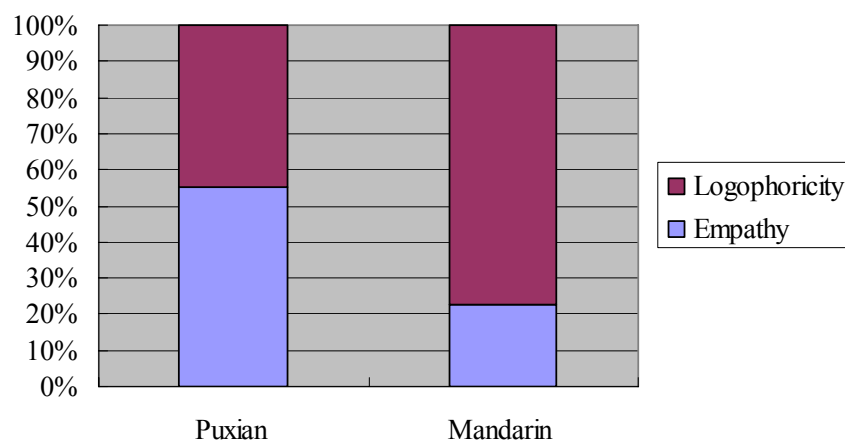


Figure 8 shows that about 20% of LDRs in Mandarin are empathic, though they are indeed ‘marginal’ in the sense that they are four times less frequent than the logophoric ones. In the case of Puxian, the instances of empathy and logophoricity are about equal. This may cast some doubt on Huang’s (2001) other claim stated in relation to the Chaozhou dialect (another branch of Min) that speakers are ‘quite reluctant to accept Pivot antecedents (i.e. empathy)’. The observation also lends no support to Sells’ (1987) argument that Pivot is less canonical than Self or Source (if empathy is one type of Pivot).

³⁸. The Mandarin data is from the CCL corpus from the Chinese department of Beijing University, where about 1,000 random instances of *ziji* in standard Mandarin are distinguished based on empathy or logophoricity. The corpus contains nearly 500 million Chinese characters, including different genres, such as news, novels, translated works, web postings etc. The Puxian data come from my transcription of Puxianese speech, where about 300 instances of the *kai*⁴² are distinguished.

Kuno (1987: 206), on the other hand, points out that ‘the degrees of the speaker’s empathy with x , $E(x)$, ranges from 0 to 1, with $E(x) = 1$ signifying his total identification with x , and $E(x) = 0$ a total lack of identification’. In the following sentences from Puxian, the LDR kai^{42} ranges from typical logophoricity (93a & b) to absolute empathy (93e & f). The exception is (93c), which could be logophoric or empathic (like the English (92) in the above).

(93) a. I⁵³³_i koŋ²⁴ ou⁴⁵³ e²⁴ hø²⁴ lia⁴² le⁴ thi¹¹ iau²⁴ kɛ²¹ kai⁴²_i

3sg speak taro be good eat and must give DAT self

e⁴ kyã⁴⁵³ ʃia²⁴.

MOD son eat

‘He_i says taro is good to eat and must give it to his (self’s)_i son.’

b. kuoŋ³²_i naŋ²⁴ tsø¹¹ kã^{-e}²¹, kai⁴²_i thø⁴² aili⁴ tsau- lua⁴²

1pl INTF do child self too like run every-day

‘(When) I_i was child, I (self_i) liked to play around.’

c. Hahlo cuh u-bi ceng-chia, dua **gai** e ba-sa ca-ku

Pharaoh went out prepare chariot, lead self MOD people leave

‘Pharaoh_i went out to prepare chariot and led his (self’s)_i people leave.’³⁹

e. Liau tyøŋ³²_i na²⁴ phe²⁴ tshiau²⁴ ka²¹, kai⁴²_i ky²¹ tshiau²⁴ le⁴.

And 2pl if want search house, self go search PERF

‘and if you_i want to search house, you(self_i) go to do then.’

³⁹ The sentence (93c) is quoted from the Bible in Romanized Puxian dialect, no tonal marking available.

f. i:²¹_i na²⁴ kua²¹ tse⁴² pie⁴⁵³ e⁴, kai⁴²_i ya⁴² nui⁴.

3sg if 1sg here buy PRT, self change PRT.

‘If he_i bought it here, he (self_i) can change it here.’

As one would expect, sentence (93a) illustrates a typical logophoric environment, where a logophor is characteristic of the sentential complements of verbs of saying, reporting or implicit reporting. In (93b), the logophor *kai*⁴² is long-distantly bound to the argument of Consciousness in the preceding clause, 1st person subject *kuoŋ*³² ‘I’. As for (93 c), there may be two interpretations: one is to treat the LDR *kai*⁴² as a logophor, referring back to the matrix subject *Pharoah*, where it is believed the agent is quite aware or conscious of his activity in the event. The other is empathy by which the speaker uses his camera angle to perceive the event and identify himself with that of the participant *Pharoah*. For (93 e & f), it is quite obvious that the event or proposition is solely evaluated from the speaker’s viewpoints and he only empathizes with the participant of the event (not necessarily the matrix subject).

Apart from the logophoricity and empathy distinction, there appears to be a different type of empathy in Puxian that cannot be fully accounted for by the existing taxonomy. For example, in the following sentences, *kai*⁴² is not only completely unbound but also reflects empathy with the internal protagonist. In this case, *kai*⁴² is more like a deictic pronoun.

(94) a. kuoŋ³²_i yø²⁴ koŋ²¹ kai⁴²_j u⁴² liau-a⁴² iau²⁴ liau-a⁴²

my mother say self have how much give how- much

‘My mother_i say you/he (self_j) give what you (self_j) have.’

b. I⁵³³_i koj⁴² kai⁴²_j tiau²⁴ menni²¹

3sg say self must clever

‘He_i says you/he/someone (self_j) must be clever (to handle something).’

In the case of (94a), there is no intra-sentential anaphoric relation between *kai*⁴² and its antecedent. Nor does *kai*⁴² reflect the speaker’s empathy with the participant. In fact, it is much like a deictic pronominal (*he/ you*). It also carries the internal protagonists’ empathic points of view (e.g. *my mother’s* in (94a) and *he* in (94b)). The only explanation is that the speaker identifies with the matrix subject, who, in turn, identifies with the other participant. I would argue that the internal protagonist’s empathy (henceforth *inter-empathy*) is not an isolated linguistic phenomenon. It is even found in English as well, though limited to the first person subject only (Huang believes unbound logophors must always have 1st person referent, which is therefore untrue, at least for Puxian).

(95) I saw a picture of herself_i to the right of Sara_i.

*John saw a picture of herself_i to the right of Sara_i.

(English; Minkoff 2004)

Minkoff (2004) argues that ‘it is possible to assume that *Sara* and *I* face each other and that the picture is on the right according to me, but on the left according to Sara, so that the content of the proposition is evaluated with respect to my (space-time) location, not hers’. In contrast, if the subject is not the first person (the speaker) himself, it is only illicit.

In addition to unbound *kai*⁴² that may be deictic as in (94), there is also another

type of unbound reflexive, namely an impersonal reflexive, whose viewpoint effect hasn't really been studied yet. One puzzling question is whether it is logophoric or emphatic. Before turning to Puxian, it seems necessary to have a look at some cross-linguistic features.

(96) a. Man_i erzählte uns, dass einem_i Unrecht geschehen war.

man told us that man(dat.) injustice happened had

'They told us that they had been treated unfairly.'

b. Jedes Paar glaubte, man verstünde sich gut.

each couple believed man understood(subj.) refl well

Each couple believed they got along well with each other.

(German; Kratzer 1997)

(97) Si lavora sempre troppo.

REFL work:sg always much

'One always works too much.'

(Italian; Siewierska 2008)

(98) Nie niszczyło się swoich

NEG destroyed.3sg.NEUT REFLown[REFL].NONVIR.GEN

dokumentów.

documents(NONVIR).GEN

'One did not destroy one's documents.'

(Polish; Kibort 2008)

It has been observed by Kratzer (1997) that impersonal pronoun *man* ‘man’ in German has logophoric uses as in (96 a& b), where, the logophoric *man* refers to the matrix subject *man* or *jedes paar*, denoting the latter’s speech/though/consciousness (i.e. a *de se* interpretation is possible in the context). In terms of the impersonal reflexive *si/se* as unbound subjects in (97) and (98), Lidz (2001) believes that they are a kind of freely indexed anaphors that can turn to the discourse to find their antecedents, which ‘ultimately gives rise to a logophoric interpretation’. Reuland (2001), however, argues that SE anaphors, which occupy the highest Specifier position (i.e. the nominative position), can allow neither a bound nor a logophoric interpretation, for they lack certain features to agree with the finite verbs.

Then if logophoricity is not a viable interpretation for all impersonal reflexives, it is still possible to treat them as being empathic. This is at least the case for Puxian. In my opinion, since impersonal reflexives are typically unbound, they cannot be used to report the thoughts or feelings or consciousness of a secondary ego, i.e. they cannot be logophoric (except for reporting a 1st person speaker). Yet, from the empathic perspective, impersonal reflexives may express the speaker’s identification, to various degrees, with the impersonal referents in the situation or event being presented. In other words, a narrator/speaker may take a ‘neutral or inoffensive’ point of view when he chooses a regular personal pronoun (Siewierska 2004: 211) but an empathic point of view when he uses a reflexive. Thus the impersonal *kai*⁴² in the following sentences is empathic in that the speaker vicariously participates in the situation or event.

(99) u¹¹ kai⁴² bø²⁴ pe- nan²⁴

have self not others

‘One is selfish.’

Lit. ‘have self (in the mind) but not others.’

(100) kai⁴² ʃia²⁴ tiŋ²⁴, naŋ²⁴ ʃia²⁴ kien²⁴

self eat sweet, man eat salt

‘One is comfortably fed while others suffer.’

Lit. ‘Self eats sweets, others eat salt.’

(101) kai⁵³³ koŋ⁴² kai⁵³³ niã⁴²

Self speak self do

‘One is self-willed.’

In the above impersonal sentences, the reflexive *kai*⁴² cannot find an antecedent in the clause and it has impersonal reference, i.e. the meaning ‘one’. The uses of *kai*, instead of other person forms are motivated by the speaker’s empathic viewpoints.

Since we have known that *kai*⁴² is involved with different viewpoints, there is still one important question that needs to be addressed: what is the grammatical category of *kai*? Is it a reflexive, an indexical or an intensifier in these contexts?

König & Gast (2004) seem to have offered the best answer to this question. According to them, these reflexives are *untriggered reflexives* that occupy a middle position between the category of reflexive pronouns (anaphors) and intensifiers, sharing properties with but also exhibiting clear distinctions from both categories. In terms of the grammatical features, they are generally found in different argument positions (e.g. as subject in Puxian and Mandarin or as object or complements of prepositions in English), can be replaced by regular personal forms and have no antecedent in the same clause (i.e. locally-free).

König & Gast also believe that the reason to treat untriggered reflexives as a distinct category, rather than subsuming them under either anaphors or logophors (as is the practice in the generative literature), is that the existing theories of anaphor or logophoricity fall short of fully accounting for the properties of untriggered reflexives. Thus in the following English sentences, the untriggered reflexive *himself* is outside the context of Chomsky's BCA or R& R's notion of Self anaphor. Nor does it fit easily into C. –T. J. Huang's extended notion of logophoricity. Thus consider,

(102) a. And that was exactly it, he thought, he really did not care too much what happened to **himself**.

(Zribi-Hertz, 1989: 709)

b. They would talk of **himself**, he thought fondly.

(PN, p.322)

c. It was time to put an end to the burning. But to do so would put an end to **himself** as well.

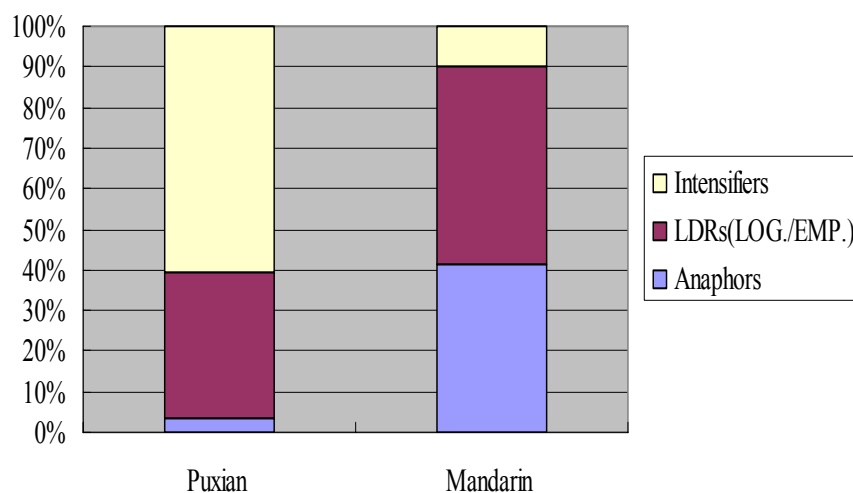
(WSM, p.317)⁴⁰

In the mainstream generative literature, an anaphor is believed to be coindexed with a coargument in the local domain (BCA) or an argument of a reflexive-marked predicate (Self anaphor). Yet the uses of *himself* in (102 a –c) are either long-distance bound (102a & b) or completely unbound (102c), which means none of them meet the conditions of being an anaphor. Thus the available explanation may be assumed to lie

⁴⁰ Sources for *PN* is *Paradise News*, by David Lodge. Penguin, 1991 and for *WSM*, *Well-Schooled in Murder*, by Elizabeth George. Bantam Press, 1990.

with the theory of logophoricity. For example Huang (ibid) put forward a dichotomy between anaphors and logophors. The latter is not only reducible to *de se* interpretation but a long-distance version of the former. As has been discussed above, there are some problems with Huang’s logophoric theory. An obvious counter example is that it fails to account for *himself* in (102c), where it is neither bound to the speaker (as 1st person logophor is) or to any argument of Source, Self or Consciousness in the sentence. Although it may be argued by generative linguists that untriggered reflexives like (102 c) are too marginal to warrant attention (cf. Reuland 2001), when it comes to cross-linguistic data, such a judgment cannot be substantiated. In fact, in both Puxian and Mandarin, untriggered reflexives constitute a substantial portion of reflexive uses. Thus based on the same data, we arrive at the distribution of reflexive functions, shown in Figure 9.

Figure 9 Categories of reflexives in Puxian and Mandarin



We see in Figure 9 that about 30% of the reflexive forms in Puxian and 50% in Mandarin are LDRs or untriggered reflexives, which can be associated with logophoric

or empathic usage. Therefore, there is no reason to ignore their existence, simply because they may be marginal in some languages such as English.

On the basis of such observation, Baker (1995), along with König & Siemund (2000c), proposes that untriggered reflexives could indeed be the fused forms of personal pronouns and adnominal intensifiers, that is, the personal pronoun may be incorporated into the intensifier as it were the combination ‘pronoun + self’ in the case of *himself* or the personal pronoun is dropped as in the case of ‘headless intensifiers’. The rationale that untriggered reflexives are of an intensifier origin is also evoked by the fact that they can be supplied with a pronominal head in almost every syntactic positions they occur in (at least in Puxian). In the following sentences of Mandarin (103) and Puxian (104), the untriggered reflexives are able to be preceded with a pronominal expression *e*.

(103) a. Zhāng sān shuō Lísì pīpíng-le [e zìjǐ].

Zhang san say Lisi criticize-Perf self

‘Zhangsan said Lisi criticized him.’

b. Zhāng sān de jiāo-ào hài-le [e zìjǐ].

Zhang san DE pride hurt-Perf self

‘Zhangsan’s pride hurt him.’

(Mandarin ; Huang et al. 2001)

(104) a. [e kai⁴²] au-uai²¹ meŋ²⁴ –tsø¹¹ – meŋ²⁴ –khy⁴².

[e self] later live on

‘I/he/they (self) live(s) on later.’

b. John na⁴² kou²¹ [e kai⁴²]

John only care-about [e self]

Lit. ‘John only cares about (him)self’

c. uan⁴² [e kai⁴²], pho uan pe- nan²⁴

blame self not blame others

‘(One) should blame (him)self but not others.’

(Puxian)

Additional support for the intensifier origin of such reflexives comes from impersonal *kai*⁴² as well, which is unbound or antecedentless in subject position. Recall from the previous section that *kai*⁴² and *nan*²⁴ can mutually serve as intensifiers. That is, the impersonal reflexive *kai*⁴² may be the intensifier of the impersonal pronoun *nan*²⁴ and vice versa⁴¹.

(105) [(nan²⁴) kai⁴²] ɬia²⁴ thiŋ²⁴, [(kai⁴²) nan²⁴] ɬia kien²⁴

Isg self_{INTF} eat sweet, self man_{INTF} eat salt

‘One is comfortably fed while others suffer.’

Lit. ‘[1sg + IINTF]eat sweets, [REFL +INTF] eat salt.’

⁴¹ In the last chapter, we mentioned that both *nan*²⁴ and *kai*⁴² can be impersonal pronouns and have the following properties: (i) it appears in the argument position with a thematic role assigned; (ii) it has the ability to control subject-oriented anaphora (e.g. being coreferential with the zero form of the conjoined clause); (iii) it is a logophor (in the broad sense) emphasizing the referent’s point of view.

(106) U¹¹ (i) kai⁴² pø²⁴ pen- nan²⁴.

AUX 3sg self_{INTF} no other man

‘One cares only about himself rather than others.’

Lit. ‘have (him)self without others’

It is also known that in Puxian *kai*⁴² is often used as an indexical referring to 1st, 2nd or 3rd person while *nan*²⁴ can refer to 1st and 3rd person. It is thus not surprising that in (105) both *kai*⁴² and *nan*²⁴ can be supplied as a pronominal head of the other part of *nan*²⁴ or *kai*⁴², as in [*nan*²⁴ *kai*⁴²] or [*kai*⁴² or *nan*²⁴], roughly meaning ‘we/they + intensifier’. The operation doesn’t result in the illicitness of the sentence. In contrast, in (106), the impersonal 3rd person *i* ‘he’ can also be added to *kai*⁴² without enhancing or detracting from the impersonal reading, since both the 3rd person singular *i* or *kai*⁴² can be used impersonally (see the previous chapter).

The fact that most untriggered reflexives in Puxian occur in subject position are not able to block intensification of NPs (in contrast to English, where they are found in other than subject positions) is a clear indication that ‘headless intensifier’ is a suitable explanation for the untriggered reflexives in Puxian.

3.6.4. The rationale

There are several principles that attempt to account for ‘headless intensifiers’ or ‘untriggered reflexives’ across languages. Siemund (2000) offers the ‘Economy Principle’, which states:

If two expressions E1 and E2 form a complex expression Ee and if the semantic features of E1 are a subset of those of E2, then E1 is superfluous and can be dispensed.

To explain, we have the following examples, where the untriggered reflexive *himself* is in prepositional object position.

(107) a. John thinks that the teacher like [e himself] is from Lancashire.

b.*John thinks that the teacher like [him himself] is from Lancashire.

The fact that a stressed intensifier *himself* is grammatical in (107a) but illicit in (107b) can be attributed to the fact that the intensifier *himself* has made the same semantic contribution as *him himself*, which enables the economy principle to take effect by deriving a reduced headless intensifier from the redundant structure of ‘anaphoric pronoun + intensifier’ (see also Ross 1970).

For one aspect of the issue, Haspelmath (2008) offers a frequency-based explanation. He argues that disjoint reference has shorter codings than coreference because the former is overwhelmingly more frequent than the latter, as illustrated in Table 11 from Ariel (2004).

Table 11 Coreferential and disjoint use of phoric object pronouns in transitive clauses
(Source: Ariel 2004, based on the Santa Barbara Corpus of English)

disjoint	101	(98%)
coreferential	2	(2%)

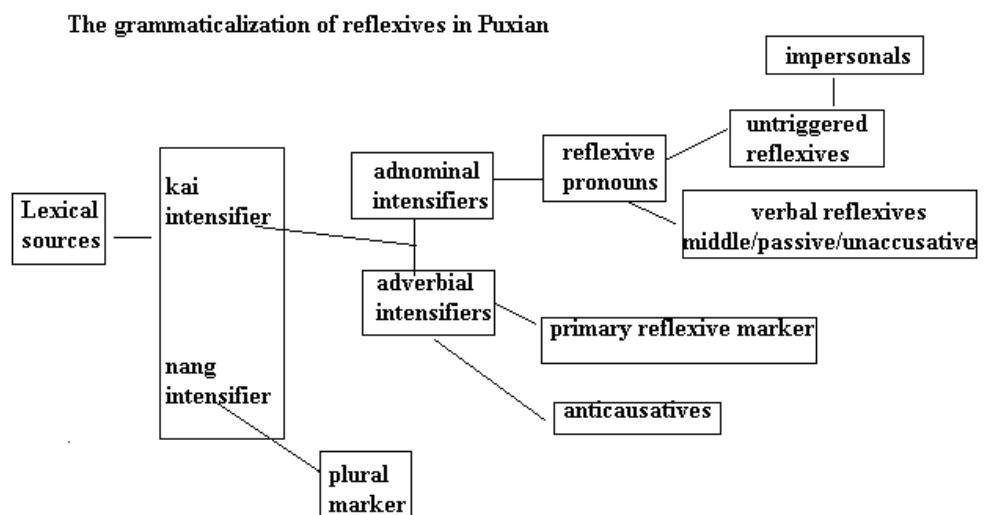
According to Table 11, out of 103 pronominal referents in English, 101 show disjoint reference. In comparison, coreferential reflexive pronouns (anaphors) make up only 2% of all object pronouns. Such an observation supports Faltz's (1985: 241-2) claim that 'in the case of a predication involving more than one argument, the unmarked situation is for the different arguments to have distinct referents'. Since disjoint reference is likely to be coded less than coreference, it may also be assumed that untriggered reflexives or LDRs which are not bound to the immediate antecedents (a type of disjoint reference) should have a default requirement to be less coded than locally bound reflexives. Haspelmath believes that what exactly Faltz means by 'unmarked', is fair to be interpreted as 'most frequent' in this context (cf. Haspelmath 2005, 2007). In my opinion, both the frequentist's explanation and Siemund's economy principle are much in the spirit of explaining the existence of untriggered reflexives in Puxian and in other languages.

3.7. The grammaticalization of *kai*⁴² in Puxian

In this section, I will approach *kai*⁴² from a grammaticalization point of view and argue that *kai*⁴² started out as a bimorphemic noun phrase, which later evolved into *nominal* as well as *verbal* reflexives (Faltz 1985). There are, nonetheless, some unique grammaticalization features for *kai*⁴², which may pose some questions to the existing grammaticalization theories or even the typology of reflexives. For example, there is some evidence from Puxian to counter the common belief that *verbal reflexives* (non-pronominal morphology, see also Lehmann 2002, Siewierska 2008), such as *si/se* in Romance and Slavic languages, represent the highest degree of grammaticalization and are markers of anticausatives, passives or impersonals, whereas *nominal reflexives*

(e.g. reflexive pronouns or nouns) are less grammaticalized and only used for marking identity, focus or some peripheral pragmatic functions. However, Puxian may have anticausatives or impersonals expressed by *nominal reflexives*, which suggests that the semantic transition to anticausatives, passives or impersonals does not correlate with the morphological development from *nominal* to *verbal* reflexives. Different categories and functions of *kai*⁴² are represented in the following diagram (Figure 10), attempting to show its development from the lexical sources to more and more grammaticalized functions.

Figure 10 Grammaticalization of reflexives in Puxian



In what follows, I will first introduce the theoretical framework concerning grammaticalization of reflexives, which is mostly based on Lehmann's (2002) four-way typology of reflexives, viz. *autophoric nouns*, *reflexive nouns*, *reflexive pronouns* and *verbal reflexives*. The discussion will then relate different functions *kai* from the perspective of grammaticalization.

3.7.1. The grammaticalization of reflexives

It is generally acknowledged that languages may have more than one form of reflexive marker. But as yet, there have been no detailed studies of the diachronic development of these forms across languages. One reason for this is that only a handful of languages have adequate etymological or grammatical ‘dictionaries’. Fortunately, the lack of documented material has, to some extent, been compensated for by some recent typological studies. These studies not only provide clues as to the uneven development of reflexive markers across languages but also offer some strong suggestions concerning the general grammaticalization trends. In other words, the fact that not every language has the same kind of reflexive in terms of morphology and functions may make up for the lack of detailed diachronic data in a language. Thus, for instance, Faltz (1985) proposes that there are two types of strategies for reflexivization across languages: *verbal strategies* and *nominal strategies*; Heine (2005) points out that languages of the world tend to create new reflexive markers through a series of ‘grammaticalization channels’ such as (i) the pronoun strategy, (ii) the noun strategy, and (iii) the intensifier strategy. In addition, Lehmann (2002) provides a four-way typology for reflexive markers on the scale of grammaticality: (i) *autophoric nouns*, e.g. Sanskrit *ātman* ‘soul’, (ii) *reflexive nouns*, e.g. German *selbst* ‘self’, (iii) *reflexive pronouns*, e.g. Russian *sebjá* ‘self’ and (iv) *verbal reflexives*, e.g. Russian *–sja* ‘self’. In fact, Lehmann’s four-way distinction of reflexive markers is in one way or another linked to Faltz’s two-way strategies or Heine’s grammaticalization ‘channels’, as they not only recognize the possible typological variations for reflexives but also suggest such a difference is probably due to idiosyncratic development of a particular language in history.

What is significant, as suggested by the above scholars, is that there is a general grammaticalization trend for reflexive markers to develop from lexical sources

(i.e. autophoric nouns) to more grammaticalized forms, such as pronouns or verbal reflexives. This is the view also held by König and Siemund (2000), who observe that reflexive markers in quite a number of languages can be traced to lexical sources, such as nouns corresponding to the means of ‘soul’ ‘body’, ‘head’ or ‘nose’. Synchronic evidence to support this claim may come from Haitian, Creole, as in (108), where the lexical NP *tèt-* ‘head’ is also the translation equivalent of English ‘self’. Its sole function in the sentence is to establish coreference with the subject.

(108) Jan_i pale ak tèt- li_i
John speak with head- his
 ‘John speaks with himself’

(Haitian CF; Lefevre, 1998: 165)

Also in Classical Chinese, in addition to the well-known reflexive markers *zi* ‘self’ and *ji* ‘self’⁴², there were the ordinary nouns *sheng* 身 and *gong* 躬, both meaning ‘body’, which are also reflexive forms in the syntactic positions of object (109a), subject (109b) or subject of passive constructions (109c).

(109) a. 吾 日 三 省 吾 身
 wǔ rì sān xín wǔ shēn
Isg day three reflect-on Isg self(body)

Lit. ‘We should reflect on ourselves three times a day.’

(from *Lun Yu, Analects of Confucius* 论语, 551 – 479 BC)

⁴² *zi* and *ji* came from other lexical sources that are discussed below.

b. 躬 造 其 庐，以 申 长 幼 之 敬
gōng zào qí lǔ, yǐ shēn zhǎng yòu zī jìn
self(body) visit that house, PREP state elder tender MOD respect
Lit. ‘Self should visit his house for expressing respect.’.

(Chinese; From *Shi Ji* (Historical Records) 史记, 135 BC)

c. 兔 不 可 复 得，而 身 为 宋 国 笑
tù bǔ kě fù dě, er shēn wéi sòng guó xiào
rabbit not can again get, but self(body) PASS Song country tease
‘One is teased by Song people, for
Lit. ‘Self is teased by Song people, for there won’t be any rabbit any
more.’

(Chinese; Hanfeizi 韩非子, 233 BC)

The use of ordinary nouns as reflexive markers may further develop into ‘reflexive nouns’ and ‘pronouns’. Reflexive nouns have no meanings other than that of ‘self’ (Lehmann 2002). They are often used as intensifiers marking *identity/focus*, e.g. German *selbst* (3) or French *x-même* (4) or even the LDR *x-self* in English (5).

(110) a. Ich komme selbst

‘I am coming myself.’

b. Wollen Sie die Karten für sich selbst?

‘Do you want the cards for yourself?’

(German; Lehmann 2002)

(111) Ce film l_i'ennuie {LUI₁ (-MEME)}

this film 3MSG.ACC bore.PRS.3SG 3MSG ITF

‘This film bores {HIM/even himSELF}.’

(French, Zribi-Hertz 2007)

(112) There are groups for people like yourself.

(Parker et al. 1990: 50)

Somewhat parallel to reflexive nouns is the development of reflexive pronouns⁴³. Typical reflexive pronouns are German *sich* (113a) or Russian *sebjä* (114), whose primary function is to refer back to the antecedent (i.e. coargument). Reflexive pronouns generally do not appear in nominative positions and are often followed by a reflexive noun in appositive position, as in (113b).

(113) a. Er wäscht sich

‘He washes himself.’

b. Paul verletzte sich selbst.

Paul hurt:PAST REFL self

‘Paul hurt himself (intentionally).’

(German; Siemund et al. 2006)

⁴³ Whether or not are reflexive nouns or pronouns an intermediate step in the development of reflexives from expressions for body parts is not clear in all cases (König and Siemund 2000)

(114) Ja myl sebja.

I washed myself

‘I washed myself’ (not someone else)

(Russian; Oya 2002)

The most grammaticalized reflexive forms are believed to be verbal reflexives. They are assumed to be derived from reflexive pronouns through a series of grammaticalization processes, namely ‘decategorization’, ‘semantic bleaching’ or ‘erosion’⁴⁴(Heine 2005). Typical verbal reflexives are affixal-like reflexive morphemes, e.g. *ngi-* or *ki-* in Rukai and Paiwan of the Formosan languages, as in (115), or clitics such as the Italian *si* in (116).

(115) a. **Ng**i-a-e-elebe ku LawLawDu kai takanaw

Refl-realis-close ACC door Nom Takanaw

‘Takanaw closed the door by himself (without somebody else’s help).

b. **Ki**-madu ti Muni a semanay

REFL-person NOM Muni LnK sing

‘Muni sang alone.’

(Formosan; Sung 2006)

⁴⁴ Heine (2005) points out that grammaticalization should be defined as the development from lexical to grammatical forms, and from grammatical to even more grammatical forms. Technically, grammaticalization involves five interrelated mechanisms: (i) extension (or context generalization), (ii) context-induced reinterpretation, (iii) desemantization (or ‘semantic bleaching,’ or generalization): loss in meaning content, (iv) decategorialization: loss in morphosyntactic properties characteristic of the source forms, including the loss of independent word status (cliticization, affixation), and (v) erosion (or ‘phonetic reduction’), i.e. loss in phonetic substance

(116) Non si è mai contenti

Neg REFL be :pres:3ps never satisfied

‘One is never satisfied.’

(Italian; Cinque 1988: 522)

One noticeable distinction between reflexive pronouns and verbal reflexives can be illustrated with *sich* ‘self’ in German. Although it shows no formal distinction as to being a reflexive pronoun or a verbal reflexive, only the former use, i.e. the pronominal *sich* (SELF anaphor) can take the intensifier *selbst*, whereas the verbal reflexive *sich* (SE anaphor) cannot, as shown in (117) below.

(117) a. Hans hat meistens sich selbst gewaschen.

Hans has mostly REFL INTF washed

‘Hans washed mostly himself.’

b. Hans hat meistens sich (*selbst) geschämt.

*Hans has mostly REFL(*self) shamed*

‘Hans was mostly ashamed.’

(German; Bayer 2008)

In terms of verbal reflexives, what is important here is that they may evolve into markers of predicate categories. Faltz (1977: 268) argues that the grammaticalization processes reduced the reflexive markers into some ‘general intransitivizers’. Kemmer (1993: 53) also argues that (verbal reflexives) may enable the sentence to profile ‘a lower degree of distinguishability among participants and consequently a lower degree

of event elaboration’. As explained by Heine (2005) as well, an ordinary noun/reflexive pronoun over time gradually loses some, if not all, referential features (e.g. person or number features) as well as its independent word status (e.g. by clitization or affixation). Cross-linguistically, verbal reflexives can appear with predicate categories of reciprocals (118), middles/anticausatives (119) and passives/impersonals (120) & (121) (see also Siewierska 1984, Sansò 2009, Reinhart & Siloni 2005, among others).

(118) Giovanni e Maria si sono abbracciati.

Giovanni and Maria REFL are hugged

‘Giovanni and Maria hugged.’

(Italian; Reinhart & Siloni 2005)

(119) La puerta se abrió

the door REFL opened

‘The door opened.’

(Spanish; Sansò 2009)

(120) Пол мыл-ся девочкой.

floor wash:IMPERF:SJA girl:INST

‘The floor was being washed by the girl.’

(Russian; Siewierska 1984: 162)

(121) Byłoby się bitym przez kaprala

Be:NEUT:3sg REFL beaten by corporal

‘One was beaten by the corporal.’

(Polish; Kibort 2000: 91)

Although the above verbal reflexives represent the highest level of grammaticalization and are associated with different grammatical functions, there are some languages that use reflexive pronouns or zero morphology to mark different verbal categories, instead of resorting to verbal reflexives, if any. For example,

- (122) *Deine Bücher verkaufen sich gut*
Your books-NOM sell RP-ACC well
'Your books sell well.'

(German; Steinbach 1999)

- (123) *Jan wast zich.*
'John washes.'

(Dutch)

- (124) *John shaves every day.*

(English)

(122) is a middle construction in German (Steinbach 1999), which requires a reflexive pronoun in the position of the accusative object. In (123), the predicates *wast* in Dutch and *shave* in English are 'lexically reflexive' (Reinhart & Siloni, 2004). The difference is that the former is formed by the simplex anaphor *zich*, while the latter is morphologically identical to the transitive counterpart.

Although there are some mismatches between form and function across languages, the general trend, as predicated by the grammaticalization approach, can be summarized as: the more grammaticalized or decategorized a reflexive marker is, the less likely is it

to be referential or argumental, and the more likely is it to assume complicated grammatical functions.

3.7.2. The case of Puxian *kai*

In the previous discussion, we mentioned that Puxian has three different reflexive markers: (i) the adnominal intensifier, anaphor (of sentient verbs) and LDR *kai*⁴², (ii) the adverbial intensifier and primary reflexive marker *kai*⁴²-*kai*¹¹ and (iii) the verbal reflexive or ‘intransitivizers’ *kai*⁵³³-. It is also expected that these reflexive forms exhibit similar properties, as prescribed by the typological or the grammaticalization approaches.

3.7.2.1. The lexical sources of *kai*

As has been pointed out by many native Chinese dialectologists (Chen 2003, Li 2005, among others), reflexive markers in most dialects of Southeastern China (e.g. Min, Hakka, Gan, Hui, Xiang, Wu and many parts of Yue) are bimorphemic. They are formed with two lexical items, *zi* 自 ‘self’ and *ka* 家 ‘family’ in tandem⁴⁵, as in *zi-ka* 自家 ‘self-family’ (the morphemic order is similar to Mandarin *zi-ji* ‘self-self’, where *zi* is always the first morpheme). Yet, only in Min dialects, the reverse order of *ka-zi* 家自 ‘family-self’ is attested. According to Li (2005: 150), the current reverse morphemic order in Min reflexives is derived from Middle Chinese, esp. in the period of between the 6th century – the 10th century, when there was a general ‘bimorphemic instability or

⁴⁵ Although the use of *ka* and *zi* are widespread in that region, there are some exceptions, for example, Southern Wu (Shaoxin or Wenzhou) has a monomorphemic reflexive *zi* 自 and some Northern Mins have *zi-zi* ‘self-self’ as the reflexive marker.

flexibility'⁴⁶. Over time, in the course of grammaticalization, the sounds of *ka* and *zi* were either fused together into *kai*⁴² (with the second consonant of *zi* being dropped, as in the case of Puxian) or developed phonological variations in other Min dialects. For example, in the Southern Min dialects, the consonant of the second morpheme *zi* is not dropped but converted into *k-*, *t-* or *ts-* and has resulted in bimorphemic reflexives, such as *kai ki*, *ka ki* or *ka ti* 'family-self' in various parts of the region. In addition, the morpheme *ka* 'family' in Puxian and in other Min dialects still retains the lexical meaning of 'family' while the second morpheme *zi* only means 'self'.

In comparison, Mandarin has a bimorphemic reflexive marker *zi-ji* 'self-self' too. According to Chinese etymological dictionaries, *zi* 自 (in the pictographic periods) was originally a body part noun meaning 'nose' and *ji* 己, meant 'string/cord/twine'. The grammaticalization of *zi* into the reflexive meaning of 'self' must have occurred very early in Chinese history (presumably far before the 6th century BC), because *zi* 'self' has been found in many archaic dialects in China, such as Min, Hakka, Yue, etc.

Heine (1991,2005) points out that the derivation of reflexives from nouns may involve three grammaticalization processes: (i) *metaphor* – 'a transfer from the world of concrete concepts to the world of text structure', (ii) *metonymy* or *synecdoche* – 'the whole (a human being) is conceptualized in terms of one of its parts (i.e. the body or the head)' and finally, (iii) *inference or context-induced reinterpretation* – 'specific contexts invite an interpretation of a meaning in terms of another meaning that suggests itself in that context'. In the case of Puxian, the morpheme *ka* 'family' must have evoked a metaphorical association from the concrete concept like 'family/household' to more abstract extensions such as 'beginning/origin/ basis/self'. In Mandarin, the morpheme *zi* 'nose' is assumed to have involved *synecdoche*, by which one's nose stands for the

⁴⁶ This is reminiscent of our previous discussion of *nai*²⁴ and *kai*⁴², which form a NP with flexible orders.

person as a whole (Interestingly, this is reminiscent of the English phrase ‘lead (somebody) by the nose’).

3.7.2.2. Intensifiers and anaphors

In the previous discussion, I referred to anaphors as expressions that are typically used to indicate co-argumenthood of a transitive predicate and to intensifiers as primarily ‘evoking of alternatives to the referent of the NP they relate to’. (Heine 2005: 218; see also König & Siemund 2000a; König & Gast 2006). From the grammaticalization point of view, intensifiers and anaphors are the intermediate stages of the process. That is, both of them are located somewhere between autophoric nouns and verbal reflexives on the scale of grammaticality (Lehmann 2002: 38 -40). Heine (2005), quoting König & Siemund (2000a), points out that ‘intensifiers and reflexive anaphors are completely or partially identical in form in about 55% of the nearly 200 languages they analyzed’, which suggest ‘the intensifier strategy provides crosslinguistically one of the most common means of creating new reflexive forms’. However, considering anaphors across languages are developed from different pathways⁴⁷, the detailed diachronic transition between them is not always clear in all cases.

With respect to Puxian, there are the adnominal intensifier, *kai*⁴² (125a) and *naŋ*²⁴ (125b) and the adverbial intensifier *kai*⁴²-*kai*¹¹ (125c), all of which differ morpho-semantically, as shown below.

⁴⁷ König (2001:747-760) mentions that reflexive markers (anaphors) may be derived directly from body parts or from other sources that is not necessarily based on intensifiers. And ‘there is, however, clear evidence that such an intermediate step is not necessary.’ (König & Siemund 1999:103)

(125) a. I²¹ nan²⁴ thi²⁴ ɬen-na⁴²
 3sg man_{INTF} be teacher
 ‘He himself is a teacher.’ (Respectfully)

b. I²¹ kai⁴² thi²⁴ ɬen-na⁴²
 3sg sefl_{INTF} be teacher
 ‘He himself is a teacher.’ (Even/too)

c. tse²¹ pou²⁴, i²¹ phe²⁴ kai⁴²-kai¹¹ kun⁴².
 the bed_{TOP}, 3sg want self-self_{INTF} sleep
 ‘He wants to sleep on the bed alone.’ (By himself/alone)

In the previous discussion, we noticed that there are some semantic/pragmatic distinctions between these intensifier forms. The adnominal intensifier *nan*²⁴ ‘man’, in addition to the common functions of *focus/prominence/contrast*, denotes a sense of *respectfulness/admiration/remarkability* (not seen outside Min). By contrast, the adnominal *kai* in (125b) denotes such meanings as *focus/contrast* or even some negative associations, without the meanings of *respectfulness/admiration*, as in (125b), which may be paraphrased as *He is a teacher too! (but he cannot teach his own son well)* and by contrast, (125a) has the meaning *He is a teacher (so admirably)*.

What is important here is that these intensifier forms further evolve into different grammatical functions. For example, *nan*²⁴ became a plural marker, attached to the personal pronouns⁴⁸ (see the previous Chapter); the adnominal *kai*⁴² evolved into a LDR and the adverbial *kai*⁴²-*kai*¹¹ developed into the primary reflexive marker (anaphor)

⁴⁸ The fact that *nan*²⁴, instead of seeking to be an anaphor, develops into a plural marker is probably due to its inability to be extensively used in non-subject positions, which prevents it from becoming *seblst*-like intensifiers in German that has nothing but ‘self’ meaning.

(see the previous section, also Heine 2005: 218).

In terms of anaphors (including the primary reflexive marker or the (x)- *kai* forms) in Puxian, they may start out as intensifiers for the sole purpose of marking anaphoric identity, and eventually develop into free reflexive pronouns (see also Faltz 1985; Levinson 1991; Keenan 2002; van Gelderen 1999; König and Siemund 1999, 2000a,b; König and Vezzosi 2004). Cross-linguistically, there are two situations in which an anaphor may be derived from adnominal intensifiers: one is that adnominal intensifiers may lose their semantic content and become meaningless component parts of a pronoun such as *sich selbst* ‘self’ in German; the other is they may coalesce with personal pronouns, such as *himself* in English and *lui-meme* in French (Zribi-Hertz 1995). Interestingly, Puxian adopts two different anaphor strategies: one involves adding an intensifier *kai* to another reflexive form *kai* (i.e. the primary reflexive marker *kai*⁴²-*kai*¹¹); the other involves having the intensifier *kai*⁴² coalesce with the pronominal head and become a so-called ‘headless intensifier’ (i.e. the (x)-*kai* forms) (Baker 1995). Thus for example,

(126) a. I²¹ kai³²-kai¹¹ pha⁴²

3sg self-self hit

‘He hits himself.’

b. Na²⁴ e⁴ yuan⁴² kai⁴².

Only can blame self

‘(You/he) have to blame (your/him)self.’

(Puxian)

The distribution of kai^{42} - kai^{11} and (x-) kai^{42} is dependent on the semantics of the relevant predicate. kai^{42} - kai^{11} is only associated with prototypical transitive predicates (e.g. with a volitional agent) and (x-) kai is used in situations where the predicates signal low transitivity (e.g. a sentient predicate). This distribution of them is reminiscent of *se* and *lui-même* in Modern French. The former is realized particularly as accusative (127a) and the latter is restricted to a subset of noun-phrase positions, as appositives in (127b) and prepositional objects (127b) (Zribi-Hertz 2007).

(127) a. Jean_i se_{i/*k} voit.

‘John sees himself.’

b. Jean se_i voit {Lui_i (-MEME)}.

‘John sees (even) himself.’

c. Jean_z est fier de lui_z-meme.

‘Jean is proud of himself.’

(French; Zribi-Hertz 2007)

However, the co-existence of the anaphors kai^{42} - kai^{11} and (x-) kai^{42} appears to be an exception to König and Siemund (2000) prediction that only one of the formally differentiated intensifiers (typically the adverbial one) can be used as an anaphor. In addition, the structure of kai^{42} - kai^{11} (reflexive pronoun + intensifier)⁴⁹ seems to be at odds with another of their predictions namely that adnominal intensifiers following reflexive pronouns should be formally differentiated from each other, as in German (128)

⁴⁹ The primary reflexive marker kai^{42} - kai^{11} looks like reduplication, which a combination of reflexive + intensifier, as is also the case of Kashmiri or Tsakhur (Gast & König 2004)

and Kashmiri (129). Notwithstanding, if the second morpheme *kai*¹¹ with the tone of 11 is viewed as ‘morphologically’ different from the first *kai*⁴², then their second prediction will hold.

(128) Paul kritisierte sich selbst.

Paul criticized himself himself

‘Paul criticized himself.’

(German)

(129) Koorev sajoov pamun paan

Girls.ERG decorated INT REFL

‘The girls decorated themselves.’

(Kashmiri; Wali et al. 2000: 474)

Further development on the grammaticalization path enables the headless intensifier *kai*⁴² in Puxian to become a viewpoint marker, i.e. LDR or ‘untriggered reflexives’, which has been discussed in detail in the previous section.

3.7.2.3. Verbal reflexives

Verbal reflexives represent the highest degree of grammaticalization in that they are formally and semantically ‘reduced or bleached’. Cross-linguistically, verbal reflexives give rise to a series of semantic distinctions among the verbal predicates that they mark, viz. the reciprocals, middles/anticausatives, passives/impersonals (Sansò 2009, Reinhart & Siloni 2005).

3.7.2.3.1. Reciprocals

Although nearly all languages of the European continent (Germanic other than English, Romance, West Slavic Breton, etc.) form reciprocals from pure pronominal reflexive (anaphors)(König & Kokutani 2006), this may not be the case outside Europe, as such reciprocals are labeled as being a ‘minor category’ worldwide⁵⁰(Kemmer 1993: 100). Even in Europe, reciprocals are only confined to constructions that have a plural subject. Thus the following sentences of (130b) and (131b) can receive a reciprocal interpretation while those in (130a) & (131a) cannot because of the singular subject.

(130) a. Max hässt sich

Max hates sich

‘Max hates himself.’

b. Die beiden Professoren meiden sich

the two professors avoid REFL/RECIP

‘The two professors avoid each other.’

(German, König & Kokutani 2006)

(131) a. Wáy (waa + ay) is dishay.

DECL + she REFL killed

‘She killed herself.’

⁵⁰ Kemmer (1993:100) consider reciprocals to be a ‘minor prototype’, frequently subsumed under the reflexive or collective situations. According to her, these terms can be defined as ‘*reciprocal middle* – results of action accrue to subject. *Reciprocal middle* – referents of plural subject do action to one another. *Reflexive middle* – subject performs action to self. *Nucleonic middle* – object of action belongs to moves into or moves from sphere of subject. *Deponent middle* – action denotes physical/mental disposition of subject. *Passive* – subject does nothing, is affected in the consequence of action.’

b. Wày(waa + ay) is arkeen

DECL + they RECIP saw

‘They saw each other/ They saw themselves/ She saw herself.’

(Somali; Saeed 1999: 78)

The reciprocal marker in Puxian is $\text{ɬ}\emptyset^{24}$ ‘each other/mutually’, as shown in (132) and in Mandarin, it is *hu* ‘each other/mutally’, as in (133), both of which were derived from ordinary nouns meaning ‘string/rope’. Although *hu* in Mandarin has lost its lexical meaning (referring to objects), Puxian $\text{ɬ}\emptyset^{24}$ retains its lexical meaning of ‘rope/string’ in non-reciprocal contexts.

(132) $\text{y}\emptyset\eta^{32}$ $\text{ɬ}\emptyset^{24}$ pha^{42}

3pl RECIP beat

‘They beat each other.’

(Puxian)

(133) Tā-mēn *hù* *ōu*.

3pl RECIP beat

‘They beat each other.’

(Mandarin)

$\text{ɬ}\emptyset^{24}$ and *hu* may be taken as evidence that there are different stages of grammaticalization between Mandarin and Puxian, for $\text{ɬ}\emptyset^{24}$ in Puxian still retains its lexical meaning while *hù* doesn’t.

3.7.2.3.2. Middles/anticausatives

There has been a lack of consensus on what should be included in the notion of middles. From the point of view of transitivity, Siewierska (1984: 163) states that ‘the middle voice expresses actions or states which immediately affected the subject’ in contrast to the active voice that ‘was used to portray the subject as simply the doer of the action’. She also rightly points out the notion of middles is a composite one that may include *plain middle*, *reciprocal middle*, *reflexive middle*, *nucleonic middle*, *deponent middle* and even *reflexive passive*⁵¹. Others such as Kemmer (1993: 53) refers to middles as constructions that ‘involve a lower degree of distinguishability among participants and consequently a lower degree of event elaboration’, such as in ‘grooming’ situations (e.g. ‘to wash oneself’). In the generative literature, middles are viewed as predicate with properties that are neither active nor passive, and whose subject is an internal argument (e.g. unaccusatives) (Glinert 1989, Doron 2003).

In contrast to the lack of consensus on middles, anticausatives are generally acknowledged to be those cases in which the event occurs (or is construed as occurring) spontaneously (Comrie 1985: 326). The semantic difference between these two verbal categories is that anticausatives stress spontaneity of the event while middles express some generalization with regard to the property of their subject or ‘actions or states which immediately affect the subject or its interests’ (Siewierska 1984: 77, 165-172; Haspelmath 1987: 7). In fact, it would suffice to say that both middles and anticausatives can be subsumed under the notion of decausativization (Reinhart & Siloni 2005).

⁵¹ According to her, these terms can be defined as ‘*reciprocal middle* – results of action accrue to subject. Reciprocal middle – referents of plural subject do action to one another. *Reflexive middle* – subject performs action to self. *Nucleonic middle* – object of action belongs to moves into or moves from sphere of subject. *Deponent middle* – action denotes physical/mental disposition of subject. Passive – subject does nothing, is affected in the consequence of action.’

What is noticeable in Puxian is that, contrary to what would be expected in the process of grammaticalization, Puxian adopts two different strategies to express middles and anticausatives respectively. That is, anticausatives may be expressed by the adverbial intensifier *kai*⁴²-*kai*¹¹ and middles, in the narrow sense of Kemmer (1993), use the verbal reflexive *kai*⁵³³-. For example, in the anticausative sentences in (134), the events may be interpreted as occurring *spontaneously* or *automatically* without any implied agent.

(134) a. *mui*²⁴ *e*²⁴ *kai*⁴²-*kai*¹¹ *khui*²⁴

*door can self-self*_{INTF} *open.*

‘The door opens itself.’

b. *tsui*⁴² *e*⁴ *kai*⁴²-*kai*¹¹ *lau*²⁴

*water can self-self*_{INTF} *flow*

‘Water flows (itself).’

Differently, the verbal reflexive *kai*⁵³³- can mark middle situations by being a general intransitivizer, which either profiles a self-initiated action and a lower degree of event elaboration (LaPolla 2005), as in (135a) , or some general property with regards to the subject, as in (135b).

(135) a. *i*²¹ *kai*⁵³³-*ly*⁴²

3sg self-cook

Lit. ‘He self-cooks/self-lives.’

b. tshai⁴² kai⁵³³ - ly⁴²

food self cook

Lit. ‘food self-cooks’

König & Siemund (2000a: 59) and König & Gast (2006) proposes that following generalization for middle markings:

If a language uses the same expression both as an intensifier and as a reflexive anaphor, this expression is not used as a marker of derived intransitivity (middle marker).

This generalization may be applicable to Puxian as well. We see that the intensifier and anaphors in Puxian is either *kai*⁴² or *kai*⁴²-*kai*¹¹, both of which are pronounced differently from the intransitivizer *kai*⁵³³- of the reflexive verbs. In other words, the intensifiers and anaphors are distinguished from the intransitivizer by phonological means. What is puzzling is the case of (134), the anticausative marker *kai*⁴²-*kai*¹¹ is the same as the adverbial intensifier and the primary reflexive marker. Yet this again may be explained by the distinction between ‘middle’ and ‘anticausative’ in Puxian, the latter of which involves only intransitive verbs. The use of *kai*⁴²-*kai*¹¹ enhances the effect of automaticity or spontaneity of the predicates without having to intransitivize them.

In my opinion, the uses of the adverbial intensifier *kai*⁴²-*kai*¹¹ for the expression of anticausatives and the verbal reflexive *kai*⁵³³ - for middles may point to the fact that there is no necessary match between the semantic and morphological facets of grammaticalization. In other words, although anticausatives and middles are expressed by verbal reflexives in most European languages, this may not hold for other languages.

In the case of Puxian, nominal reflexives (the adverbial intensifier), instead of verbal reflexives, can be used for decausativization.

3.7.2.3.3. Reflexive Passives/impersonals

Broadly speaking, reflexive passives are a sub-category of middles (Siewierska 1984: 163). One important feature of reflexive passives is that, unlike anticausatives, they allow the overt expression of the agent or external argument in some languages. For example,

(136) Pol *mylsja* *devocko*j.

floor wash:IMPERF:SJA girl:INST

‘The floor was being washed by the girl.’ (Siewieska 1984: 162)

Siewierska (1984: 78) also points out that ‘although passive clauses need not have or in some languages cannot have a specified agent, the existence of some person or thing bringing about the situation is implied’. Her view is echoed by Comrie (Comrie 1985: 326) who suggests that in the reflexive passive clauses, ‘the existence of some person or thing bringing about the situation is implied’ whereas anticausative clauses are ‘consistent with the situation coming about spontaneously’. The contrast between reflexive passives and anticausatives may be illustrated with the following French sentences, where the passive sentence suppresses the agent while the anticausative one deletes it.

(137) a. La decision s’est prise hier. Suppression - Passive

b. La branche s'est cassée. Deletion – Anticausative

(French)

The (reflexive) passives and anticausatives differ from each other with respect to the expression of external arguments in prepositional phrases; while passives license both agents and causes in a prepositional phrase, anticausatives license only causes but never agents.

On the other hand, the chief distinction between reflexive passives and impersonals may have to do with syntax. That is, according to Siewierska (1984, 2008), the subject of reflexive passives not only bear no responsibility for the situation or state and are patient-like whereas the subject of reflexive impersonals is ‘identified (in one way or another) with non-pronominal morphology’. In other words, reflexive impersonals have a non-canonical subject, i.e. the reflexive marker. For example the clauses in (138a) can be interpreted as impersonal (e.g. ‘one eats / People eat the apples’) and as agentless passives (e.g. ‘The apples are eaten’), as indexed by the person and number features on the predicates.

(138) a. Si mangia e mele

REFL eat:3sg the apples

‘One eats the apples.’

b. Si mangiano le mele

REFL eat:3pl the apples

‘The apples are eaten.’

(Italian; Rivero, 2000)

Turning to Puxian, it appears that the same verbal reflexive *kai*⁵³³- is also used to mark passives and middles.

- (139) a. (I²¹) *tsou*⁴² *kai*⁵³³- *khi*²¹
 3*sg*_{TOP} *house* *self-build*
 ‘As to him, the house is built by himself’

- b. (*yøŋ*³²) *hun*⁴⁵³ *kai*⁵³³-*phan*²⁴.
 3*pl*_{TOP} *wedding* *self-manage*
 ‘As to them, the wedding is held by themselves.’

In (139), the reflexive marker *kai*⁵³³- intransitivizes the predicates *tsy*⁴² ‘cook’ and *phan*⁴² ‘manage/hold’; the agent *I* ‘he’ and *yøŋ*³² ‘they’ are optionally present in the topic position of the clauses; the subjects *tsai*⁴² ‘food’ and *tsiu*⁴⁵³ ‘banquet’ are patient-like arguments that bear no responsibility for the action. The syntactic features (139) resemble those of a reflexive passive in other languages (e.g. an implied agent, not expressing spontaneity). In view of this, I tend to believe that sentences like (139) are indeed reflexive passives. By way of comparison, we also have the following reflexive constructions with an agent subject and patient topic.

- (140) a. (*tsai*⁴²) I²¹ *kai*⁵³³-*ly*²¹
 *banquet*_{TOP} 3*sg* *self-cook*
 Lit. ‘As to food, they self-cook.’

b. (tsiu⁴²) yøŋ³² kai⁵³³-phan²⁴

*banquet*_{TOP} 3pl *self-manage*

Lit. ‘As to banquet, they self-manage.’

In (140), the patient arguments *tsai*⁴² ‘food’ and *tsiu*⁴² ‘banquet’ are topicalized and the agents *I*²¹ ‘he’ and *yøŋ*³² ‘they’ become the subjects. In these cases, there is no possibility for passive readings. On the contrary, the reflexive marker *kai*⁵³³- turns the predicates into unergative ones.

Although Puxian reflexive passives are similar to those of European languages, where verbal reflexives (clitic or non-free reflexive morpheme) are used, this is not the case for impersonals. In the following sentence, the reflexive marker *kai*⁴² is an untriggered reflexive.

(141) *kai*⁴² *ɿia*⁴² *thin*²⁴, *phe*²⁴-*naŋ*²⁴ *ɿia*⁴² *kien*²⁴

Self *eat* *sweet* *others* *eat* *salt*

‘One is comfortable while others suffer.’

In (141), the fact that *kai*⁴² in the subject position is argumental, pronominal-like and with 42 tone rather than 533 tone of the verbal reflexives (i.e. *kai*⁵³³-) shows that it is best viewed as an untriggered reflexive with impersonal reference and with an empathic point of view from the speaker.

By contrast, Mandarin *zi*- morpheme, when used in impersonal contexts, should be viewed as clitic-like, for it has to be affixed to the verb so as to acquire impersonal readings. Similar claims are found among native Chinese linguists (not from the Western linguistic tradition), who believe *zi*- is an ‘adverbial element’ and can not

appear in the subject or adnominal modifier positions. Thus Mandarin *zi-* patterns *se/si* impersonals in Romance and Slavic, unlike Puxian *kai*⁴², as shown in (142 -143)

(142) zì bào jiā-mén
self report identity
‘One identifies/reveals himself.’

(143) zì qú qǐ rǔ
self get DET insult
‘One incurred insults.’

(144) zì huǐ cháng-chéng
self destroy Greatwall
‘One destroys something he build.
Lit. ‘One destroys the Greatwall.’

(Mandarin)

All the above sentences do not require additional subject NPs, as the reflexive marker *zi* ‘self’ may be viewed as an indefinite subject. Besides, all the predicates remain transitive as they are followed by a direct object. These sentences are reminiscent of the impersonal constructions in Romance and Slavic languages, where the reflexive clitic *si/se* not only exhibits some nominative properties but is semantically similar to an indefinite pronoun with human reference (Siewierska 1984: 175, 2008; Kibort 2008).

3.8. Conclusion

The discussion in this chapter has brought to light many interesting findings concerning Puxian reflexives. I began with a critical view of C. –T. J. Huang’s (1982, 2001) generative approach to Mandarin *ziji* and pointed out that Huang not only fails to recognize the bimorphemic nature of *ziji* but also provides some problematic definitions of anaphor and logophor. On the basis of the typology of anaphors (Faltz 1985, 1997) and taking into consideration a series of related studies (e.g. R& R’s reflexive-predicate theory and König’s notion of reflexive pronouns, etc.), I argue that the primary reflexive marker (anaphor) in Puxian is *kai*⁴²-*kai*¹¹, which is only used as DO of primary transitive verbs or psych-verbs with stimulus subjects. I also found out that there are a group of transitive verbs that can be transformed into reflexive verbs (via the reflexive marker *kai*⁵³³-). The reflexive operation results in both unaccusative and unergative predicates. The discussion was then concerned with the use of *kai*⁴² or *kai*⁴²-*kai*¹¹ as an adnominal or adverbial intensifier, which later developed into the areas of viewpoint reflexives, i.e. ‘headless intensifiers’ or ‘untriggered reflexives’. In terms of marking viewpoints, I proposed that there is not only logophoricity, empathy but also inter-empathy in Puxian, the last of which has not been well studied yet. What is more pertinent for reflexives in Puxian is the discussion of grammaticalization, which reveals that *kai*⁴², in the history of change, started out as two lexical words and later evolved some highly grammaticalized functions, such as middles, anticausatives, reflexive passives and impersonals. What is significant is that these grammaticalized functions do not necessarily correlate with the morphophonological features of *kai*, e.g. anticausatives may rely on the nominal reflexive *kai*⁴²-*kai*¹¹ while reflexive passives used the reflexive intransitivizer *kai*⁵³³-. Both of them are distinguished morphologically as well as phonologically. Further research, however, is still needed to look into more

specific areas, especially how the reflexive markers may be linked in one way or another in different Sinitic languages.

Chapter 4 - Word order, alignment and the interplay of Person in Puxian $k\varepsilon^{2l}$ constructions

4.1. Introduction

It has long been observed that transfer verbs in Sinitic languages are involved in a series of grammaticalized constructions, ranging from the monotransitive, to the ditransitive, causative, passive and even to the intransitive. Studies in the past focus mainly on the diachronic changes of these verbs, e.g. how they develop different lexical meanings or grammatical functions along the pathways of grammaticalization. There have been only a few studies so far, positioned to look into these verbs and the related constructions from a functional-typological point of view, especially concerning the inherent properties, such as placement of syntactic constituents, interplay of Person and comparison of argument marking properties across constructions. It is therefore meaningful when such studies are available and applied to Puxian, a relatively unknown dialect from Min.

This chapter will then be structured into two inter-related parts. The first part involves detailed discussion of different types of Puxian $k\varepsilon^{2l}$ constructions, in comparison with similar ones attested in other languages (see Chappell 2000, 2001a & b, 2006, 2007, Matthew et al. 2005, among others). The second part focuses on the typology of Word Order, Alignment and Person effects, which are closely related to these constructions (Comrie 1981, Haspelmath 2005, 2007, 2008; Siewierska 2003, 2005; Siewierska & Bakker 2009: 291, among others). The discussion is therefore organized as follows. Section 4.2. will briefly introduce the grammaticalization of transfer verbs (esp. regarding syntax and semantics) in Puxian, Min and other languages.

Section 4.3 will be devoted to the discussion of different types of $k\varepsilon^{21}$ constructions, ranging from the monotransitive to the intransitive. A number of unique features of these constructions will be revealed in this section. The next section will explore the thematic relations particular to these constructions, from the perspectives of Word Order, Person and Alignment. Some concluding remarks will be offered in Section 4.5.

4.2. Grammaticalization of transfer verbs in languages

In grammar, transfer verbs, such as Mandarin *gei* ‘give’, German *geben* ‘give’ or *kriegen* ‘get’, are often referred to as the *give* or *get* type of verbs. These verbs tend to reflect the basic human conceptions of motion, dislocation or energy transfer between discrete objects (Rice 1987). Significantly, transfer verbs (esp. of the *give* type¹) are involved in a variety of constructions, such as the ditransitive, the causative, the passive or even the intransitive. Investigation of transfer verbs is thus important, simply because of ‘their high frequency of usage, formal and semantic complexity, high variability in intro-and cross-varietal comparisons and their susceptibility to grammaticalization’ (Lenz 2008, cf. Heine & Kuteva 2002).

4.2.1. Semantics and syntax of transfer verbs

Studies of transfer verbs are inextricably linked to the theory of grammaticalization, whereby these verbs acquired extended lexical meanings and more grammaticalized functions via the mechanism of metaphorical abstraction or semantic extension. In the book of *World Lexicon of Grammaticalization*, Heine & Kuteva (2002) provide some

¹ According to Hollmann (2003:106-107), when it comes to grammaticalization into causatives ‘get’ and ‘give’ verbs are very different, the former not allowing the development nearly as readily as the latter.

detailed instances of *give* verbs across languages, as they develop into markers of the dative, benefactive, causative, purposive, etc. as shown in the examples below.

(a) *GIVE* > Dative

(1) é gblɔ e ná m.

3sg say it give:DAT me

‘He told it to me.’

(Ewe; Heine et al. 1991)

(b) *GIVE* > Benefactive

(2) amu ske fé taba da- bó.

1sg PART make work give:BENE 2sg

‘I’ll do the work for you.’

(Fa d’Ambu CP; Post 1992: 158)

(c) *GIVE* > Causative

(3) knom qaoy koət ruət.

1sg give:CAUS 3sg run

‘I had him run (intentionally).’

(Khmer; Matisoff 1991: 429-30)

(d) *GIVE* > Purposive

(4) En o-yel-a madaa, omiyo a-goy-e.

He 3sg:annoy:1sg much give:PURP 1sg:beat:3sg

‘He vexed me so much so that I beat him.’ (Acholi; Malandra 1995: 115)

(e) *GIVE* > Passive

(5) kereta kita habis bagi dia rosak
car us completely give:PASS he wreck

‘Our car was completely wrecked by him.’

(Malay; Yap & Iwasaki 2007)

On noticeable property concerning *give* constructions is that they are sometimes applied to different contexts without substantial modification of the surface structure, i.e. via *analogy* or *reanalysis*² (Hopper & Traugott 1993, Langacker 1977: 58). This is illustrated by the ditransitive verb *davat* ‘give’ in Russian, as shown in (6), where it is ambiguous between the ditransitive and causative readings on the basis of the same superficial structure³.

(6) Ivan dal Petru knigu pocitat.
Ivan give:PST:3sg Petr:DAT book:ACC read:INF

‘Ivan gave Petr the book to read.’

‘Ivan let Petr read the book.’

(Russian, Waldenfels 2004)

² *Reanalysis* and *analogy* are also characteristic of grammaticalization. Reanalysis refers to a ‘change in the structure of an expression or class of manifestations that does not involve any immediate or intrinsic modification of its surface manifestation’ (Langacker 1977:58), that is, a form may be interpreted by the hearer as having a different structure and meaning from that of the speaker. Analogy, on the other hand, refers to change in surface collocations and pattern use, namely, the extension of existing forms or structures to contexts where they did not originally apply. According to Hopper and Traugott (1993: 61), ‘analogy makes the unobservable changes of reanalysis observable’.

³ According to Waldenfels (2004), When the direct object *knigu* ‘book’ is supplemented with the infinitive *pocitat* ‘to read’ (denoting an action to be performed by the recipient *Petru* on the theme), as in (6), the sentence can be interpreted as a causative or a ditransitive construction, as the ‘giving’ and ‘letting’ readings of *davat* are possible in some appropriate contexts. Otherwise, *davat* means *giving* only. The constituent order plays a role as well. When the infinitive immediately follows the recipient, rather than the direct object, *davat* cannot be interpreted a ditransitive verb.

Similar constructional ambiguity is also observed in the Mandarin *gei* constructions, which receive a causative and a passive interpretation⁴, as shown in (7) (see also Jiang Lansheng 1999, Jiang, Shaoyu 2002, etc.).

(7) Lísì gěi Zhāng Sān kànjiàn-le

Lisi give Zhang San see:ASP

‘Lisi let Zhang San see (him).’

‘Lisi was seen by Zhang San.’

(Mandarin)

Another issue concerning grammaticalized transfer verbs is their parts-of-speech identification, that is, during the processes of grammaticalization, transfer verbs often lose their verbal category and acquire diversified parts-of-speech assignments. It is sometimes even difficult to pinpoint their exact grammatical categories. For example, the transfer verb *bun* ‘give’ in Hakka (a Sinitic language) has two different categories in the same clause, as shown in (8), where the first *bun* is a ditransitive verb and the second *bun* is a preposition (Lai 2001).

(8) Gia ba bun yi kiu tien bun gi.

his father BUN_{GIVE} one CL field BUN_{TO} him

‘His father gave a piece of field to him.’

(Hakka; Lai 2001)

Semantic extension, constructional ambiguity and parts-of-speech identification

⁴ Although the same *gei* construction in the above has both causative and passive readings, it is important to note that subject *Lisi* is assigned different argument roles, viz. Causer in the causative and Patient in the passive.

are the three main concerns in the study of transfer verbs. These will be looked into in the following discussion.

4.2.2. Transfer verbs in Puxian and other Sinitic languages

In Sinitic languages, the family of transfer verbs involves not just the *give* or *get* type of verbs but also verbs of ‘taking’ or ‘handling’⁵, e.g. 拔 *bo* ‘take’, 把 *ba/pa* ‘hold’, 拿 *na* ‘hold’, 帮 *bang* ‘help/handle’, etc. In the Xiang dialects of Hunan, for instance, the morpheme *pa*⁴¹, originally meaning ‘handle/hold’, is grammaticalized into a dative marker (9a), an object marker (9b) and an agent marker (9c), as shown below.

(9) a. **Pa**⁴¹ pen⁴¹ çy³³ **pa**⁴¹ ŋo⁴¹

PA_{give} *CL* *book* *PA_{DAT}* *Isg*

‘Give me a book.’

b. **pa**⁴¹ mən¹³ kuan¹³ tç⁴¹ i⁴¹

PA_{DISPOSAL} *door* *close* *COMP*

‘Close the door.’

c. ŋo²⁴ mau⁵⁴ iau⁵¹ **pa**⁵⁵ y³³ lin²⁴ ci⁵⁵ ne³³

Isg *not* *want* *PA_{PASS}* *rain* *pour* *wet* *MOD*

‘I don’t want to get wet in the rain.’

(Hunan dialects of Xiang; Wu 2005: 340)

In (9a), there are two instances of *pa*⁴¹: the first is a ditransitive verb, followed by the

⁵ This type of transfer verbs are often seen in Wu, Xiang and some dialects spoken in south-eastern China.

direct object *pen*⁴¹ *ɕy*³³ ‘a book’ and the second is a prepositional dative marker, marking the indirect object *ŋo*⁴¹ ‘I’; in (9b), *pa*⁴¹ is an object marker, marking the foregrounded object *mən*¹³ ‘door’ in the disposal construction; in (9c), *pa*⁴¹ is an agent marker, followed by *y*³³ ‘rain’ in the passive construction.

In Min dialects, the primary transfer verbs under grammaticalization are the *give* verbs. There is a large semantic field of *give* verbs and not every dialect uses the same one. As a result, they are pronounced differently. To name just a few, there are *kɛ*²¹ in Puxian, *køyk*²³ in Fuzhou, *kei*^ʔ in Gutian, *ke*^ʔ in Zhouning, *kø*^ʔ in Fuqing (from Northeastern Min) and *ki-ke* in Datian, *kɔ*^ʔ in Dongshan and *ki*^ʔ in Chaoyang, *keg*⁴, *kig*⁴ in Chaozhou (from Southern Min) (Chen and Li 1991: 42, 95, 299-302, quoted in Chappell 2000). All of these verbs are supposed to be cognates of *qi* 乞 ‘give or beg’ in Classical Chinese. In addition, there are some competing forms other than the *give* verbs in some Min dialects, e.g. *khit* ‘give’ vs. *hoo* ‘give’ in Southern Min, which are traced to different source morphemes in history⁶. Chappell (2000: 12) points out that *qi* 乞 and its cognates are a ‘consistent and widespread feature of Northeastern Min but less so in Southern Min’. In other dialects, *give* verbs are pronounced differently or related to separate source morphemes, such as *gei* in Mandarin, *bei* in Cantonese or *bun* in Hakka, etc.

Turning to Puxian, the primary *give* morpheme is a cognate of *qi* 乞 in Classical Chinese (not *hoo* in Southern Min). Yet it is also pronounced differently in various parts of Puxian areas, such as *kɛk*²¹ or *kɛ*²¹ in Xianyou, *ki*^ʔ in Putian or *kɔ*^ʔ in Donghai, etc. For the benefits of discussion, I will take *kɛ*²¹ to be the standard pronunciation, which is the pronunciation of my native town, Licheng of Xianyou.

⁶ *Khit* and *hoo* can be traced to separate source morphemes in history. *Khit* is linked to *qi* in Middle Chinese while *hoo* appears to be unique to Southern Min, for it is not well attested in other dialects, such as Inland or Western Min (Chappell *ibid*).

In Classical Chinese, *qǐ* 乞 is a unique transfer verb. It consists of two opposite meanings: ‘get/beg’ vs. ‘give’. Interestingly, such an opposition is well preserved in Puxian (but not seen with *qǐ* 乞 in standard Mandarin). For instances, Puxian may resort to a slight vowel change to indicate the semantic difference, i.e. from *kɔr²¹* to *kɛ²¹*, as shown in (10).

(10) a. \emptyset ma²⁴ *kɔr²¹* t̚e¹¹ tshui⁴

meal beg one CL

‘(You) beg a meal.’

b. huŋ⁵³³ thua t̚e¹¹ phau⁴² kɛ²¹ i⁵³³

cigarette bring one CL DAT 3sg

‘Bring one cigarette for him.’

In (10a), *kɔr²¹* ‘beg/get’ is a bivalent transitive verb, preceded by the preverbal object *ma²⁴* ‘meal’; in (10b), *kɛ²¹* marks the recipient *i⁵³³* ‘him’ in the ditransitive construction, as a prepositional dative marker. In the processes of grammaticalization, *kɔr²¹* ‘get’ remains stable as a transitive verb, whereas *kɛ²¹* ‘give’ evolves into a variety of lexical meanings and grammatical functions⁷.

Concerning the grammaticalization of *kɛ²¹*, Chappell (2000, 2006, 2007) provides the most relevant studies across Min dialects⁸. According to her investigation, *khit*

⁷ Yet, in Mandarin, it is the morpheme *bei*, originally meaning ‘to cover’, that evolved into highly grammaticalized functions, e.g. a passive marker, while *gei* ‘give’ appears later in the history. Also, in Mandarin, the semantic differences can occasionally be indicated through phonetic means. For example, the verb *mǎi* ‘buy’ or *mài* ‘sell’ are contrasted with a 214 tone and a 42 tone.

⁸ In addition to contemporary data, her studies are based on historical evidence found in books, such as the Southern Min translation of *Doctrina Christiana* (ca. 1607), a Southern Min grammar written in Spanish: *Arte de la lengua Chiō Chiu* (1620) as well as *Lì Jīng Jì* 荔鏡記 ‘Romance of the Litchi Mirror’ (1566, 1581).

‘give’ in Southern Min, (a cognate of Puxian $k\varepsilon^{21}$), follows the following two separate grammaticalization pathways:

(11) Grammaticalization of *khit*

(i) $V_1 + V_2$ [*khit*4] > dative marker introducing indirect object or recipient

(ii) V_1 [*khit*] + V_2 > causative verb

/ Causative complementizer

\ Passive marker introducing agent

We see that *khit* developed into three main grammaticalized uses: as a dative preposition, a causative verb/complementizer and as a passive marker. In terms of the dative use, *khit* generally appears in postverbal position⁹, as in the ditransitive structure of ‘S + V + O₁ + *khit*_{DAT} + O₂’, as shown in (12); in terms of the causative and passive uses, *khit* may function with the same superficial structure of ‘NP₁ + *khit*_{CAUS/PASS} + NP₂ + V’, as in (13 a & b). The following examples are taken from the 16th century opera script of Southern Min, the *Lì Jǐng Jì*.

(12) Chit chit pau gun-chi theh khit i.

only one CL silver money take give_{DAT} 3sg

‘give a bundle of silver money to him.’

(Ditransitive)

⁹ According to Chappell (2000), the distinguishing feature of the two grammaticalization pathways of *khit*, i.e. the dative and causative/passive in Southern Min, has to do with its syntactic positions in the clause. While *khit* as a dative/benefactive marker is typically found in the postverbal position, the causative/passive *khit* prefers the first verbal position in the clause, as the latter in that position never develops into a dative or benefactive marker ‘to’ or ‘for’.

(13) a. Goa khit i boa

1sg give_{CAUS} 3sg rub

‘I make him rub.’

(Causative)

b. I khit goo-niu phah

3sg give_{PASS} Goo-niu beat

‘He was beaten by Lady Wu-niang.’

(Passive)

In the case of Puxian $k\varepsilon^{21}$, it acquired similar functions of *khit* as mentioned above but has some unique uses of its own. For instance, $k\varepsilon^{21}$ can be used to mark intransitive and transitive predicates, as in (14) & (15) below.

(14) tshiu²⁴ $k\varepsilon^{21}$ thø⁴² luai²¹

wall give fall PRT

Lit. ‘The wall got fallen.’

(Intransitive)

(15) tshiu²⁴ $k\varepsilon^{21}$ naj²¹ $k\varepsilon^{21}$ ie⁴² thø⁴² luai²¹

wall give man give push fall PRT

‘The wall was pushed by someone and collapsed.’

Lit. ‘The wall was pushed fallen by someone.’

(Transitive)

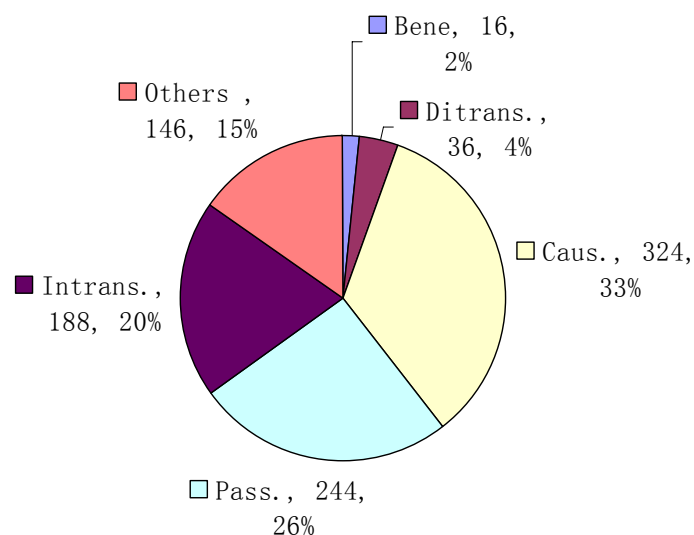
In the above sentences, we notice that $k\varepsilon^{21}$ enters into some highly grammaticalized functions, as it marks the intransitive verb, thø⁴² ‘fall’ in (14) and the transitive verb ie⁴² ‘push’ in (15). As will be discussed in detail below, the former is a $k\varepsilon^{21}$ -marked unaccusative construction while the latter is a *double-marked passive* construction, both

of which are rarely discussed in Chinese linguistics. In addition, there are other functions of $k\varepsilon^{21}$ that deserve a thorough investigation. In what follows, I will first turn to different constructions involving the morpheme $k\varepsilon^{21}$, seeking an understanding of how $k\varepsilon^{21}$ plays a role in marking thematic/grammatical relations. The discussion is mostly synchronic in nature.

4.3. Types of $k\varepsilon^{21}$ constructions in Puxian

There are different types of $k\varepsilon^{21}$ constructions in Puxian, which are commonly known as the ditransitive, causative, passive and intransitive constructions. The distribution of these constructions by frequency in the data¹⁰ is shown in Figure 11 below.

Figure 11 Distribution of different types of $k\varepsilon^{21}$ constructions in the data



¹⁰ The data refer to the transcribed speeches of several Puxian speakers, which constitute my basic corpus. See Section 1.4 in the introduction.

We see that there are no instances of $k\varepsilon^{21}$ used as a lexical verb (e.g. it is not able to replace the verbal *give* as in the English *I give love to you*). The most frequent $k\varepsilon^{21}$ constructions are the causatives, which account for 33%, followed by the passives, 26% and the intransitives, 20%; the dative uses of $k\varepsilon^{21}$ including the benefactive and ditransitive occupy only 2% and 4% each. In addition, there are 15% ‘other’ uses of $k\varepsilon^{21}$, corresponding to the meanings of ‘till / to / like’¹¹, yet these uses will be left out of the current study, for they are not particularly related to the types of $k\varepsilon^{21}$ constructions under discussion. Also, it should be pointed out that the distribution shown in Figure 11 does not need to be representative overall of the Puxian dialect (due to the lack of large-scale data). Nevertheless, it offers some schematic information of how these constructions are distributed in daily speech. In the following sections, I will try to survey these constructions in detail, with respect to their syntactic and semantic features.

4.3.1. The ditransitive construction

In linguistics, ditransitive constructions are the concerns of various dimensions of interest (e.g. case marking, alignment, etc.) and are subject to several models of analyses (e.g. the functional, generative, typological, cognitive, etc.). The grammaticalization of $k\varepsilon^{21}$ towards the dative/benefactive function overlaps to some extent with the studies of ditransitive constructions, e.g. dative-alternation across languages¹². In this section, ditransitive constructions with $k\varepsilon^{21}$ will be the main

¹¹ However, due to the lack of comparative studies, it is not very clear whether the above mentioned $k\varepsilon^{21}$ meanings are all related to the transfer verb $k\varepsilon^{21}$, though all of them are pronounced the same. For example, $k\varepsilon^{21}$ *hensi*⁴ ‘till now’ or $k\varepsilon^{21}$ *konui*⁴² ‘like an ass’

¹² The dative alternation refers to the general linearization alternation in ditransitive constructions. For instances, in English, the syntactic alternation between the double object construction (e.g. *John gave you a book*) and the

concern.

Across languages, there are three main types of ditransitive constructions: (I) indirect object constructions, (II) double object constructions and (III) secondary object constructions (Haspelmath 2005). Each of these is subject to certain syntagmatic constraints and/or certain linearization principles, i.e. Animacy, Referentiality, Person, etc. Puxian has the three types of ditransitive constructions but only in a less prototypical sense, as they violate the *prominence* and *weight* principles, proposed by Heine and König (2010).

4.3.1.1. The indirect object construction

Indirect object constructions are the type of ditransitives that have the theme coded like the monotransitive patient (e.g. both T and P have the same case-marking or syntactic placement), and the recipient is coded differently (e.g. it is marked with adpositions, dative or other case markers), as in (16) from German.

(16) a. Ich aß den äpfel.

Isg:NOM ate the:ACC apple

‘I ate the apple.’

(Monotransitive)

b. Ich gab dem kind den äpfel.

Isg:NOM gave the:DAT child the:ACC apple

‘I gave the child the apple.’

(Ditransitive)

(German; Haspelmath et al. 2007)

prepositional dative construction (e.g. *John gave a book to you*). Many different factors have been claimed to influence the dative alternation, such as prominence principles, semantics/lexical preferences and Person factors (Givón 1984, Levin 1993, Levin and Rappaport Hovav 2002, Bresnan et al. 2005, among others).

We see from (16a) that the monotransitive patient *den äpfel* ‘the apple’ is marked with the accusative case *-en* and the ditransitive theme *den äpfel* ‘the apple’ is marked the same in (16b)¹³. On the other hand, the recipient or the indirect object *dem kind* ‘child’ is marked differently with the dative case, just as in the English translation, where the recipient ‘child’ is marked with the adposition marker ‘to’.

In Puxian, due to the lack of morphological case, the placement of T and R in the clause, in comparison with the unmarked position of a monotransitive P, is a way to identify an indirect object construction. For example, a typical indirect object construction in Puxian may have the structure of ‘A + V + T + $k\varepsilon^{21}_{DAT}$ + R’, as illustrated in (17 a & b) below.

(17) a. kua^{21} iau^{42} $muino^{21}$

Isg take stuff

‘I take something.’

b. kua^{21} iau^{42} $mui-no^{21}$ $k\varepsilon^{21}$ ty^{21}

Isg take stuff give_{DAT} 2sg

‘I will take something to you.’

We see that the monotransitive clause of (17a) has the unmarked word order of AVP, whereby the A kua^{21} ‘I’ and the P $muino^{21}$ ‘stuff’ are placed on both sides of the V, iau^{42} ‘take’. In the indirect object construction of (17b), the A kua^{21} ‘I’ and the T $mui-no^{21}$ ‘stuff’ retain the same syntactic positions as the A and P of the monotransitive (17a), which means ‘T is coded like P’. On the other hand, the R, ty^{21} ‘2sg’ is marked by the

¹³ In German, the accusative case is used for the direct object in a sentence. The masculine forms for German articles change in the accusative case, e.g. ending in *-en*.

prepositional dative marker $k\varepsilon^{2114}$ and is viewed as being coded differently from the P. Thus constructions like (17b) will be termed ‘indirect object constructions’ in the sense that both T and P are similarly placed while R is marked otherwise.

In addition, there are also some other cases, where the T, as in (17b), is preverbal, as in the structure of ‘A + T + V + $k\varepsilon^{21}$ _{DAT} + R’, shown in (18) below.

- (18) kua^{21} **$muino^{21}$** iau^{42} $k\varepsilon^{21}$ ty^{21}
Isg *stuff* *take* *give_{DAT}* *2sg*
 ‘I will take something to you.’

When the T $muino^{21}$ ‘stuff’ leaves its postverbal position, namely, the monotransitive P position and is placed immediately before the V iau^{42} ‘take’, the whole construction has special communicative import, that is, according to the Task Urgency Principle (Givón 1983, 1989: 224), the speaker has to place new /most urgent information preferably in the earlier syntactic positions of the clause. In fact, as far as I am aware of, preverbal objects in Puxian are quite frequent, especially when the sentence involves more arguments than just the A and P, as in (19) and (20) below.

- (19) kua^{21} le^{11} kie^{24} $muntie^{21}$ $khaŋ^{21}$ ty^{21}
Isg *one* *CL* *question* *ask* *2sg*
 ‘I ask you one question.’
 Lit. ‘I one question ask you.’

¹⁴ In addition to the grammaticalization perspective (Chappell 2006), the category of $k\varepsilon^{21}$ as a prepositional dative marker can be accounted for by its inability to take any aspect marker $liau$ in the sentence, whereas the distransitive verb iau^{42} ‘take’ can, as shown below.

(20) kua²¹ ie²¹ ʔøŋ²¹ lo⁴ ø kiã²¹

Isg shoe wear PRT go

‘I put on my shoes and (I) then go.’

Lit. ‘I shoes wear and go.’

We see that the English translation of (19) is a *double object construction*, where the indirect object *you* and the direct object *one question* are not marked. However, in Puxian, it is preferable to have the direct object *ʔe¹¹ kie²⁴ muntie²¹* ‘one question’ placed preverbally so as to be away from the indirect object *ty²¹* ‘you’; similarly in (20), the sentence consists of two combined clauses: *kua²¹ ie²¹ ʔøŋ²¹* ‘I wear the shoes’ and *ø kiã²¹* ‘(I) go’. The object *ie²¹* ‘shoes’ is obligatorily placed in the preverbal position, which is a way to be distinguished from the null subject of *kiã²¹* ‘walk’, for, syntactically, the null subject in the clause only refers to the matrix subject *kua²¹* ‘I’.

Therefore, it appears that preverbal objects may not just serve some pragmatic needs but have the function of disambiguating argument roles in the clause. As a matter of fact, when a language lacks morphological case, it is a convenient way to mark argument roles by means of linearization or word order. Constructions like (18) belong to a different type of ditransitive construction, viz. the *secondary object* construction, which is discussed below in section 4.3.1.3.

4.3.1.2. The double object construction

In the double-object construction, both the theme and recipient of the ditransitive verb are coded like the monotransitive patient. Typical double object constructions are seen

in Mandarin, as in (21), where both the R *wǒ* ‘I’ and the T *yī bēn shū* ‘one book’ are in the object position without extra marking on the arguments or the verb.

- (21) *tā sòng wǒ yī bēn shū*
3sg send 1sg one CL book
 ‘He sent me a book.’

However, such double object constructions are rarely seen in Puxian. In order to place both R and T in the object position without extra markings, as in the structure of ‘A + V+ R+ T’ of Mandarin (21), the ditransitive predicate always needs to be attached or compounded with the ditransitive marker *kε²¹*, as in (22), where the resulting single predicate *iau⁴²-kε²¹* ‘take- *kε²¹*’, can then have two objects: *kua²¹* ‘I’ and *ɬe¹¹ pui²¹ tsa⁴* ‘one book’ in sequence.

- (22) *I⁵³³ iau⁴²-kε²¹ kua²¹ ɬe¹¹ pui²¹ tsa⁴*
3sg take:KE 1sg one CL book
 ‘He gave me a book.’

In Mandarin, the similar ditransitive marker is *-gei*, which is often attached to the predicate verb as a form of ditransitive marking (Thepkanjana et al. 2008). The ditransitive-marked predicate therefore requires the default R-T ordering in object position, as in (23a), in contrast to the indirect object construction of (23b), where T precedes R (see also Huang & Ahrens 1999, Newman 1993b, Her 2005).

(23) a. wǒ sòng-gěi nǐ yìbēn shū

Isg send-GEI 2sg one-CL book

‘I send you a book.’

b. wǒ sòng yìbēn shū gěi nǐ

Isg send one-CL book DAT 2sg

‘I send a book to you.’

Thus, (23a) and (23b) constitutes a type of *dative alternation*, with regards to different placement of the T and R in the construction. The dative alternation has to do with the category of *gěi* as well, for it may be a ditransitive marker in the double object construction or a dative marker in the indirect object construction. Since double object constructions are very rare in Puxian, I will not dwell on this construction further.

4.3.1.3. The secondary object construction

In the secondary-object construction, it is the recipient of the ditransitive verb that is coded like the monotransitive patient whereas the theme is coded differently. For example, in Chamorro (24 a & b), the monotransitive P in (24a) and the ditransitive R in (24b) are both marked with the absolutive marker *i*, while the ditransitive T is coded differently with the oblique marker *ni*.

(24) a. Ha tuge i kannastra

He:ERG weave ABS basket

‘He wove the basket.’

(Monotransitive)

b. Ha na'i i patgon ni leche
he:ERG give ABS child OBL milk

‘He gave the milk to the child.’ (Ditransitive)

(Topping 1973, appear in Thepkanjana et al. 2008)

Secondary object constructions with morphological case-marked arguments are not attested in Puxian. However, recall the preverbal object construction (18) mentioned above, where the T is preverbal and the R is not. Also in the construction, the morpheme $k\varepsilon^{21}$ is considered a ditransitive marker (be it an affix or some compounding morpheme), forming a verbal complex with the preceding verb, as in the structure of ‘A + T+ V- $k\varepsilon^{21}$ + R’. Therefore, the R is considered unmarked¹⁵ or ‘similarly placed’ with P, while the T is coded otherwise, viz. being placed in a marked preverbal position. I would argue that secondary object constructions do exist in Puxian, only in the sense of differentiated syntactic positions of T and R. Syntactic evidence in support of the existence of secondary object constructions may come from the following sentences, which exhibit a contrast between the secondary object construction (25) and the indirect object construction (26).

(25) a. kua²¹ ɬe¹¹ pui²¹ tsa⁴ iau²¹-kε²¹ ty²¹.

Isg one CL book take:KE 2sg

‘I give a book to you.’ (Secondary object construction)

¹⁵ In this case, $k\varepsilon^{21}$ is no longer an adpositional marker but part of the ditransitive predicate. In this sense, the R is unmarked.

*b. kua²¹ tsa⁴ **iau²¹-kε²¹** ɬe¹¹ pui²¹ ty²¹

Isg book take:KE one CL 2sg

*c. kua²¹ **iau²¹-kε²¹** ɬe¹¹ pui²¹ tsa⁴ ty²¹

Isg take:KE one CL book 2sg

(26) a. kua²¹ **tsa⁴** iau²¹ ɬe¹¹ **pui²¹** kε²¹ ty²¹

Isg book take one CL give_{DAT} 2sg

b. kua²¹ iau²¹ ɬe¹¹ **pui²** **tsa⁴** kε²¹ ty²¹

Isg take one CL book give_{DAT} 2sg

‘I give a book to you.’

(Indirect object construction)

In the secondary object construction (25), where *kε²¹* is combined with the predicate *iau²¹*, the classifier *ɬe¹¹ pui²¹* ‘one’ cannot be separated from the head noun *tsa⁴* ‘book’.. The whole NP *ɬe¹¹ pui²¹ tsa⁴* ‘one book’ must be placed altogether in the preverbal position, as illustrated in (25 b & c). In contrast, in the indirect object construction (26), where *kε²¹* is a prepositional dative marker, separation of the noun *tsa⁴* and its classifier *ɬe¹¹ pui²¹* is possible¹⁶. The rationale behind such differences is that, in (25), the complex verb *iau²¹-kε²¹* is considered a single predicate, which is then followed by the unmarked R. To differentiate the R from the similarly unmarked T, the best way is to move T to the other side of the predicate; differently, in the indirect object construction

¹⁶ It is sometimes referred to as ‘floating quantifiers (FQ)’ (Kayne 1969), where it is found that some quantificational elements can be separated from the NP. For example, in English *all the students came* or *The students all came*, where *all* can be separated from *the students*.

of (26), the R is marked with the dative marker $k\varepsilon^2$, i.e. in an oblique role, which is therefore easily distinguished from the T. As a result, there is some flexibility for the T to be placed differently (i.e. separation of quantifiers)

4.3.1.4. The unique ditransitive construction

In addition to the three basic ditransitive types, Puxian has a special construction, which, to my knowledge, hasn't been reported in other Sinitic languages, as shown in (27 a-c) below.

(27) a. ty^{21} $hu\eta^{24}$ iau^{21} **$tsai^4$**
 2sg *cigarette* *take* *TSAI_{here}*
 ‘(You) give the cigarettes to me/you/him.’

b. kua^{21} iau^{21} $hu\eta^{24}$ **$kuai^4$**
 1sg *take* *cigarette* *KUAI_{there}*
 ‘I give cigarettes to him.’

c. kua^{21} iau^{21} $hu\eta^{24}$ **kie^{533}** **$kuai^4$**
 1sg *take* *cigarette* *DAT:2sg* *KUAI_{there}*
 ‘I give cigarettes to you.’

We notice that in the above constructions, the R is only indicated by some adverbial elements, i.e. $tsai^4$ ‘here’, metaphorically meaning ‘to the speaker’ or $kuai^4$ ‘there’, metaphorically meaning ‘to non-speech act participants’. Only the 2nd person has to be

overtly realized (27c), but in the phonologically fused form of *kie*⁵³³, (derived from ‘*kε*²¹ + *ty*²¹ ‘2sg’)¹⁷. The use of *tsai*⁴ or *kuai*⁴ to indicate Person is also found in constructions that involve transfer verbs such as *poŋ*⁴² ‘throw’, *the*⁴² ‘kick’, *kya*⁴² ‘post’, etc¹⁸. For example:

(28) a. *kiu*²⁴ *the*⁴² ***tsai*⁴**
ball kick TSAI_{here}
 ‘Kick the ball to me.’

b. *tshin*⁴² *poŋ*⁴² ***kuai*⁴**
quick throw KUAI_{there}
 ‘Throw (it) to him quickly.’

Although all the above constructions are restricted to human R, they are, nevertheless, a convenient way to keep R and T distinguished in the clause, as a result of which the positions of T can be either preverbal or postverbal, without resorting to the adpositional marker *kε*²¹ on R, as shown in (29), where the T *muino*¹¹ has a flexible (preverbal or postverbal) position.

(29) John (*muino*¹¹) *iau*⁴² *muino*¹¹ *tsai*⁴
John (stuff) take stuff TSAI
 ‘John gave something to me.’

¹⁷ It is known that *kε*²¹ is often fused with the singular person forms *kua*, *ty* and *i* in Puxian, which results in *kua*⁵⁴, *kie*⁵³³ and *kε*²¹ (see also the *dative subject* construction in the previous chapter).

¹⁸ Rappaport Hovav & Levin (2006) propose that verbs such as *kick*, *send*, *throw*, etc are noncore dative verbs in contrast to the core dative verbs, such as *give*, *show*, etc. The former are associated with a caused motion and caused possession, while the latter only with the caused possession.

It is also important to note that the use of the adverbial elements *tsai*⁴ and *kuai*⁴ constitute an independent ditransitive coding mechanism, parallel to that of the secondary object construction (featuring a ditransitive marker) and the indirect object construction (featuring a dative marker).

4.3.1.5. Violation of the *prominence* and *weight* principles

Heine & König (2010) argue that ‘crosslinguistically the linear ordering of the ditransitive arguments R and T is not arbitrary’ (see also Primus 1998, Blansitt 1973, Sedlak 1975) and there is a limited set of principles of ‘processing underlying human communicative strategies that accounts for regularities in the ordering of R and T’. What immediately concerns the discussion of Puxian ditransitives are the *prominence* principle (30) and *weight* principles (31):

(30) The *prominence* principle:

Since prominent arguments tend to precede less prominent ones and R is generally more prominent than T, the ordering R-T is crosslinguistically the expected one.

(31) The *weight* principle

Since heavy arguments tend to follow light ones, and R tends to be heavier than T, the ordering T-hR is crosslinguistically the expected one.

In terms of the *prominence* principle, Heine & König specify that recipients are crosslinguistically more prominent than themes in the ditransitive constructions, because in natural discourse, recipients are far more likely to be human, controller,

definite and personal markers with respect to the animacy, referentiality, and person hierarchies. On the other hand, themes or direct objects are generally non-human, indefinite and almost invariably 3rd person. Thus, it is quite reasonable to assume that R is more prominent and should precede T¹⁹.

Concerning the weight principle, they point out that a heavier argument is morphologically more complex than a light one. A heavier argument is subject to two weight parameters, namely, Case weight (e.g. what Faltz (1978) calls an oblique object type and Siewierska (1998: 181), an adpositional category) and Constituent weight, referring to the relative length and/or complexity of constituents (see Dik 1978, Hawkins 1998). To illustrate, they offer the following English example, as in (32).

- (32) a. She gave John a book.
b. She gave a book to John
c. She gave to John the book **I bought yesterday.**

The ditransitives in (32) are typical examples of how Constituent weight may overrule Case weight. That is, in (32a), the R *John* is deemed more prominent than the T *book* and should precede it; in (32b), an oblique marked R, i.e. *to John* is considered heavier in terms of Case weight than the lighter or unmarked T. Therefore, the T should precede the R; in (32c), the T *the book* is followed by a relative clause *I bought yesterday*, which is heavier in terms of Constituent Weight. Therefore, the R, though case-marked, is still considered lighter than the T.

However, neither the prominence principle nor the weight principle can account for the ditransitives in Puxian satisfactorily. In fact, Puxian appears to have a tendency to

¹⁹ Yet they do not rule out some theme-prominent languages (Kittila 2006 a, b), where T is treated as more prominent in specific contexts.

place R in a less prominent position. In other words, R is always preceded by T (except in some rare cases of double object constructions). To illustrate, we repeat some of the ditransitive constructions discussed earlier, as shown in (33a-c) below.

(33) a. *kua*²¹ *iau*²¹ *ɬe*¹¹ **haŋ**⁴ **muino**¹¹ *kɛ*²¹ *ty*²¹
1sg give one CL stuff to 2sg
 ‘I will give you something.’ (The indirect object construction)

b. *kua*²¹ **ɬe**¹¹ **haŋ**⁴ **muino**¹¹ *iau*²¹-*kɛ*²¹ *ty*²¹
1sg one CL stuff give:KE 2sg
 ‘I will give you something.’ (The secondary object construction)

c. **muino**¹¹ *poŋ*²¹ *tsai*⁴ / *kuai*⁴
stuff throw TSAI / KUAI
 ‘give the stuff to me/to him.’ (The unique ditransitive construction)

From these constructions, we see that the T, be it indefinite or inanimate, always precedes the human, definite and pronominal R, which is considered a violation of the prominence principle; On the other hand, the weight principle seems to apply to the indirect object construction only, as in (33a), where the dative-marked R is considered heavier than the unmarked T. However, when it comes to Constituent Weight, as illustrated in (34) below, we see that no matter how heavier the T is, it always precedes the R.

(34) kua²¹ phan²⁴ ɿe¹¹ uã kua²¹ kai⁴² tsy⁵³³ e⁴ ma²¹ kɛ²¹ i⁴

Isg carry one CL Isg REFL cook MOD rice DAT 3sg

‘I bring him a bowl of rice I cooked.’

Lit. ‘I carry one bowl of rice I cooked myself to him.’

We see that the T in (34) is a complex NP, meaning ‘a bowl of rice that I cooked myself’. It precedes the dative-marked R *i* ‘him, though it is much heavier than the R. Constructions like (34) may pose a question as to whether the weight principle really takes effect in Puxian or the so-called Case Weight in (33a) is just another instance of R-final tendency, widely observed in Puxian.

A similar ‘T precedes R’ phenomenon is also observed in other dialects, e.g. the neighboring Cantonese, where there exist what Tang (1998) termed the ‘Inverted Double Object’ construction or what Yip & Matthews (2007: 201) regard as ‘aberrant’ property of Cantonese’ and ‘topping the list of grammatical points of divergence from Mandarin’, as illustrated in (35) below.

(35) Ngo bei jat bun syu lei laa

Isg give one CL book 2sg SFP

‘I give you a book.’

We can see that the theme *jat bun syu* ‘one book’ is in the first object position and the recipient *lei* ‘you’ is in the second object position, which is significantly different from the usual R + T ordering of the double object constructions in English and Mandarin. Nevertheless, one may argue that (35) is in fact an indirect object construction and there used to be a second verb/dative marker *pei* ‘give’ preceding the

indirect object *lei* ‘you’. And it is only because of diachronic changes that *pei* has been lost. However, the question remains as to why the loss of *pei* may occur in history and why there is a consistent violation of the prominence or weight principle in the cases observed in Puxian and Cantonese. It is very likely that some other principles, e.g. *R-final*, may be responsible here²⁰.

4.3.2. The causative construction

The causative construction is defined here as referring to some special verb forms or structures that may be interpreted as involving two related situations, viz. a causing situation and a resulting situation (cf. Comrie 1981: 165; Haspelmath 1993). Syntactically, the causative can be expressed by means of conjunctions or prepositions (i.e. to link two events) or by means of causative verbs, the latter of which is the focus of this discussion.

Constructions with causative verbs can be classified into three types: the *analytic causative*, the *morphological causative* and the *lexical causative*. The analytic causative refers to constructions that use syntactic means (e.g. serial verbs) to code causation (Shibatani & Pardeshi 2002). For example, the English sentence *She makes me eat the vegetables* is typical analytic causative sentence, where the verbs *make* and *eat* forms a complex predicate to express cause and effect.

The morphological causative, in its prototypical sense²¹, is derived from the non-causative counterpart (be it transitive or intransitive), via some productive²²

²⁰ Tallerman (1998), appearing in Siewierska (1998:616), also points out that ‘pronominal objects exhibit a strong preference for clause-final position, even following any non-valency constituents’.

²¹ The prototypical morphological causatives have the characteristics of deriving a causative form productively from a non-causative counterpart, e.g. through affixation. However, in some cases, it is difficult or impossible to speak of any direction of morphological derivation (see Comrie 1981: 168-9 for the Swahili and French examples).

²² By ‘productive’, it is meant here that one can, in the ideal type, take any predicate and form a causative form by some appropriate morphological means (Comrie 1981:167).

English lexical causative *I broke the window*, indicates direct causation, whereas the complex causative constructions, as in *I hit the window and it broke* or in the analytic causative *I made the window broken*, feature only less direct causation (see also Whaley 1997: 194; Hollmann 2003: 210).

One important aspect of causative constructions is *valency increase* as a result of causativization, especially among morphological causatives. For example, in English, the lexical causative verb *melt*, as in *The sun melts the snow*, has one argument more than the non-causative counterpart, as in *The snow melts*. In other words, the monovalent non-causative verb *melt* increases its valency by one and becomes a bivalent causative verb²⁴. Comrie (1976b, 1985a) observes that valency increasing in the causatives is almost invariably indicated by altering the formal expression of the causee. And the grammatical relation of the causee tends to be predictable following the Accessibility Hierarchy, as illustrated in Figure 12 below.

Figure 12 The Causee Accessibility Hierarchy

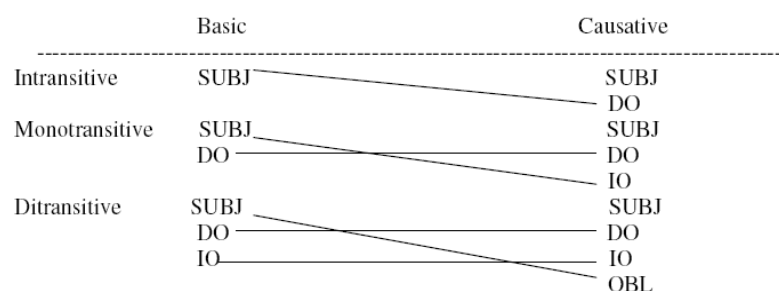
Subject > direct object > indirect object > oblique

According to the Accessibility Hierarchy of the causee, the subject of the original clause, which later becomes a causee, is relatively unstable in terms of the grammatical relations in the derived causative construction. For instance, it may be assigned a new syntactic function to the right of its original one on the hierarchical scale. In other words, if the causative is derived from an intransitive structure, the causee, which is the subject of the intransitive predicate, is likely to become a direct object of the causative structure; if the causative is built on a two-place transitive structure, the causee then tends to be an indirect object; and if the causative comes from a ditransitive clause, the causee will be

²⁴ But it does not necessarily mean that the transitive *melt* is derived from the intransitive *melt*.

further obliquely-marked. The correspondent syntactic positions of the causee are illustrated in Figure 13.

Figure 13 Typical grammatical relation changes between Basic and Causative verbs



(Comrie 1985: 342)

However, Figure 13 only offers an ideal scenario of the changing grammatical relations on the causee. In different languages, the expressions of the causee in causatives may vary significantly and the acceptability of morphological causativization decreases as arguments of the basic predicates increases, which is noted by Dixon (2004: 61):

[M]any languages restrict morphological causative processes to apply only sparingly to intransitive verbs, and quite a few of the remainder allow these processes to apply only sparingly to transitive verbs.

As a matter of fact, languages may adopt different coding strategies for the causee, as the valency of the original clause increases. For example, in Turkish, the ditransitive clause (37a) has three arguments, namely, the agent *mudur* ‘director’, the theme *mektub* ‘letter’ and the recipient *Hasan*. In the causative counterpart of (37b), with the

involvement of an extra participant, namely, the causer *disci* ‘dentist’, the causee *mudur* ‘director’, which is originally the agent/subject of the ditransitive has to be marked with a special oblique marker, the postposition *tarafından*, so as to be distinguished from the dative-marked recipient *Hasan* and the accusative-marked theme *mektub* ‘letter’.

(37) a. Müdür Hasan-a mektub-u göster-di
Director Hasan:DAT letter:ACC show:PAST
 ‘The director showed the letter to Hasan.’

b. Dişçi Hasan-a mektub-u müdür tarafından göster-t -ti.
Dentist Hasan:DAT letter:ACC director by show:CAUS PAST
 ‘The dentist got the director to show the letter to Hasan.’

(Turkish; Comrie 1981)

However, not every language has as many coding devices to differentiate T, R or Oblique O as those in Turkish. Therefore, it is believed that omission of the causee in the causative structure is a frequent alternative (Comrie 1981: 175). This is illustrated in Shawi and Shiwilu, two related languages spoken in the northeastern Amazonian region of Peru, the causative prefix *a-* requires the overt surface realization of an extra participant, as in the case of Shiwilu (38) but not in the case of Shawi (39), where omission of the causee seems to be the strategy.

Shiwilu

(38) a. Wila weran-pa-lli

child eat:DUR:nonFUT:3sg

‘The child is eating.’

(Non-Causative)

b. *asu wila a-weran-pa-lli allila wila*

DEM child CAUS:eat:DUR:nonFUT:3sg other child

‘This child is feeding the other child.’

(Causative)

Shawi

(39) a. huënsë -r-in

sit:INDIC:3sg

‘He sat.’

(Non- Causative)

b. a-huënsë-r-in

CAUS:sit:INDIC:3sg

‘He made him sit.’

(Causative)

(Valenzuela, et al. 2009)

We see that the two languages have different strategies in causativization. In Shiwilu, both the causer *asu wila* ‘this child’ and the causee *alli?la wila* ‘other child’ are present in the causative structure and it may be argued that the causee, which is now the direct object, is originally the subject of the non-causative counterpart of (38a); In Shawi, surface realization of the participants is indicated by the agreement marker *-in* on the verb, which indexes an intransitive agent, as in (39a) or a causer as in (39b). In the case

of (39b), the causee is not overtly coded but implied (e.g. not by the agreement marker). Although such an omission may result in loss of information, it is typologically significant in that morpho-syntactic realizations of the causee can be altered by different means, e.g. omission, only to fit in with the argument structure of the derived causative predicate.

4.3.2.1 Causatives in Puxian

Turning now to Puxian, as far as the morpheme $k\varepsilon^{21}$ is concerned, there are two types of causative constructions: (i) the analytic causative, where the verbal $k\varepsilon^{21}$ and the other predicate form a serial verb construction; (ii) the complex causative, where $k\varepsilon^{21}$, as an affixal or compounding morpheme, is attached to the preceding verb and form a single causative predicate. Both types of causatives in Puxian have not been well studied before, especially under a functional-typological perspective. The topic is very much in need of a thorough investigation.

4.3.2.1.1. Analytic causatives

In the analytic causative construction, $k\varepsilon^{21}$ appears like a coverb and forms string with another verb in the causative construction. The direct object of the first causative verb, i.e. $k\varepsilon^{21}$, is the causee, which, in turn is the subject of the second verb (see also Langacker 1991: 260 or Chappell 2006 for ‘pivot constructions’), as in (40 a & b).

(40) a. \emptyset $k\varepsilon^{21}$ kua^{21} $tshiu^{42}$

give 1sg sing

‘(You) let me sing.’

b. \emptyset $k\varepsilon^{21}$ i^4 $hau-hau^{21}$ lo^4

give 3sg cry-cry PRT

‘(You) let him cry a while.’

The semantic and syntactic properties of $k\varepsilon^{21}$ in (40) resemble those of *make* or *let* in English, as shown in the English translations. There are other causative verbs, such as o^{42} ‘force’, pan^{42} ‘let’, ʔai^{42} ‘make’, etc, that can be similarly used in the structure, as in (41).

(41) a. Pan^{42} kua^{21} kun^4 ,

let 1sg sleep

‘Let me sleep.’

b. o^{42} I^4 ky^{42}

force 3sg go

‘Force him go.’

c. ʔai nan^{21} hau^{21}

make man cry

‘Make someone cry.’

Sometimes, the analytic causative appears to be combined with another clause, as in the structure of ‘Clause A + $k\varepsilon^{21}$ + Clause B’, shown in (42).

- (42) kua^{21} $tshiu^{21}$ ηi^{11} $k\varepsilon^{21}$ ty^{21} $thi\tilde{a}^{42}$
1sg sing song give 2sg listen
 ‘I will sing a song for you to listen to.’

Constructions like (42) are called ‘purposive causative’, as the event expressed by the first clause kua^{21} $tshiu^{21}$ ηi^{11} ‘I sing songs’ enables the happening of the second clause ty^{21} $thi\tilde{a}^{42}$ ‘you listen’. In the structure, $k\varepsilon^{21}$ has no causative entailment but corresponds functionally to a complementizer²⁵, meaning *so that* or *in order that* (see Chappell 2006: 16 on *khit* in Southern Min; Song 1996, cf. Her 2006 for purposive *gei* in Mandarin).

A less typical type of analytic causatives is the disposal construction of Puxian type, which is also widely observed in other Sinitic languages. The Puxian disposal construction has the DO foregrounded and uses $k\varepsilon^{21}$ to mark an expletive causee *i*, though mostly in contracted form of $k\varepsilon^{21}$, as in (43).

- (43) a. ty^{21} tsy^{42} ma^{24}
2sg cook rice
 ‘You cook the food.’ (Monotransitive)

²⁵ There may be controversy as to whether $k\varepsilon^{21}$ is a complementizer or a coverb proper. Here, I adopt the the complementizer view held by Chappell et al. concerning *khit* in Southern Min.

b. Ty²¹ (tsioŋ²⁴) ma²⁴ kɛ²¹ (i⁴) tsy⁴² lo⁴.

2sg (tsioŋ²⁴) rice give 3sg cook PRT

‘You make the food cooked.’ (Puxian disposal construction)

The disposal construction of (43b) (the APV order) is derived from the transitive (43a) (the AVP order). In (43b), the object *ma*²⁴ is moved to the preverbal position and is optionally marked with the object marker *tsioŋ*²⁴ (subject to the Animacy factors discussed below). The object position of the causative verb *kɛ*²¹ is then filled by the expletive *i*, which is phonologically fused with *kɛ*²¹²⁶. The syntactic structure of (43b) is ‘A + P + (*kɛ*²¹_{CAUS} + (i) + V)’, where the structure in the bracket is an analytic causative proper. In this sense, the disposal construction of (43b) is also a causative construction, derived from the non-causative counterpart (43a). The causativization results in one valency increase and is fulfilled by the expletive *i* in the causee position.

Evidence of the increased argument in the form of the expletive *i* is well attested in other Min dialects. For example, Matthew et al. (2005) observe that there exists a type of pretransitive construction in the Jieyang vernacular, which takes the form of ‘*t’ang* + NP + *kai* + *i* + V’, with *t’ang* corresponding roughly to Puxian *tsioŋ*²⁴ (or Mandarin *ba*) and *kai* to *kɛ*²¹ (or *gei* in Mandarin as well), as shown in (44) below.

(44) ua t’an lu kai i poi tiau ne

1sg Pretr 2sg KAI_{CAUS} 3sg sell RVC PRT

‘I sell you off.’

(Jieyang, Matthew et al. 2005)

²⁶ The corresponding morphemes of *kɛ*²¹ in other Min are, say, *hoo* in Southern Min or *ke?* in Jieyang. They are also reported to be fused with the 3rd person form *i* in the passive or causative constructions. But in Puxian, phonological evidence of the fusion is not salient in current vernacular speeches.

The pretransitive construction is in essence a disposal construction, where *t'ay* is an object marker, marking a foregrounded preverbal object *lu* ‘you’, while *kai* is still a causative morpheme²⁷, followed by a ‘dummy’ or expletive pronominal *i* in the object/causee position. In this case, the overt presence of the expletive *i* should be viewed as a syntactic strategy to encode an increase in valency as a result of causativization.

A similar structure is also observed in Taiwanese Southern Min (TSM), where causativization enables the causative morpheme *hoo* ‘give’ to restructure what would be a bivalent transitive clause into a causative construction, as in (45), where the expletive pronominal *i* signals the increased valency in the structure.

- (45) \emptyset mui²⁻⁶ hoo i guan¹ kit⁷ lai⁹
 (You) door HOO_{CAUS} 3sg close up-come_{PERF}

Lit. ‘(You should) make the door to be close-up.’

Like Puxian, the object *mui*²⁻⁶ ‘door’ is moved to the preverbal position and an expletive pronominal *i* is inserted between the causative *hoo* and the other verb *guan* ‘close’.

Since Jieyang, Southern Min and Puxian all belong to the Min dialect family and the 3rd person pronoun *i* is commonly shared by these dialects, there is no reason not to believe that such a valency-increase analysis is not applicable to any one of them. In many cases, the causative morpheme, such as Puxian *kε*²¹, Jieyang *ke?* and Southern Min *hoo*, can be phonologically fused with the expletive *i*, which results in some slight tonal changes. However, in vernacular Puxian today, the tonal change is hardly

²⁷ Matthews et al. (2005), however, consider *kai* to be an object marker, which is different from my analysis here. In fact, they don’t rule out that ‘a number of alternative analyses might be considered’ and ‘leave the detailed analysis of the pretransitive construction for future research’.

detectable²⁸, and this is also reminiscent of the ‘causee omission’ strategy mentioned by Comrie (1981: 175) (see the case of Shawi as well).

In addition, Mandarin *ba* constructions may be viewed as causatives as well. That is, apart from the basic functions of foregrounding a direct object in the preverbal position, the *ba* constructions denote a change of state as a result of causation (cf. Jiang 1997, Wu 2003, Chappell 1992). Chappell (2000) points out that *ba* constructions exhibit ‘a causative constraint which is reflected in the causative complement in terms of degree or manner, movement, etc.’. In fact, most *ba* constructions can be supplemented with a causative verb *gei* as in (46)

(46) *bá rén gěi ø dǎ le.*
BA_{ACC.} ren give_{CAUS.} beat Perf.
 ‘(I) hit somebody.’

In (46), the direct object *ren* ‘man’ is moved forward and is marked by the object marker *ba*. The causative verb *gěi* is also introduced in the sentence to enhance the causative connotation. Such a structure of ‘BA + NP_{DO} + GEI_{CAUS} + ø + V’ is essentially similar to those in Min. Therefore, the valency-increase analysis²⁹ may be applied to (46) as well, if we are able to assume that there is a null causee in the object position of *gei* or such a causee is subject to some ‘omission strategy’ (Comrie *ibid*).

²⁸ By referring to the linguistic sections in Putian Xianzhi (Puxian County Records) (Wen 1994), there is no mentioning of the overt presence of *i* in the constructions, compared to other Min dialects that specify its presence.

²⁹ Chappell (2006:441-486) points out that the disposal *ba* construction in Mandarin allows the direct object in a marked position. It has a distinctly causative meaning but does not increase the valency. The marker *gei* acts like a prefix on the verb, without a covert a covert object and appear to emphasize the patient role in the event. However, in the above example, I tend to believe that the causative meaning in the *ba* construction is enhanced with the causative verb *gěi*, with results in a serial verb construction with a null expletive as a form of valency increase (a strategy of omission).

4.3.2.1.2. Complex causatives

The term ‘complex causatives’ refers to the use of $k\varepsilon^{21}$ as an affix or some compounding element in forming a single predicate, marking ‘the oblique function of the following NP, i.e. the causee’ (Chappell 2006: 22)³⁰. One interesting feature about complex causatives in Puxian is that, like the derivation of morphological causatives, $k\varepsilon^{21}$ appears to be a productive morpheme, attached to different ‘verbal stems’ to form causative meanings, such as ‘make /let /enable’³¹. There are three basic types of complex causatives in Puxian, each built on the original intransitive, transitive or even ditransitive clauses. The complex causative constructions require one argument more than the non-causative counterparts. Just like the disposal constructions, the increased argument is probably realized in the form of 3rd person expletive *i* (simply a null expression) which, in the process of grammaticalization, is generally fused with the causative morpheme $k\varepsilon^{21}$. To begin with, let’s consider the intransitive-based causatives, as shown in (47) below.

(47) a. tha-kie^{453} $\text{t}\emptyset^{533}$ he^4

Everybody sit there

‘Everybody sit there.’

(Intransitive)

³⁰ From a semantic point of view, complex causatives across languages are generally composed of a causing event and a caused event, the latter of which is expressed in the form of resultative complements (cf. Levin & Rappaport 2001). Pragmatically, complex causatives express the speaker’s deliberate intension to achieve certain results, as the events expressed can be factual or non-factual.

³¹ Different from the ditransitive marker $k\varepsilon^{21}$ in the double object construction, $k\varepsilon^{21}$ of the complex causatives marks a causee.

b. *tha-kie*⁴⁵³ *ɬø*⁵³³-*kɛ*²¹ *ø* *tsiã*⁴²

Everybody *sit-give* (3sg) *straight*

‘Everybody should sit straight.’

Lit. ‘Everybody should make themselves sit straight.’ (Causative)

We see that in the intransitive clause (47a), the verb *ɬø*⁵³³ ‘sit’ has only one argument, i.e. the subject *tha-kie*⁴⁵³ ‘everyone’. In the causative structure (47b), the NP *tha-kie*⁴⁵³ ‘everyone’ assumes double argument roles, namely, the causer and the causee. In terms of the latter, it follows the complex causative *ɬø*⁵³³-*kɛ*²¹ ‘sit’ and is realized as an unexpressed expletive *i*. The constructional semantics is like this: the causer, *tha-kie*⁴⁵³ ‘everyone’, by means of the causative action of ‘sit_{CAUS}’, expects or enables itself to achieve a desired state of ‘straight sitting’, as is indicated by the resultative complement *tsiã*⁴² ‘straight’. Also, such a complement appears to be the predicate of the expletive *i*, the object of the complex causative *ɬø*⁵³³-*kɛ*²¹ ‘sit_{CAUS}’³².

Syntactic evidence for the overt presence of the expletive *i* in complex causatives is found in other Min dialects. For example, in TSM again, the expletive use of 3rd person singular *i* may be overtly placed in the object position of a complex causative predicate ‘V-*hoo*’, as shown in (48). In vernacular speech, the listener is able to infer its presence by some phonetic clues, e.g. the phonological contraction *i* with *hoo* may result in *hoo*h** (the glottal stop takes its place for compensation) or just *hoo* (with a slight tonal change, e.g. 7 - 8) (Huang 1999: 31; Lee 2008: 72).

³² I tend to believe that *i* in this case is an expletive rather than a referential pronominal, as it remains invariably the same, regardless of the person/number feature of the subject. This is also the case for the expletive *i* in Jieyang, mentioned by Matthews et al. (2005:282).

- (48) a. *li gin-a phah- hoo i si / phah- hoo h si*
2sg child hit-give 3sg dead / hit-give:3sg dead
 ‘You should hit the child severely.’

In (48), the complex causative structure requires the DO position of the predicate *phah-hoo* ‘hit_{CAUS}’ to be filled with the expletive *i*, which is also the subject of the complement, i.e. the adjective *si* ‘dead’ as well.

On the other hand, when it comes to bivalent transitive verbs, the causativization is slightly more complicated. It usually follows two steps: (i) move the original DO to the preverbal position of the derived causative structure; and (ii) place an unexpressed expletive *i* in the object position of the complex causative, as shown in (49).

- (49) a. *ty²¹ tsy⁴² ma²⁴*
2sg cook dinner
 ‘You cook diner.’ (non-Causative)

- b. *ty²¹ (tsioŋ²⁴) ma²⁴ tsy⁴²- kε²¹ ø t̥ue²⁴*
2sg ACC dinner cook-give (3sg) thorough
 ‘You should cook the dinner to full.’
 Lit. ‘Dinner, cook it to full.’ (Causative)

We see that the DO of the transitive (49a) *ma²⁴* ‘dinner’ is moved to the preverbal position in the causative structure (49b), which is then optionally marked with the object marker *tsioŋ²⁴* (see Chappell 2000, and the Person effects discussed below). The causative construction can be interpreted as ‘the causer cooks the dinner and makes

sure/enables it to be cooked thoroughly'. The increased argument is again the unexpressed expletive *i*, immediately following $-k\varepsilon^{21}$.

Sometimes, the complex causative may be derived from some tri-argument constructions. In this case, there is a very different complex causative structure, where the monosyllabic predicate in the causing clause should be reduplicated in the resulting clause, as in (50 a & b)

(50) a. John $ioŋ^{11}$ $tsui^{42}$ o^{42} hua^4
 John use water rain flower

‘John waters the flowers with water.’

Lit. ‘John takes water (to) rain the follow.’ (non-causative)

b. John $ioŋ^{11}$ $tsui^{42}$ o^{42} hua^4 beh^4 $o^{42} - k\varepsilon^{21}$ \emptyset ua^{24}
 John use water rain flower want rain-give (3sg) alive

‘John waters the flower to make them alive.’ (Causative)

In (50a) the serial verb construction has three arguments, i.e. *John*, *water* and *flowers*. In the causative derivation (50b), the sentence consists of two clauses. Not only should the non-causative construction be repeated but the main predicate o^{42} ‘rain’ is reduplicated and marked with $k\varepsilon^{21}$ in the second clause. Again, it is expected that the expletive *i* should follow the complex causative, as a result of valency increase.

4.3.2.2. The typological perspective

One noticeable feature of complex causatives in Puxian, derived from original

intransitive verbs, is very similar to the ‘reflexive resultative’ constructions in Germanic languages (see also similar discussion in the last Chapter), where the intransitive agentive (i.e. unergative) verbs, such as *laugh, run, work*, etc. can have reflexive objects without alternative NPs (i.e. *fake reflexives*) (Simpson 1983).

(51) a. He laughed himself silly. (Verspoo 1997: 104)

b. Joggers often run themselves sick. (Carrier and Randall 1992: 217)

c. Sie arbeitete/rannte sich müde.

‘She worked/ran herself tired.’ (German)

e. Hun arbeidet seg svett.

‘She worked herself sweaty.’ (Norwegian; Lødrup 1999: 371)

f. Hij werkte zich suf.

‘He worked himself drowsy.’ (Dutch: Hoekstra 1988: 115)

Levin and Hovav (1999) point out that this type of ‘reflexive resultative’ is associated with a complex event structure that consists of ‘a causing event and a caused event’. Thus, they can be viewed as a syntactic variation due to causativization. The differences between ‘reflexive causatives’ and the complex causatives in Puxian is that Puxian resorts to an expletive DO strategy, whereas reflexive resultatives in the Germanic languages adopt a reflexive DO strategy.

Another interesting linguistic phenomenon is that it is not common to have overt or

covert expletives as place holders in the DO position in languages. Yet, according to the generative literature, verbs like *believe* or *expect* are supposed to assign accusative case to the subject of its complement clause (Postal and Pullum 1988). Thus in the following two English sentences, *there* and *it* can be thought of as overt expletives in DO position as well.

(52) a. I expect *there* to be three men in the shop

b. I take *it* that John will be the next.

Compare

c. I believe *him* to be innocent.

In the Romance languages, referential null objects, the so-called *pro*, are possible and are viewed as a position holder for the DO, which enables the sentence to be interpreted as transitive (Franco et al. 2008: 222).

(53) Es major que pongas *pro* aquí

is better that put-2 here

‘It’s better that you put \emptyset here.’

(Spanish; Franco et al. 2008)

To sum up, the underlying mechanisms for causative derivations in Puxian, i.e. the strategy of valency increase by means of the expletive *i*, is linked to the extensive typology of causee markings, as attested in other languages, such as the *fake reflexive* in Germanic languages or the ‘omission strategy’ in Shawi causatives.

4.3.3. The passive construction

The term ‘Passive’ refers to a wide variety of constructions, differing in morphosyntactic features, such as case marking, verbal morphology or word order. Despite the great differences among them, there is some general agreement on what should be defined as a prototypical or canonical passive (see e.g. Givón 1979, Siewierska 1984, Shibatani 2006; Comrie 2007, among others). Siewierka (2005) offers the following characterization of a canonical passive, which is illustrated as follows:

- i. It contrasts with another construction, the active;
- ii. The subject of the active corresponds to a non-obligatory oblique phrase of the passive or is not overtly expressed (but only implied);
- iii. The subject of the passive, if there is one, corresponds to the direct object of the active;
- iv. The construction is pragmatically restricted relative to the active;
- v. the construction displays some special morphological marking of the verb.

According to the characterization, the canonical passive is defined in relation to the corresponding active, as illustrated in (54).

(54) a. John bought the book. (Active)

b. The book was bought (by John). (Passive)

(English; Siewierska 1984)

The subject *John* in the active (54a) is demoted to an oblique role (i.e. in the *by*-phrase) or even totally suppressed in the passive (54b); and the object *the book* in (54a) is

promoted to the subject position in (54b). The two clauses, the active and the passive, are generally viewed as having the same propositional content as well as the same semantic roles, though the grammatical relations are different (Siewierska 1984: 3).

Typologically, Passive may vary along several parameters. The first of them concerns the presence or absence of a grammatical subject, which divides passives into *personal passives* and *impersonal passives* (Siewierska 1984, 2005; Keenan 1985). The personal passive is typically seen as being derived from the active by means of agent demotion and patient promotion, as in the English (54b) mentioned above. Besides, it has an overt lexical subject, marked in one way or another to indicate the grammatical relation with the predicate. A prototypical personal passive construction is seen in the Latin (55), where the nominative subject *horti* ‘gardens’ triggers 3rd person plural agreement on the predicate *ama-ntur* ‘love’.

(55) Horti pulchri ama-ntur
Gardern.PL:NOM beautiful:PL.NOM love:PASS.3pl
 ‘The beautiful gardens are loved.’

(Latin; Manninen et al. 2004)

The impersonal passive, on the other hand, usually has an intransitive predicate and the designated subject position is filled with an expletive or some non–subject constituent. The passivization process enables the intransitive predicate to be marked with passive morphology and the sole argument of the intransitive predicate to be deleted or reintroduced in the oblique position (or as complement). Impersonal passives do not involve DO promotion but have subject demotion (Comrie 1977, Siewierska 1984: 96-100, 2008). The most common and least controversial types of impersonal

passives are from the German (56) and Turkish (57) (see also different types of impersonal passives from Siewierska 1984: 94).

(56) Es wurde getanzt.

it was danced

‘There was dancing.’

(German)

(57) Otobüse-e bin-il-di

bus-DAT board-pass-past

‘The bus was boarded.’

(Turkish; Siewierska 1984: 94)

In German (56), the subject of the impersonal passive is the expletive *es* ‘it’ and the passive morphology is applied to the intransitive verb *tanzen* ‘dance’ so that the sentence undergoes passivization; in Turkish(57), the NP *Otobüse* ‘bus’ does not ‘have nominative marking typical of subject NPs in Turkish; nor does it govern subject-verb agreement. The verb in the passive clause appears with the passive affix *-il* or *-in* subject to vowel harmony (Siewierska *ibid*).

The second parameter relates to the type of verbal morphology used. There are *analytic/periphrastic passives* and *synthetic passives*. The periphrastic/analytic passive involves an additional auxiliary and the lexical verb is in the form of a participle or other nonfinite form, as in the case of English passives; the synthetic passive, on the other hand, has passive markings on the verb (*viz.* conjugation), as in the case of Swahili, a Bantu language, where the passive is formed by a suffix *-w-(-u-)* on the verb, as in (58).’

(58) Nyana ili-pik-wa na mwanaume yule
meat PAST:cook:PASS by man that

‘The meat was cooked by that man.’

(Swahili, personal knowledge)

In addition, another type of passives is *reflexive passives*, in which the passive marker is homophonous with the reflexive marker of the language in question. Reflexive passives resemble structurally, at least to some extent, a reflexive middle-voice construction (Givón 2006). This may be illustrated in (59) from French, where the reflexive structures can have passive or anticausative meanings.

(59) a. La décision s'est prise hier
the decision REF AUX taken yesterday

‘The decision is taken yesterday.’ (Passive)

b. La branche s'est cassée.
the branch REF AUX broken

‘The branch is broken.’ (Anticausative)

(French, Heidinger et al. 2008)

Finally, a unique type of passives is the *indirect passive*, where the subject does not correspond to an argument of the verb in the active and is often interpreted as some additional referent that is “affected” (adversely) by the actions³³, denoted by the verb, as

³³ Siewierska (1984:157) points out clearly that ‘the *indirect passive*, unlike the *direct passive*, does not appear to be compatible with the relational approach to passivization’. In other words, indirect passives may not fit into the usual passivization processes of promotion or demotion, as in the cases in Vietnamese or Tai (see also the Mandarin or Puxian (61) below). Pragmatically, the indirect passive is associated with adversative meanings, which, however, will not be the focus of the chapter.

shown in (60) of the Japanese.

(60) a. Doroboo ga Taroo no zitensha o nusanda
Thief NOM Taroo GEN bike ACC steal: PAST
'A thief stole Taroo's Bike'.

b. Taroo ga doroboo ni zitensha o nusum-are-ta
Taroo NOM thief by bike ACC steal-PASS-PAST
'Taroo has his bike stolen by a thief.'

(Japanese; Siewierska 1984: 154)

In the indirect passive (60b), the subject *Taroo* is also the possessor of the object *zitensha* 'bike' in the active clause of (60a). The indirect passivization enables the possessor to become the subject, rather than the DO *zitensha* 'bike'. Therefore, both the English translation and the indirect passive clause appear to have an 'extra argument' missing in the active.

Generally speaking, the Passive is used primarily for three functions: (i) topicalization (ii) impersonalization (ii) detransitivization (Siewierska forthcoming). Topicalization is defined by Givón (1979: 186, cf. 2006) as '[...] patient becomes, by default, the only topical argument'. Topicalization also involves subjectivization, except for some languages, e.g. Japanese or Chinese, where topicalization can occur without subjectivization; Impersonalization, on the other hand, is an agent-defocusing strategy, which is viewed by Shibatani (1985), as the primary function of passives. Impersonalization can also be characterized syntactically, as occurring when an argument other than the agent has been selected for the subject through different coding

strategies (Siewierska 2008); finally, Passive has the function of detransitivization, namely, a valency decreasing strategy, by which the detransitivized passive form and regular intransitives can both have one surface subject, e.g. *be killed* or *die* (Shibatani 1985).

4.3.3.1. The passive in Puxian

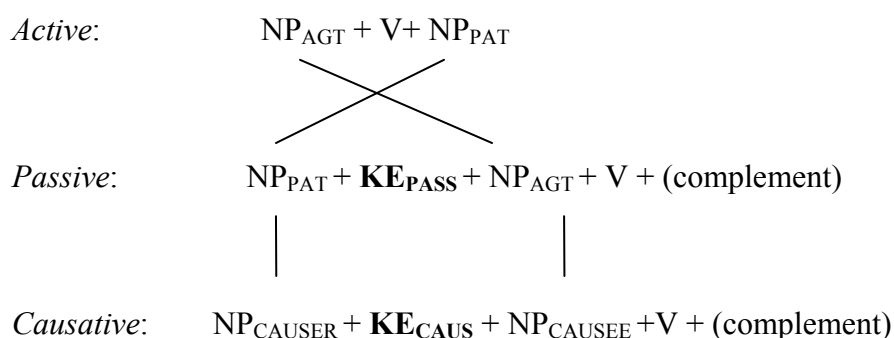
Like other Min dialects, Puxian relies on the *give* verb $k\varepsilon^{21}$ as the main source of grammaticalization into dative, causative as well as passive functions (see also Yue-Hashimoto 1993: 131, Chappell 2006, etc). The use of $k\varepsilon^{21}$ as a passive marker is observed in three different types in Puxian, namely, the *personal passive*, the *double-marked passive* and the *indirect passive*. The personal passive is the most frequent type of passives, which however resembles the analytic causative structurally and semantically. They are also known as *long passives* in Chinese linguistics, because the agent in the clause should always be present (Huang 1999); the double-marked passive is a special passive type of Puxian, which requires separate markings on both the agent and the predicate. Such a structure resembles the passive *wěi...suǒ* construction in Middle Chinese; finally the indirect passive is known to involve different semantic roles and has more arguments than the active counterpart. These passives are discussed below.

4.3.3.1.1. The personal passive

Personal passives in Puxian are similar to those in other languages, which have an overt lexical subject, typically in the role of a patient, and a demoted agent in the oblique

position. The personal passive in Puxian is closely related to the causative, as both of them share the same morpheme $k\varepsilon^{21}$. The development from the active to the passive and the causative, in terms of thematic role changing, can be illustrated in Figure 14.

Figure 14 Thematic relations in the active, passive and causative



It is interesting to see that the personal passive and the causative in Puxian resemble each other structurally, that is, they have similar placement of NPs in the structures. What's more, they cannot be clearly distinguished as well, for some passives may be interpreted as 'weak causatives' (Deng 2004, Weng 2006). In fact, this is a property shared by many Sinitic languages. To illustrate, we have the following sentences from Puxian and Mandarin, as in (61) and (62).

- (61) a. kua^{21} pha^{42} ty^{21}
1sg *hit* *2sg*
 'I hit you.'

b. ty²¹ kɛ²¹ kua²¹ pha⁴² nŋ o⁴
2sg PASS/CAUS 1sg hit two times

‘You are hit by me twice.’

‘You let me hit (you) twice.’

(Puxian)

(62) a. Lǎoshī mà John

teacher scold John

‘The teacher scolded John.’

b. John gěi lǎoshī mà le.

John PASS/CAUS teacher scold ASP

‘John was scolded by the teacher.’

‘John let the teacher scold (him).’

(Mandarin)

We see that the passive and causative in Puxian share the same structure and are derived from the same monotransitive clause. This is also observed in the Mandarin examples. The underlying mechanism as to why the passive and causative may share the same structure is explained by Yap and Iwasaki (2003), who argue that the transition from the causative to the passive is realized by means of the decreased ‘volition or willingness on the part of the subject’ and, at the same time, the increased control of the event by the causee/agent in the clause. Take the Mandarin sentence (62b) for example, one causative interpretation is that the causer ‘John’ let/make the causee ‘teacher’ to scold him (probably for his own goods); the other passive interpretation is that the patient ‘John’ is affected by the action of ‘scolding’, instigated by the agent ‘teacher’. Thus,

although we see the same placement of NPs in the sentences, the argument roles may be different. Such an analysis can be applied to the Puxian example as well, where the subject *ty*²¹ ‘you’ may, out of his own volition, let someone hit him or was hit by someone in a typical passive sense. In view of this, the personal passives in both Puxian and Mandarin are sometimes termed ‘weak causative’ or ‘permissive’, in the sense that ‘the causer let the causee carry out an action on him’³⁴.

4.3.3.1.2. The double-marked passive

In addition to the personal passive, the double-marked passive is quite common in Puxian as well. The construction features two separate passive morphemes of *kε*²¹, one for the agent, the other for the predicate, as in the structure of ‘NP_{PAT} + *kε*²¹ + NP_{AGT} + *kε*²¹ + V + complement’. For example,

(63) a. *ɬø*¹¹ *kε*²¹ John *kε*²¹ *o*⁴² *iu*¹¹ *θerŋ*⁴

Clothes PASS John PASS water wet PVF

Lit. ‘The clothes were watered wet by John.’

b. *phie*¹¹ *kε*²¹ *kua*²¹ *kε*²¹ *kya*⁴² *liau*²⁴ *lo*⁴

letter PASS Isg PASS post ASP PRT

‘The letter was posted by me.’

(Puxian; Cai 2006)

³⁴ Siewierska, A& D, Bakker (to appear) observe that passives in Sinitic languages exhibit a series of ‘non-canonical’ properties, e.g. incomplete agent ‘suppression’ or ‘demotion’, topicalization without subjectivization, etc.

In both of the above constructions, the first $k\varepsilon^{21}$ looks like a prepositional agent marker, introducing the agent, e.g. *John* or *kua*² ‘I’ in the above. The second $k\varepsilon^{21}$ marks the transitive predicates, e.g. *lo*⁴² ‘water’ or *kya*⁴² ‘post’. It is therefore believed that the categories of $k\varepsilon^{21}$ in the double-marked passive are unlikely to be the same. Such a construction, however, is reminiscent of the ‘*wei...suo*’ passive in Middle Chinese, which has the structure of ‘NP_{PAT} + *wei* + NP_{AGT} + *suo* + V’. The agent is marked by the preposition *wei* and the transitive predicate by *suo* (Shi 2005), as shown in (64)

- (64) 太子 为 江允 所 败。
 Tàizǐ wěi Jiāngyún suǒ bài.
Prince WEI_{PASS} Jiangyun SUO_{PASS} defeat
 ‘Prince was defeated by Jiangyun.’

(Banggu, A.D. 32-92)

Shi (ibid) points out the morpheme *suo* in the above construction is a pronominal intransitivizer³⁵ (see also Ting 2003), which prevents the transitive verb from having an argument in the object position (for the direct object has already been promoted to the subject position). Just like *suǒ*, the second $k\varepsilon^{21}$ in the Puxian construction has an intransitivizing function as well and should be viewed as some highly grammaticalized morpheme. In fact, it is not uncommon to find grammaticalized transfer verbs, such as $k\varepsilon^{21}$ in Puxian or *gei* and *bei* in Mandarin to directly precede transitive verbs. For instance, in the Mandarin short passives³⁶, e.g. *tā gěi-mà le* or *tā běi-mà le* ‘he was

³⁵ The particle *suo* has long been noticed to appear before the transitive verb. However, its syntactic status is not commonly agreed upon. It is viewed as an adverb (Chao 1968), a relative pronoun (Ou 2007), a resumptive pronominal clitic (Ting 2003), etc. From a functional point of view, *suo* is an intransitivizer, just like the reflexive markers, e.g. *se*, in Romance languages (see the previous chapter)

³⁶ The long passive *gei* construction, as in (58b), is cognate with the causatives but this is definitely not so for the

scolded’, the morpheme *gei* or *bei* precedes the verb *ma* ‘scold’ and is regarded by Newman (1993b: 477) as ‘affixal-like’, representing some highly grammaticalized functions of marking passivity. In my view, both the *wei...suo* construction and the ‘affixal’ analysis of *gěi* or *bèi* parallel, to some extent, the double-marked passive in Puxian. In the following section (3.4), we will see that $k\varepsilon^{21}$ is able to mark intransitive verbs as well, representing another highly grammaticalized function.

4.3.3.1.3. The indirect passive

It is known that the indirect passive is not a typical passive, as the subject does not correspond to an argument of the active base, e.g. it is possessor of a monotransitive P instead of P. The indirect passive in Puxian, however, appears to have some unique syntactic features, with the structure ‘Topic + NP_{PAT} + $k\varepsilon^{21}$ _{PASS} + NP_{AGT}+ V+ (complement)’. The possessor goes through topicalization without subjectivization. Such a syntactic property is different from the indirect passive in Japanese mentioned above or even from Mandarin. The difference between the indirect passives in Puxian and Mandarin can be illustrated in (65 a & b) below. Both sentences express the same proposition, as of the active *someone stole John’s bike* in English.

(65) a. John $k\text{ø}lia^{11}$ $k'\varepsilon\eta^4$ $thauiau^{42}$ $ki\tilde{a}^4$

*John*_{TOP} *bike* *PASS:man* *steal* *PRF*

Lit. ‘John, his bike was stolen by someone.’

(Puxian)

short passive *gei* constructions. The latter not only appeared earlier in history but went through different grammaticalization paths. The fact that the agent in the long passives is ‘generally inaccessible to deletion’ (Huang 1999) suggests that they are not syntactically related to short passives (see also Hashimoto 1987, Wei 1994, Ting 1995, 1996, Deng 2004, among others).

b. John **bèi** rén tōu le chēzi

John PASS man steal ASP bike

Lit. ‘John was stolen a bike by someone.’

(Mandarin)

,

We notice that the indirect passive in Puxian and Mandarin does not follow typical passivization processes of promotion and demotion typical of the personal passive. In the Puxian (65a), the underlying structure is ‘Topic + NP_{PAT} + kε²¹_{PASS} + NP_{AGT}+ V+ (complement)’, where *John*, the former possessor, is topicalized but not subjectivized. *John* becomes an optional element, in the sense that Topic does not necessarily enter into thematic relations in the clause; the patient *kølia*¹¹ ‘bike’, by means of promotion, becomes the subject of the sentence. On the hand, the agent *nan*²¹ ‘man/someone’ is defocused, as in the contracted form of *k’εŋ*⁴ in the oblique position. Thus, such a syntactic operation enables the direct object *bike*, rather than the possessor *John*, to become the passive subject and the main clause remains a typical personal passive construction (cf. Siewierska 1984: 154 on Japanese indirect passive). Nevertheless, the construction does result in one more noun than the active, viz. the topic *John*, just like the other indirect passives. Differently, in the Mandarin (65b), the subject of the passive is the former possessor *John*, marked as a sufferer or affectee; the DO *chēzi* ‘bike’ remains in its postverbal position, following the verb *tōu* ‘steal’. Although both the Puxian and Mandarin clauses can be translated as ‘John had his bike stolen’, they are distinguished syntactically concerning the choice of the subject NP.

4.3.4. The $k\varepsilon^{21}$ -marked intransitive constructions

In the previous section, I introduced three different types of $k\varepsilon^{21}$ -marked passive constructions. In this section, I will discuss two types of $k\varepsilon^{21}$ -marked intransitive constructions. To begin with, I should point out that the intransitive constructions to be discussed, to some extent, resemble passives, for both of them share the same passive-like morpheme $k\varepsilon^{21}$ ³⁷. However, it is difficult to pinpoint the exact status of $k\varepsilon^{21}$ in the respective constructions, that is, whether they are indeed the same passive morpheme or just homophonous to each other. To better understand the issue, we need to refer to the similar passive and intransitive constructions in Jieyang dialect, investigated earlier by Matthews et al. (2005) first.

The Jieyang dialect is a member of Southern Min, spoken in eastern Guangdong province, known as the ‘Chaoshan area’. In the dialect, the passive is best illustrated in (66a); its active counterpart is shown in (66b).

(66) a. ua tiam k'e? (i) me

1sg always PASS 3sg scold

‘I keep being scolded by him.’

b. I tiam me ua

3sg always scold me

‘He keeps scolding me.’

(66a) is a prototypical passive construction in Jieyang. On the basis of the active

³⁷ it is not rare for languages to have passive morphology applied to intransitive verbs (Siewierska 1984:64)

counterpart of (66b), the passive subject *ua* ‘me’ is promoted from the direct object position of the active; and the subject of the active *i* ‘he’ is demoted to an oblique position, marked by the passive marker *keʔ* ‘give’³⁸. Interestingly, the same *keʔ* is also used in the intransitive constructions, as shown in (67)³⁹.

(67) a. *tsaŋ hue k'eʔ i si k'ʊ*

CL flower PASS 3sg die RVC

‘The flower has died.’

Lit. ‘The flower get died.’

b. *kai nou-kiã k'eʔ i puaʔ loʔ k'ʊ*

CL child PASS 3sg fall down RVC

‘The child fell over.’

Lit. ‘The child get fallen over’

In the passive, *keʔ* is a passive marker introducing an agentive nominal. Yet in the intransitive, its status is unclear. We see that both *si* ‘die’ and *puaʔ* ‘fall’ in the sentences are unaccusative verbs, which suggests that the sole argument of the predicate is a theme or patient. In other words, no agent role is available for marking. According to Matthews et al, the morpheme *keʔ* in the unaccusative construction ‘represents overt marking of unaccusativity’, as the *keʔ* -marked intransitive predicates denote a change of state of the subject. Importantly, they also remark on the obligatory presence of the

³⁸ Matthews et al. (2005: 271) mentioned that the passive marker *keʔ* and the 3rd person pronoun *i* may fuse to give a monosyllabic contracted form *kei* or *ke* in rapid speech. There are a number of evidences suggest that the pronominal *i* is present in the passive clauses, despite the fusion.

³⁹ As will be discussed in next section, some *keʔ*-marked intransitive verbs are inchoative-stative, which resembles the passives in English, where the inchoative *get* takes adjectival passive participle as complement.

3rd person singular *i* between *keʔ* and the intransitive predicates, which they regard as a ‘frozen dummy agent’ and ‘apparently there to fill the syntactic position occupied by the agent in passives but lacks the semantic role of agent and it therefore non-thematic, much like an expletive subject in English’. Thus, the expletive *i*, apparently without any thematic role in the clause, poses an empirical challenge to the universal characterization of unaccusativity, for it is generally assumed that ‘every subcategorized position must be assigned a theta role’(see also Postal and Pullum 1988).

While the expletive status of *i* may be granted, one would ask why the surface structure of the unaccusative construction, i.e. ‘NP + *keʔ* + NP_{PRON.} + V’, is almost identical to that of the passive one, i.e. ‘NP + *keʔ* + NP_{AGT} + V’. In other words, the transition from the passive to the unaccusative does not affect the core grammatical relations: both structures have a theme or patient NPs in sentence-initial subject position and an agent NP or a ‘dummy agent’ in the oblique position marked by *keʔ*. However, Matthews et al. did not actually specify whether and how the unaccusative construction relates to the passive or to other constructions in the dialect.

To better understand the interrelationship between them, we need to take two factors into account: the first is that the lexical properties of the verbs, i.e. transitive vs. intransitive, do not seem to have a great effect on the choice of syntactic structures. Instead, it is the structure or construction that forces the verbs to accommodate; the second factor is related to grammaticalization, assuming that the unaccusative, the passive and the causative are all related to each other. In other words, it is very likely that both the passive and the unaccusative are somehow linked to the causative as a result of grammaticalization (e.g. through *reanalysis or analogy*). In fact, if we have a closer look at the unaccusative constructions mentioned in the article by Matthews et al, all of them seem to indicate some *external causation*. Such causation, when encoded by

the intransitive constructions, which usually profile one thematic argument, needs to be realized as if it were to have an increase in valency. It thus explains why the standard practice in the Jieyang unaccusatives is to insert an expletive *i* in the syntactic position normally held for the agent.

Following such a causation-based analysis, the parallelism applies naturally to the *kε*²¹-marked intransitive constructions in Puxian, as they also signify some externally-induced causation. Yet different from Jieyang, both unergative verbs and unaccusative verbs can be used in the construction, as a result of which the implied causation is construed differently: either from some unknown source or from the subject itself (i.e. reflexive effect). To illustrate, we have the following unaccusative constructions, as shown in (68) and (69), where the predicates marked with *kε*²¹ or without *kε*²¹ are contrasted⁴⁰.

(68) a. ɬv²⁴ phaŋ-iŋ⁴² theŋ²¹

clothes lost PVF

‘The clothes are lost.’

b. ɬv²⁴ kε²¹ ø phaŋiŋ⁴² theŋ²¹

clothes KE lose PVF

‘The clothes got lost.’

⁴⁰ Although the unaccusative construction is coded as if it were externally caused, there is no transitive counterpart whatsoever for them.

(69) a. siu^{24} $th\emptyset^{42}$ $luai^{21}$
wall fall PVF

b. $tsiu^{24}$ $k\varepsilon^{21}$ \emptyset $th\emptyset^{42}$ $luai^{21}$
wall KE fall PVF

‘The wall got fallen.’

We see that (68) and (69) are typical unaccusative clauses in Puxian yet those with $k\varepsilon^{21}$ are far more common than those without $k\varepsilon^{21}$. In (68a) and (69a), the sentences have the SV order and the predicates *phaŋ-iŋ*⁴² ‘lose’ and *th \emptyset* ⁴² ‘fall’ denote some resultant or stative aspect of the subject. Differently, (68b) and (69b) involve the morpheme $k\varepsilon^{21}$, which suggest a sense of external causation, as if the changed state of the subjects, e.g. *ɬɔ*²⁴ ‘clothes’ or *tsiu*²⁴ ‘wall’, are brought about by some inexplicable causes. One would have expected that the unaccusative construction in Puxian should also have the expletive *i* in the ‘agent’ position, immediately following $k\varepsilon^{21}$, as in the case of Jieyang. However, in rapid speech of Puxian, this expletive *i* is always fused with $k\varepsilon^{21}$ and is, therefore, phonologically null.

In addition, the $k\varepsilon^{21}$ -marked intransitive constructions involve unergative verbs, as shown in (70), where the subject NPs can be human or a body part. Such constructions are nonetheless not available in Jieyang, according to Matthew et al.

(70) a. ko^{11} $k\varepsilon^{21}$ \emptyset $ki\tilde{a}^{21}$ $th\emptyset^{453}$ nui^{21} $then^4$
feet KE walk very tired PVF

‘John walked himself tired’

b. I⁵³³ kɛ²¹ ø hau⁴² huŋ²⁴ theŋ²¹

3sg KE cry faint PVF

‘He cried until he fainted.’

Lit. ‘He cried himself fainted.’

Noticeably, the unergative constructions cannot appear without the morpheme *kɛ²¹*. Instead of signifying an abstract causation, the constructions have some reflexive effect, as if the action were instigated vicariously by a second ego of the subject. Such a reflexive effect is well illustrated by the English translations, where the reflexive pronoun *himself* is treated like the DO of the predicate (see also *syntactic anaphors* by König & Gast 2002 or *fake reflexives* by Simpson 1993);

The above intransitive constructions also suggest that the unaccusative and unergative verbs, e.g. *thø⁴²* ‘fall’ and *kiã²¹* ‘walk’ can be used in the same syntactic structure without resorting to differentiated subject markings, i.e. *split intransitivity* (Dixon 1994, Creissels 2008, etc.). In traditional Chinese and some non-standard Mandarin dialects (e.g. those in Shangxi and Liaoning provinces), the functional morpheme *ba*, known as an accusative/object marker, is used to mark ‘the intransitive subject of an unaccusative verb’ or ‘the subject of an unergative verb, provided this has a reflexive effect, thereby causing a change of state in the undergoer-subject’ (Chappell 2007: 6). Thus for example,

(71) a. bá gē zhū pǎo le

BA_{ABS} CL pig run CRS

‘A pig run away.’

(Mandarin; Chappell 2007)

b. kēxī bǎ yī duǒ hǎitánghuā lǐnlùò le.
unfortunately BA_{ABS} one CL flower fall ASP
 ‘unfortunately the flower was fallen.’

(Traditional Chinese, Baipu 1271- 1368)

c. bá měixiāng mǐ le.
Ba_{ABS} meixiang confuse ASP
 ‘Meixiang get lost.’

(Traditional Chinese, Liu 960-1279)

We see that in the above sentences, the morpheme *ba* precedes the subjects of the unergative verb *pǎo* ‘run’(71a), the unaccusative verbs *lǐnlùò* ‘fall’ (71b) and the psych-verb *mǐ* ‘getting confused/lost’(71c). Chappell (ibid) points out that *ba*, in the transitive constructions, serves to foreground a referential NP, i.e. the direct object in the preverbal position, especially one which has the semantic role of affected patient. Yet in the intransitive constructions, *ba* turns into an absolutive marker, as it marks both the subject of an intransitive verb and the object of a transitive verb in the active counterparts. In my opinion, the same causation-analysis can be applied to the above *ba* constructions as well, for both *ba* and *kε*²¹ are known to have causative connotations. Thus, in Mandarin, as in (71), there may be a causer/agent argument preceding *ba* but it is unknown or not worth mentioning to the speaker, thus zero-coded. In the process of grammaticalization, such constructions become so established that they later develop into non-canonical subject constructions (i.e. a subtype of impersonal constructions).

Interestingly, just like the intransitive *ba* constructions in Mandarin that have

non-canonical subjects, Puxian also has dative subject constructions. These constructions have obliquely-marked pronominal subjects and the predicates are invariably unergative, as illustrated in (72) below:

(72) a. kua^{21} $huayi^{21}$ $thuakia-a^{21}$

KE:1sg rejoice very much PRT

‘I am very happy.’

b. Kie^{453} $thiau^{24}$ $tsui^{21}$ ho^4

KE :2sg dance very good

‘You dance well.’

c. $k\epsilon^{21}$ $ki\tilde{a}^{11}$ $tsui^{42}$ kin^4

Ke:3sg walk very fast

‘You walk fast.’

(Puxian)

There are some constraints to these constructions. For example, the subjects are restricted to singular personal forms and always in the contracted form with the morpheme $k\epsilon^{21}$, as in kua^{21} , kie^{453} and $k\epsilon^{21}$. The predicates, such as $huayi^{21}$ ‘rejoice/be happy’, $thiau^{24}$ ‘dance’ and $ki\tilde{a}^{11}$ ‘walk’ are all unergative verbs, profiling a volitional or experiencing human agent. The constructional semantics can be understood as ‘the agent experiences a state or carries out an action, which is to his own benefit and/or is commended/acknowledged (by the speaker)’. As has been discussed in the previous chapter, the morpheme $k\epsilon^{21}$ should be viewed as a dative marker, which acquires the

benefactive function over the process of grammaticalization⁴¹ (Iwasaki and Yap 2000, Shibatani 2008: 335). The following two examples will add some support to this dative-benefactive analysis.

(73) a. kua²¹ kie⁵³³ thi⁴² lau⁴⁵³

Isg KE :2sg cut hair

‘I cut (your) hair for you.’

b. kua²¹ kie⁵³³ tsiu⁴²

Isg KE :2sg sing

‘I let you sing.’

We notice that the benefactive (73a) and the causative (73b) have the same structure as ‘NP + $k\varepsilon^{21}$ _{BENE/CAUS} + NP+ VP’. However, the $k\varepsilon^{21}$ in the (73a) can only be interpreted as a dative/benefactive marker, with the English translational equivalent of *for*, whereas $k\varepsilon^{21}$ in (73b) is a causative verb, similar to *let* in English. As mentioned previously (Chappell 2006), *give* verbs follow two separate grammaticalization paths in Min dialects: one becomes the dative/benefactive marker and the other develops into causative and passive markers. Thus $k\varepsilon^{21}$ in the dative-subject constructions with the constructional meaning of ‘to the benefit/advantage of subject’ can only be seen as a prepositional dative marker.

Therefore, it appears that Puxian has partial *split intransitivity*, with regard to person forms high on the Nominal Hierarchy (Dixon 1994: 84). A detailed explanation

⁴¹ Shibatani(2008:335) mentions that ‘in languages that make a distinction between the accusative and the dative case, the beneficiary nominal of a benefactive applicative generally takes the dative case’, as in the case of Japanese and Korean. In Puxian, case relations are distinguished by ‘word order’ (see the next section) and there is distinction between P in the unmarked postverbal position and the dative $k\varepsilon^{21}$ marked arguments. Therefore, it may suggest some parallelism to apply the dative –benefactive analysis in Puxian.

will be provided in the next section, from the perspective of alignment typology.

4.4. Word order, alignment and the interplay of person

In the previous sections, I have discussed different types of $k\varepsilon^{21}$ constructions in Puxian. In this section, I will explore the thematic relations particular to these constructions. I will argue that the primary ‘case-marking’ strategy in Puxian is *word order*, by means of which ‘case relations’ are reflected through different arrangement of syntactic constituents in comparison to the unmarked AVP order. The discussion will begin with a brief review of case-marking strategies, proposed by Siewierska & Bakker (2008: 290-303) and then focus on *word order* in Sinitic languages, esp. Mandarin and Puxian. The discussion will then concentrate on the thematic relations in different $k\varepsilon^{21}$ -marked constructions, with a focus on Person effects and other constraints. Finally, a comparison of argument properties from the perspective of alignment typology is provided.

4.4.1. Case relations and word order

In grammar, case refers to a set of argument coding possibilities, characterizing especially argument-predicate relations. In the generative literature, case, in the abstract sense, is considered universal and ‘each argument bears one and only one theta-role and each theta-role is assigned to one and only one argument’ (Chomsky 1981: 36). Syntactic constituents with identical thematic relationships should be represented in the same ‘deep structural relationships’ (Baker 1988: 46). Morphological case, on the other hand, is language-specific, which is the surface realization of the syntactic notion of

‘theta roles’ (e.g. the number, type and placement of obligatory arguments). Both the Abstract Case and morphological case are necessary concepts in the literature (Markman 2009).

In the functional-typological framework, case is only understood as surface expressions marking thematic and/or grammatical relations in the clause. Case-marking is overtly realized and is a phenomenon of ‘what you see is what you get’ (Malchukov 2008). Absence of morphological changes on the arguments is viewed as absence of case (Aissen 1999, 2003). Take English for example, there are no morphological changes for ordinary nouns, such as *John* or *the man*, to appear in the subject or object position, e.g. *John hit the man* or *The man hit John*. Thus no case marking is observed. Yet when it comes to personal pronouns, case marking has to be overtly realized (i.e. by means of suppletion, rather than affixation) to disambiguate the nominative case (such as *I*, *he*, *she*, *we*) from the accusative/dative case (such as *me*, *him*, *her*, *us*).

However, morphological case is not a universal property across languages and many of them are able to differentiate argument roles in the clause equally well without it. Thus the term ‘case’ will be adopted here, in a broad sense of referring to how languages express or encode different argument roles in general (e.g. agent, goal, recipient, theme, etc) and is not particularly limited to morphological case. Concerning the primary case marking strategies, as proposed by Siewierska & Bakker (ibid), there are three of them: *morphological case*⁴², *agreement marking*⁴³ and *word order*, the

⁴² According to Siewierska & Bakker (ibid), morphological case could be an affix or adposition, which marks primarily the argument-predicate relations (in contrast to ‘less predicable dependents, i.e. adjuncts’). It also fulfils two important functions: the ‘discriminatory’ function and the ‘indexing’ function. In terms of the discriminatory function, it differentiates the primary arguments in the clause, especially when they are likely to be confused. This is illustrated by the case-only languages, such as Japanese, which has the nominative case marker *-ga* and the accusative marker *-o* attached to the primary arguments. With regards to the indexing function, it is concerned with the inherent properties of the argument being marked. For example, the semantic features of Person, Animacy or Definiteness, etc., projected on the prominence scales have an effect on the so-called differential subject marking (DSM) or differential object marking (DOM). This can be illustrated as in Qiang below, where the agent marker *-wu* is applied when the subject appears to have ‘object-like’ properties. This is probably due to the fact that the prototypical agent is human and volitional, coupled with the knowledge to make what is non-prototypical agent NP agent-like.

MoBu-wu qa datuəz(-ʂa)
Wind-AGT 1sg knocked down

latter of which is believed to be a widely attested strategy in Sinitic languages and is the main concern in this section.

The notion of *word order* is ‘taken to be the sequencing of information in ways which best reflect the communicative intentions of the speaker and simultaneously enable these intentions to be successfully and speedily processed by the addressee’ (Siewierska & Bakker *ibid*). The placement of arguments relative to the predicate and to each other, e.g. AVP or PVA, is seen as an economical way of differentiate argument roles. For languages that lack morphological case and agreement marking, word order may be the predominant case-marking strategy. This appears to be true when it comes to the majority of Sinitic languages. Take Mandarin for example, linguistic evidence has suggested that the language does maintain a strict word order, i.e. the unmarked AVP, and any deviation from that order, e.g. APV or PAV is likely to involve complex morphosyntactic rearrangement (e.g. using serial verbs, such as *gei* in the passives). Sun & Givón (1985) point out about 94% of the written language and 92% of the spoken language in Mandarin have the VP (or VO) order, similar to those in English or Biblical Hebrew. Preverbal P is often marked with the object marker *ba*, a grammaticalized ‘*handle/take*’ verb, as in (74), where *ba* is used to single out P *tā* ‘he’ from A *wǒ* ‘I’ in the clause⁴⁴, as they are adjacent to each other in the sentence-initial position.

‘The wind knocked me down.’ (Qiang, LaPolla 2003)

⁴³ Agreement is ‘an indexing strategy denoting the properties of one of the entities in the agreement relations’, namely, the relations between the controller, whose properties are indexed and the target, on which the indexing (i.e. agreement markers) is placed (Siewierska & Bakker *ibid*; see also Corbett 1983, Croft 1988: 173; 2003:199). Thus, for example, in the Desano, the 3pl agreement marker *-ba* is placed on the predicate verb *ba?ba* ‘eat’ (i.e. the target), which is only indexed to the subject NP *era* (i.e. the controller) rather than the object *bere* ‘fruit’, as shown below.

Era bere di?ta ba?ba-ba

3pl fruit only eat:3pl

‘They eat mere fruit.’

(Desano; Miller 1999)

⁴⁴ There are, however, cases where *ba* is optional, especially when P is non-human or inanimate and A is human. In other words, the inherent properties of A and P also play a role in argument differentiation, simply because of the default notion of human A and non-human P in the mind of Mandarin speakers.

(74) Tā bá wǒ tuī dǎo le.

3sg BA 1sg push fall PFV

‘He pushed me down.’

In addition, it is commonly believed that languages that have flexible parts-of-speech system are likely to have strict word order. According to Hengeveld, Rijkhoff & Siewierska (2004), flexible parts-of-speech system exhibits ‘severe restrictions on their word order possibilities’, because ‘disambiguation through lexical specification’ is not available. For example, Warao is a language with a flexible parts-of-speech system, the need to distinguish a lexical item with regard to different syntactic positions is fulfilled by morphological marking on the item. In the following sentence, the functional ambiguity of *yakera* ‘beauty’ in (75) is solved by the postposition *tane* ‘manner’ in (75b), as a result of which the word can be interpreted as the head of a noun phrase with the manner reading, as in (75b) but a modifier of the referential phrase, as in (75a).

(75) a. Oko kuana yaota-te arone yakera nahoro-te...

1pl hardness work:NPAST although beauty eat:NPAST

‘Although we work hard and eat well,...’

b. Ma-ha eku ine yakera tane uba-te.

1sg:POSS inside I beauty MANNER sleep:NPAST

‘I sleep very well in my hammock.’

Similar flexibility of parts-of-speech also exists in Mandarin, which can be illustrated with the lexical item *hong* ‘red’, as in (76).

(76) a. tā **hóng** biàn Zhóng-guó.

3sg redden all-over China

‘He is popular in China.’

Lit. ‘He reddens China.’

b. Tā yǒu gē **hóng** màozi.

3sg have CL red hat

‘He has a red hat.’

We see that *hong* ‘red’ in (76a) is used as a verb, meaning ‘redden’ or ‘become popular’ in the metaphorical sense(for the red color signals auspiciousness in Chinese), while the other *hong* in (76b) remain its basic category of an adjective, meaning ‘red’. The transition from the adjective *hóng* to the verbal *hóng* does not require any formal marking on the word (cf. *wide* to *widen* or *red* to *redden* in English). What is significant is that the distinction between A and P in the above is not affected by the uninflected *hóng* with different parts-of-speech. As we can see, (76a) maintains the unmarked AVP ordering, which immediately enable *hong* to be interpreted as a bivalent transitive verb; on the other hand, (76b) has the AVP ordering as well, yet the V is *you* ‘have’ rather than *hóng* ‘red’. In fact, *hóng* in the default modifier position, i.e. being adjacent to the nominal head *maozi* ‘hat’, is generally understood as an adjective. Thus the NP *gē hóng màozi* ‘one red hat’ as a whole assumes the P role in the clause⁴⁵.

⁴⁵ Despite evidence suggesting that Mandarin has a strict word order, there is actually no such consensus. A widely held view is that Mandarin grammar is pragmatically-oriented and ‘no basic word order can be established’(Li and

Interestingly, in the generative literature, it has been argued similarly that Mandarin has strict, rather than arbitrary, case relations (Li 1990, Markman 2009). For example, in the following sentences with complex clausal structures, the temporal adverbial *zuotian* ‘yesterday’ is regarded as a ‘case assigner’⁴⁶, which is solely adjacent to the agent NP of the related propositional content, as shown in (77 a & b).

(77) a. Wǒ yào tā **zuǒtiān** lái.

Isg want him yesterday come

‘I wanted him to come yesterday.’

Lit. ‘I want that he yesterday come.’

b. Wǒ **zuǒtiān** yào tā lái.

Isg yesterday want him come

‘Yesterday, I ask him to come.’

Lit. ‘I **yesterday** ask him com.’

We notice that the case assigner *zuǒtiān* ‘yesterday’ is adjacent to *tā* ‘he’, the agent/subject of the infinite clause as in (77a), when the proposition content is ‘I want him to come only yesterday’; however, if the proposition is ‘yesterday, I wanted him to come’, the case assigner *yesterday* must be adjacent to the agent and subject *wǒ* ‘I’ of the clause (Li 1990). The two examples show that strict grammatical/thematic relations may exist in Mandarin, even without the indication of morphological case.

Thompson 1974, 1975, 1981: 26). In addition, Mandarin is also viewed as having no distinction between the major syntactic categories, that is, the notion of subject is not grammaticalized in Mandarin (also complicated with extensive ellipsis and movement in the language) (cf. LaPolla 1993, Gil 2005b). In fact, linguists, favoring a pragmatic perceptive on Mandarin, would argue that information structures rather than syntactic structures are used in Chinese to convey information and that the only notions grammaticalized in Chinese are topic and focus (LaPolla 1990, 1999).

⁴⁶ Case assigner is a term in the generative literature. It refers to different grammatical markers that signify a case position adjacent to them. For example, if the object of a preposition is an accusative position and hence that preposition is Case Assigner. Also a verb is considered as assigning case to the object.

To sum up, I quote the findings from Siewierska and Bakker (2008), which states that ‘case marking of arguments is overall considerably less common cross-linguistically than agreement marking. Moreover, case marking is more often found in languages that also display agreement marking than in languages in which it is the only means of morphological argument encoding’ and ‘the most common cross-linguistically is agreement alone (44%) followed by case and agreement (37%), then case alone (10%) and finally neither (8%)’. In addition, they also point out that SVO order (e.g. in Mandarin or Puxian), that is, ‘the placement of A and P on opposite side of the verb is seen to be just as good as means of discriminating the transitive arguments as the overt case marking of either or both of them’, as we can see from the statistics, only 21% of V-medial languages have case, in comparison to 71% of the verb-final and 42% of the V-initial, as shown below.

Table 12 Distribution of case over word order types

	V-final	V-medial	V-initial
Dryer N=502	72%(181/253)	14%(26/190)	47%(28/59)
S & B N=417	71%(143/202)	21%(32/150)	42%(27/65)

4.4.2. Case relations in Puxian $k\varepsilon^{21}$ constructions

Like Mandarin, Puxian lacks explicit morphological case marking (on dependents) and agreement marking (on heads). Word Order, therefore, is believed to be the main

case-marking strategy in the dialect. Rearrangement of the unmarked AVP order into APV (e.g. the causative) or PAV (e.g. the passive) almost invariably triggers the issue of argument role disambiguation. As has been discussed in the previous sections, the multi-functional morpheme $k\varepsilon^{21}$ is applied to distinguish key argument roles from each other. It is necessary to point out that, $k\varepsilon^{21}$, originally a ‘give’ verb, is not a prototypical case marker in that it still retains verbal meanings in some cases, e.g. in the analytic causatives⁴⁷. Yet $k\varepsilon^{21}$ does act like a case-equivalent morpheme and assume several case-marking functions, e.g. disambiguating or singling out the particular argument it marks in the ditransitive or double-marked passive constructions. Also, the relative positions of a NP to $k\varepsilon^{21}$ are a way to decide whether it is a theme or an agent in the contexts. To begin with, let’s review some constructions with marked word orders, as shown in (78 a-c).

(78) a. John pha⁴² naŋ²¹ (AVP)

John hit man

‘John hit someone.’

b. John lia²⁴ naŋ²¹ a¹¹ pha⁴² (APV)

John catch man PRT hit

‘John hit someone.’

Lit. ‘John caught someone for hitting.’

⁴⁷ For example, Puxian $k\varepsilon^{21}$ or Mandarin *ba* in the Sinitic context (the so-called *give* or *take* verbs), when marking the semantic role of the undergoer (e.g. theme) is generally considered equivalent to a case marker. Besides, in our previous discussion, Puxian $k\varepsilon^{21}$ is often used to single out an argument, e.g. theme, agent or recipient in the disposal, causative, passive, etc. constructions (i.e. the ‘differentiating function’). However, the fact that $k\varepsilon^{21}$ can be a serial verb, not affixed to most NPs and is optional in some cases may suggest that it is at best equivalent to case marker (e.g. adpositions). Such an analysis may apply to *gei*, *ba* in Mandarin as well.

c. $naŋ^{24}$ $k\varepsilon^{21}$ John pha^{42} (PAV)

man *PASS* *John* *hit*

‘Someone was hit by John.’

We see that both (78b) and (78c) are verb-final structures with the APV or PAV order, in comparison to the unmarked AVP order in (78a). In (78b), the P $naŋ^{24}$ ‘man’ is regarded as being foregrounded and is correspondingly marked by the grammaticalized verb lia^{24} ‘catch’ as a causee (similar to *ba* in Mandarin)⁴⁸; in the passive (78c), the P $naŋ^{24}$ ‘man’ is further promoted to the subject position and the morpheme $k\varepsilon^{21}$ is inserted to mark the A role of *John*. In fact, $k\varepsilon^{21}$ fulfills the case-marking function of formally discriminating the A from the P in the passive clause. From a pragmatic point of view, the reorganization of syntactic constituents is a way to prioritize one of them and to reflect the speaker’s communicative intention⁴⁹.

In addition to syntactic factors involving reorganization of argument roles, the inherent properties of the arguments that $k\varepsilon^{21}$ marks is also relevant to our discussion. These properties involve Person, Animacy, Referentiality, etc, known as the ‘Scales of Prominence’, which are illustrated below in Figure 15, where a property to the left is always more prominent or discourse salient than the one to its right (Givón, 1975, 1988; Silverstein, 1976; Moravcsik, 1978; Comrie, 1989; Primus, 1998; Filimonova, 2005; Kiparsky, 2008, etc).

⁴⁸ Such constructions are also termed ‘scrambled object constructions’ (Yang et al. 2007), where the preverbal objects are marked by the object markers such as *ba*, *jiong*, *ka*, etc. in Sinitic languages. The uniqueness of the Puxian construction is that, in addition to the object marker *lia*, there is a particle *a*, (functionally similar to *to* in English), which links the P and V.

⁴⁹ In Chinese grammar, the passive markers, e.g. *bei*, *gei* in Mandarin, are also regarded as marking an agent role or an agent marker as well.

Figure 15 Scales of prominence

- a. Animacy: human > (non-human) animate > inanimate
- b. Thematicity: controller > controlled (including causer > causee)
- c. Referentiality: proper noun > definite NP > indefinite-specific NP > indefinite-non-specific NP
- d. Anaphoricity: personal pronoun > noun
- e. Person: first/second person > third person

As far as Person is concerned, in what follows, I will refer to the notion in terms of the person category as a whole (i.e. the 1st, 2nd and 3rd person forms), as opposed to the other nominals on the NP hierarchy, as in Figure 16. The term also refers to the components of the category itself, where the first and the second persons differ from the third person in terms of syntagmatic behaviors⁵⁰.

Figure 16 The Nominal Hierarchy (Silverstein 1976)

Pronouns > proper nouns > common nouns
1st > 2nd > 3rd person human > animate > inanimate

In relation to the Nominal Hierarchy, pronouns overall are more prominent than nominals on the hierarchy and the split between the two is believed to affect syntactic varieties, as observed in many languages (Silverstein 1976, Dixon 1994: 85)⁵¹.

⁵⁰ First and second person involve speech act participants and are considered more central to the grammatical category of person than the third. For instance, Alcorn (2008) reveals that there is a statistically significant correlation between pronoun placement and Person in Old English, that is, the placement of third person is significantly different from that of non-third person (e.g. frequency to the left of the preposition).

⁵¹ The nominal hierarchy, originally proposed by Silverstein (1976) and others, is primary concerned with the ergative splits in ergative-absolutive languages. Yet the hierarchy also indicates roughly 'the overall agency potential of any given NP' on the scale (Dixon 1979: 86–87).

The third factor, pertinent to the understanding of $k\varepsilon^{2l}$ constructions, can be interpreted from the perspective of ‘event structure’, as characterized by Croft (1990). Within the framework, an event structure consists of three segments in a causal chain, differing in the transmission of force and the involvement of participants. Thus an internal structure of events may consist of a three-part sequence: ‘cause, change, state’, each exhibiting prototypically a correspondence with clausal features, e.g. in terms of verb morphology in head-marking languages. Since each segment focuses on one stage of the sequence, they are termed *stative*, *inchoative* and *causative* respectively:

The *stative* implies an inherent property, without any implication as to the kind of process involved. The *inchoative* implies a certain kind of process, without any implication of an external (human) cause. The *causative* implies direct human causation, with the attendant properties of intention and responsibility (Croft 1994a: 37).

Take English for example; the verb *break* in the following sentences can express three specific segments of the causal chains, which constitute the typical view of an event structure, as shown in (79)

- (79) a. The man broke the vase. (Causative: *profiling the whole segment*)
- b. The vase broke. (Inchoative: *profiling only the last two segments*)
- c. The vase is broken. (Stative: *profiling only the last segment, these are often expressed as adjectives*)

The constructional variations corresponding to different segments of the event are also characteristic of Puxian $k\varepsilon^{21}$ constructions. In what follows, the discussion of case relations in Puxian will be structured with respect to (i) the monovalent intransitive, (ii) the bivalent causative and passive and (iii) the trivalent ditransitive constructions, with a special focus on the effects of Person.

4.4.2.1. Case relations in the $k\varepsilon^{21}$ -marked intransitive constructions

In Puxian, the $k\varepsilon^{21}$ -marked intransitive constructions belong to segments of the *inchoative-stative* in the event structure (see also Sasse 1991: 36), where S enters into and/or is in a state profiled by V^{52} . Some of the intransitive constructions mentioned earlier are repeated below, as in (80).

(80) a. Kie⁵³³ huã -i²¹ tua-kiaua⁴

DAT:2sg rejoice much

‘You are happy.’

b. John $k\varepsilon^{21}$ kiã⁵³³ tsui⁴² kiŋ¹¹

John KE walk very fast

‘John walks fast.’

c. tsiu²⁴ $k\varepsilon^{21}$ thø⁴² lui²¹

wall KE fall PRT

‘The wall has fallen.’

⁵² On the other hand, the intransitive constructions without *ke* may just signal *stative* rather than *inchoative*.

We see that, although all the constructions are inchoative-stative, they show some differences in marking the subjects. For instance, (80a) has an oblique-marked subject *kie*⁵³³ ‘to you’, which shows some agent properties (e.g. volition) with the unergative *huāi*²¹ ‘rejoice/be happy’; in (80b), the S *John* is not marked, yet it has a volitional property as well (but less than the S in (80a)). The construction is interpreted as if *John* were made to perform an action of ‘walking’ by himself. In this sense, the S *John* approximates the argument role of theme/undergoer, as the resultant complement *tsui*⁴² *kiŋ*¹¹ ‘very fast’, together with the predicate, denotes some property of it (resembling the unaccusatives); In (80c), the S *tsiu*²⁴ ‘wall’ is a theme/undergoer proper and the predicate *tho*⁴² ‘fall’ is unaccusative. The clause denotes a resultant state, caused by some inexplicit ‘external causation’. Based on the above sentences, we can sense a decreased volition or increased affectedness on the part of S, as in the order of (80a) > (80b) > (80c) or vice versa. Such an incremental change is also related to the S positions relative to *kε*²¹. In other words, whether S precedes *kε*²¹ or follows it makes a difference in determining the case relations. In fact, the above sentences are instances of ‘differential subject marking’ (DSM), subject to the degree of agency or the properties of predicates, viz. split intransitivity. In addition, the fact that the dative subject constructions are only restricted to personal pronouns shows a split between nouns and pronouns on the NP Hierarchy.

4.4.2.2. The causative/passive constructions

In the *kε*²¹-marked intransitive constructions, what is at issue is just the determination of the sole argument role of S. The causative/passive, however, involves at least two NP arguments and there is a need to distinguish the A, P or T role in the clause. On the other

hand, concerning event structure, the causative may profile all the segments, whereas the passive may just focus on the last one, i.e. the *stative*, but in a less typical sense of the term. To illustrate, we have the following causative (82) and passive (83) sentences, both of which are based on the original AVP (or SVO) clause (81), as shown below.

(81) ty²¹ tsy⁴² ma⁴

2sg cook food

‘You cook food.’

(82) a. kɛ²¹ i⁵³³ tsiu⁴² ŋi⁴

KE_{CAUS} 3sg sing song

‘(You) let him sing a song.’

(Analytic causative)

b. (ty²¹ tsion²⁴) ma⁵³³ kɛ²¹ tsy²¹ lo⁴

(2sg ACC) food KE_{CAUS} cook PRT

‘You make the food cooked.’

c. ty² tsion ma⁵³³ tsy²¹-kɛ^{21 1} t̩ue¹¹

2sg ACC food cook:CAUS ready

‘You should cook the food completely.’

(Complex causative)

(83) a. ma⁵³³ kɛ²¹ ty²¹ tsy⁴² liau²⁴ lo⁴

food PASS 2sg cook PFV PRT

‘The food is cooked by you.’

(Passive)

b. ma^{533} $k\varepsilon^{21}$ ty^{21} $k\varepsilon^{21}$ tsy^{42} $liau^{24}$ lo^4
food *PASS* *2sg* *PASS* *cook* *PFV* *PRT*
 ‘The food is cooked by you.’ (Double-marked passive)

We see that all the above constructions are based on the bivalent predicate tsy^{21} ‘cook’. The need to focus on a particular segment of the event structure as well as to foreground certain participants entails the reorganization of different syntactic constituents in the clauses. Thus, in the typical causative operation of (82 a), $k\varepsilon^{21}$ marks a causee, which is also the subject of the following verbal clause. In (82b), the causative is also a disposal construction, where the NP ma^{533} , formerly P of the transitive is brought forward to a more prominent preverbal position, with the verb tsy^{21} ‘cook’ going to the clause-final position. The reordering of the causer, theme and the predicate constitutes a marked APV order. If ma^{533} is replaced by a personal pronoun, as high on the prominence scale as the causer ty^{21} ‘you’, the object marker $tsion^{24}$ must be obligatorily used to discriminate the two pronominal arguments. On the other hand, the null expletive *i* in both the analytic and complex causative also suggests an implicit argument role (i.e. a causee role) in the position. In fact, the causatives in Puxian are reminiscent of Mandarin *ba* constructions, where both $tsion^{24}$ and *ba* are viewed as case-equivalent morphemes, marking a preverbal object. (Li & Thompson 1981: 26, 463; Chappell 2007).

In the passive operation, the P ma^{533} is promoted to the most salient sentence-initial subject position and the S ty^{21} ‘you’ is correspondingly demoted. Pragmatically, the transition from the causative to the passive is via the decreased ‘volition or willingness on the part of the subject’, because the morpheme $k\varepsilon^{21}$ still retains a weak causative meaning and functions in the resembling structures, i.e. $NP_1 + k\varepsilon^{21}_{CAUS/PASS} + NP_2 + V$, as

in (83a) and (83a). The differences is about thematic relations, as, in the passive (83a), $k\varepsilon^{21}$ marks the agent, ty^{21} ‘you’, in distinction from the preceding P ma^{533} , whereas in the causative, $k\varepsilon^{21}$ marks the causee in the form of the expletive *i* or other nominals, depending on the type of causatives.

There are some Person constraints on the above causative constructions, as they prefer subjects of personal pronouns and non-pronominal subject NPs are rarely used in the construction, as shown in (84).

(84) a. $k\varepsilon^{21}$ i^{533} $tsiu^{42}$

KE 3sg sing

‘let him sing.’

b. *John / ty^{21} ma^{24} $k\varepsilon^{21}$ tsy^{42} lo^4

John 2sg food CAUS cook PRT

‘You should cook the rice.’

In daily Puxian speech, analytic causatives, like (84a), generally assume a null pronominal subject, which is understood to be one of the speech act participants. Also in the disposal construction of (84b), pronominal subjects are far more preferable to nominal ones. To sum up, regarding causatives (84a), there is a split between 1st & 2nd person vs. 3rd person; and as the causative (84b), such a split happens between pronominals vs. nominals.

4.6.2.3. The ditransitive constructions

In the previous discussion, we observe that the typical ditransitive construction in Puxian has the structure of ‘A + T + V_{DITRANS.} + R’, as repeated below in (85)

- (85) a. kua²¹ ɬe¹¹ haŋ²¹ muino²¹ iau⁴² kɛ²¹ ty²¹
Isg one CL stuff take DAT 2sg
 ‘I will give you something.’
 Lit. ‘I something give to you.’

I also point out that there is tendency in Puxian to have the R placed in the sentence final position, irrespective of the inherent properties of the T. The disambiguation of R and T can be realized by placing the T and the R on both side of the V and by marking the R with the adposition.

In addition, there is a unique type of ditransitive construction in Puxian, where the R is implicitly coded via some special adverbials, such as *tsai*⁴ ‘here’, *kuai*⁴ ‘there’, which are semantically equivalent to ‘to me’, ‘to him’, etc. Thus disambiguation between the T and R becomes easier, as shown in (86b) below, where the T can be preverbal or postverbal without being confused with the R.

- (86) a. ∅ huŋ⁵³³ iau⁴² tsai⁴ / kuai⁴
cigarette take here(to me) / there(to him)
 ‘(You) give the cigarettes to me/him.’

b. John iau⁴² muino²¹ tsai⁴ / kuai⁴
John take stuff here(to me) / there(to him)
 ‘John gave something to me.’

All the ditransitive constructions, however, are subject to Person constraints. Firstly, we observe that the R in the ditransitive must be a personal pronoun or human NP. And inanimate and/or non-human R are not allowed, as in (87), where the non-human or inanimate R, e.g. *tse η²⁴ ‘field’ and *ku²⁴ ‘bull’ are not grammatical in the ditransitive clause.

(87) John tsui²¹ iau⁴² kε²¹ kua²¹ / *tse η²⁴ / *ku²⁴
John water take KE 1sg / field / bull
 ‘John gave water to me/ *the field/*the bull’

If R has to be inanimate/non-human in some cases, the ditransitive construction must be transformed into a seemingly benefactive-applicative construction, where R is interpreted as a beneficiary nominal, marked by the dative marker kε²¹. For example,

(88) ty²¹ kε²¹ hua²¹ o⁴² tsui²¹
2sg DAT flower rain water
 ‘You water the flower.’
 Lit. ‘You rain water to the flower.’

In (88), the R hua²¹ ‘flower’ not only receives a beneficiary reading but is moved to a more salient preverbal position, which is different from the usual sentence-final position

of ditransitives. Such a syntactic operation has also been observed by Shibatani (2008: 336), who points out a similar dative to benefactive applicative transformation in Japanese. This is shown in (89), where the T *kodomo* ‘child’ in the ditransitive is followed by the dative marker *-ni* yet it is a beneficiary nominal and marked by the benefactive applicative *-ni* in the applicative construction⁵³.

(89) a. Hahaoya-ga kodomo-ni hon-o yat-ta
mother:NOM child:DAT book:ACC give:PAST
 ‘Mother gave a book to the child.’

b. Hahaoya-ga kodomo-ni hon-o kat-te yat-ta
mother:NOM child:DAT book:ACC buy:CON give:PAST
 ‘Mother bought the child a book.’

(Japanese; Shibatani 2008)

While the R in the ditransitives is restricted to personal pronouns or human NPs, the T, conversely, is most likely to be non-human or inanimate. When a human T is needed in the ditransitive, it cannot go unmarked, as shown by the ungrammaticality of (90).

(90) *I⁴ kua²¹ tsa⁴² kε²¹ ty²¹
 3sg 1sg bring DAT 2sg
 ‘John brings me to you.’

⁵³ The Puxian construction like (88) therefore resembles the applicative construction in Japanese or Korean, where a patient-like entity is introduced in the argument structure (Shibatani 2008: 334 -335). In the (21) of the above, *hua* ‘flower’ looks like the applicative-marked argument.

Such ungrammaticality as in (90) is due to the ambiguity as a result of placing A and T together, especially when both of them are not marked for argument roles. It would be difficult then for the hearer to process the sentence, as to which pronominal argument, i.e. *i*⁴ ‘he’ or *kua*²¹ ‘I’ in the clause, should be viewed as the syntactic pivot. To solve the ambiguity, T should be marked with the object marker *tsioŋ*²⁴, as in (91).

(91) *i*⁴ *tsioŋ*²⁴ *kua*²¹ *tsa*⁴² *kε*²¹ *ty*²¹
 3sg *Jiong* 1sg bring DAT 2sg
 ‘(You) lead him to me / to you/ to him.’

However, the application *tsioŋ*²⁴ does not guarantee the grammaticality of ditransitive constructions. Some verbs, such as *iau*⁴² ‘give’, *poŋ*⁴² ‘throw’, etc. are never associated with a human T, while other verbs, such as *tsua*⁴² ‘lead’, *kai iau*⁴² ‘introduce’, etc., are used only with a human T. The exact distribution between the two types of verbs has yet to be found out in future research.

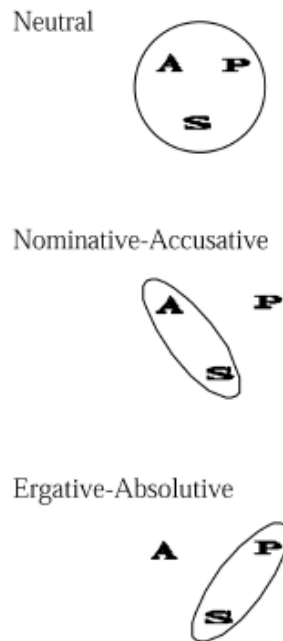
4.4.3. Alignment

Alignment refers to the comparison of argument marking properties across constructions, that is, how S of the intransitive verb can be compared with A or P of the transitive verb or whether S is coded the same as A or P (Siewierska 2005, Malchukov et al. 2007). The major alignment types are: *accusative alignment* (A = S ≠ P)⁵⁴, *ergative*

⁵⁴ Languages with *accusative alignment* are seen to display the same treatment of the A and S (be it case, agreement or position) while the P is distinct, as in Tawala (Western Oceanic; Papua New Guinea), where the alignment is identified through the location of person affixes on the verb, as the S and A are both prefixes and P are suffixes.

alignment ($A \neq S = P$)⁵⁵, *neutral alignment* ($A = S = P$) and *active alignment* ($S = A$ or $S = P$), as illustrated in Figure 17 below.

Figure 17 Morphological alignment types



Tawala(Ezard 1997: 289,116)

- a. I-bowi-ye-ya
3sg.A-deny-TRV-3sg.P
'He denied him.'
- b. Apo i-na-nae
FUT 3sg.S-POT-go
'He will go.'

⁵⁵ In *ergative alignment*, S and P receive the same encoding while A is treated in another way. This is illustrated in Konjo (Western Malayo-Polynesian; South Sulawesi), where S is identified through the agreement suffixes on the verb, like P in the transitive.

Konjo(Friberg 1996:141)

- a. Na-peppe'-i Amir asung-ku
3.A-hit-3.p Amir dog-1
'Amir hit my dog.'
- b. a'-lampa-i Amir
INTR-go-3.S Amir
'Amir goes.'

Active



What is of interest here is the *active* alignment, which is well attested in Puxian and Mandarin. In languages with active alignment, there are two patterns of morphological encodings of S, that is, S may pattern either with A or P, depending on a series of factors, such as the verbal properties, eventhood, performance/effect, instigation, control and significant affectedness (Mithun 1991, quoted in Siewierska 2005). This is shown in (92) for Hindi, where verbs in perfective aspect show an active marking pattern: the ergative marker *-ne* on the subject of transitive verbs only appears on S of the unergatives but not on the unaccusatives.

(92) a. Raam-ne kelaa khaayaa.

Ram-ERG banana Ate

‘Ram ate a banana.’

b. Kutte (ne) bhONke.

Dogs (ERG) barked.

‘The dogs barked.’

c. Siitaa (*ne) aayii.

*Sita (*ERG) arrived*

‘Sita arrived.’

However, subject to the available case-marking strategies of a given language, there

are different subtypes of active alignment. In languages, such as English, without overt case markers on nominals, active alignment may be realized only semantically, as in (93), where S can be identified as A or P, patterning those of the transitive.

- (93) a. The man kicks the ball.
b. The man laughs.
c. The ball was flattened.

In other languages that show features of fluid intransitivity, as in (94) and (95) of Mandarin, the preverbal or postverbal positions of the S are considered as aligning with either the A or the P.

- (94) a. Kērén lái le.
guest come PERF
‘The guest has arrived.’

- b. Lái kērén le.
come guest PERF
‘A guest/guests has/have arrived.’

- (95) a. Fūqīng sǐ le
father die PEFV
‘My father died.’

- b. Sǐ le fūqīng
die PEFV father
 ‘(Someone’s) father died.

Taking into account that the basic constituent order in Mandarin is AVP, the S of the above intransitive constructions exhibits two different patterns of alignment, that is, it may be in preverbal subject position, patterning with the A or in the postverbal object position, showing alignment with the P. However, such an alignment pattern is subject to the constraint of definiteness. The S in the preverbal subject position is definite or identifiable, whereas the S in postverbal object position is only indefinite or non-identifiable (see also Chen 2004). In a sense, different positions of the S in the intransitive clauses may be pragmatically driven as well, depending on the speaker’s intention to make specific the subject referents. For example, the S in the object position is also viewed as being de-topicalized or less prominent. This also appears to be the case of the French type of fluid intransitivity, as realized in (96) below.

- (96) a. Une femme viendra
INDEF.SGF woman.SG come:FUT :3sg
 ‘A woman will come.’

- b. Il viendra une femme
3sg.M come:FUT:3sg INDEF.SGF woman:3sg
 Lit. ‘It will come a woman’ or ‘There will be a woman coming’).

(French; Creissels 2008)

Creissels (2008: 159) points out that French exhibit features of partial fluid intransitivity⁵⁶(subject to pragmatic conditioning⁵⁷), as illustrated by (96), where S of the intransitive verb *viendra* ‘come’ can appear in the sentence initial subject position(96a) or in the postverbal position (96b), representing the subject argument of an intransitive verb.

Turning to Puxian, it too shows properties of active alignment. Semantically, the S of an intransitive clause can be agentive or patient-like, just as in English. Thus consider the following sentences in (97) below.

(97) a. ty^{21} $k\varepsilon^{21}$ $ki\tilde{a}^{24}$ $tshui^{21}$ kin^4
 2sg KE walk very fast
 ‘You walk very fast.’

b. $tsiu^{24}$ $k\varepsilon^{21}$ $th\emptyset^{42}$ $luai^4$
 wall KE fall PERF
 ‘The wall has fallen.’

We see that the subject ty^{21} ‘you’ in (97) is an agentive NP in contrast to $tsiu^{24}$ ‘wall’ in (97b), which is patient/theme-like. In comparison with the unmarked AVP order in Puxian, I would argue that this is a subtype of active alignment, as the S can be identified with the A or P. However, in terms of the dative-marked subject construction, as in (98), S of the unergative predicate is dative-marked, different from the S of (97b),

⁵⁶ In the *fluid intransitivity* system, S of the same intransitive verb may align either with A or with P, depending on ‘the degree to which the referent of the S NP controls the activity in the particular event referred to’; on the other hand, the *split intransitivity* refers to ‘situations in which verbs occurring in intransitive constructions divide into two classes characterized by a contrast in the way their single core argument S is aligned with the core terms of the transitive construction, A and P’ (Creissels 2008)

⁵⁷ According to Creissels (2008: 157), the French type of fluid intransitivity is subject to some pragmatic factors, such as de-topicalization or expressing a ‘presentational’ organization of predication.

where the predicate is an unaccusative predicate.

- (98) **kie**²⁴ kiã²⁴ tshui²¹ kin⁴
KE:2sg walk very fast
‘You walk very fast.’

Thus the sentence (98) displays split intransitivity with (97b), in terms of differential subject markings (DSM) with regards to verbal properties, i.e. unergative vs. unaccusative. On the other hand, it also shows fluid intransitivity with (97a), as DSM happens with the same intransitive predicate *kiã*²⁴ ‘walk’. However, just like the case of (96) in French, (98) in Puxian is not amenable to alignment analyses, for the S, which is dative-marked, does not pattern either with A or P in the unmarked AVO structure.

The alignment typology has also been extended to ditransitive constructions. In the ditransitive alignment, the encodings of T and R is compared to that of the monotransitive P⁵⁸ (Comrie 1982; Blansitt 1984; Dryer 1986; Croft 1990; Siewierska 2003; and Haspelmath 2005 a, b). There are the following basic types of ditransitive alignment: *indirect object alignment*⁵⁹, *secondary object* or *secundative alignment*⁶⁰, *neutral alignment*⁶¹ and *tripartite alignment*⁶², as shown in Figure 18. below.

⁵⁸ Codings of the ditransitive arguments could be formal case-marking on the NPs or person agreement. In terms of the latter, for instance, ‘which arguments do and which do not display agreement marking, the phonological form of the existing markers, their location and/or order relative to the verbal stem and/or each other and the conditions under which person agreement occurs’ (Siewierska 2003:342)

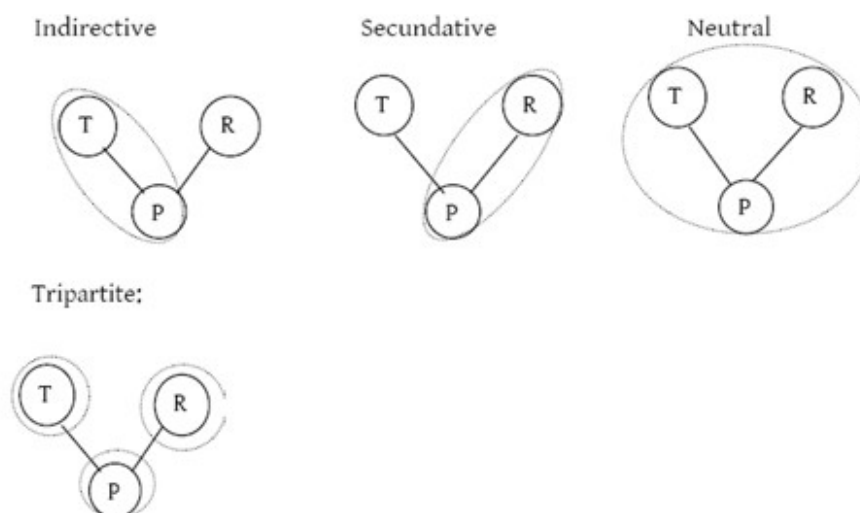
⁵⁹ In the *Indirect object alignment*, or *indirective alignment*, the R is treated differently from the P and the T (T = P ≠ R). Such constructions are also called "dative constructions", or "indirect object constructions".

⁶⁰ In *Secondary object alignment*, or *secundative alignment*, the T is treated differently from the P and the R (T ≠ P = R). Such constructions are also called *primary object constructions*.

⁶¹ In *neutral alignment*, the P, the R and the T are encoded in the same way (T = P = R). Such constructions are also often called *double object constructions*.

⁶² In *tripartite alignment*, T and R are coded differently from the P and from each other.

Figure 18 Ditransitive Alignment



In Puxian, there are at least three different alignment types concerning the ditransitive constructions. The most frequent type is *tripartite alignment*. This is typically seen with the indirect object construction, where the R is marked with the adposition marker $k\varepsilon^{21}$ and the T is placed in the marked preverbal position, as in (99). Tripartite alignment also appears with the unique ditransitive constructions (i.e. with the adverbial R), where the R is only implied through adverbial elements and the T is preverbal as well, as in (100).

(99) ty^{21} $t\text{sa}^{11}$ $th\text{a}^{42}$ te^{11} pui^4 $k\varepsilon^{21}$ $k\text{ua}^{21}$
2sg book bring one CL KE 1sg
 ‘You bring a book to me please.’

(100) ty^{21} muino^4 iau^{21} tsai^{42} / kui^{42}
2sg stuff give to 1sg / to 3sg
 ‘You give the stuff to me / to you/ to him.’

In (99), the T *tsa*¹¹ ‘book’ is moved to the marked preverbal position, different from the P position of the monotransitive and the R, *kua*²¹ ‘me’ is marked by *kε*²¹; also in (100), the T *muino*⁴ is preverbal (see the previous discussion) and the R is only implicitly coded. Thus in both (99) and (100), the R and T are always marked differently from the P and from each other. the ditransitive alignment in Puxian should be considered as a subtype of tripartite alignment.

However, there are also features of *indirective alignment*, when, for instance, the T in (100) now appears in the postverbal P position, as in (101), where the coding pattern is thus considered T = P ≠ R.

- (101) *ty*²¹ *iau*²¹ *muino*⁴ *tsai*⁴² / *kuai*⁴²
2sg take stuff to 1sg / to 3sg
 ‘You give the stuff to me / to him.’

In addition, features of *secundative alignment* occur in the secondary object constructions, as in (102), where the morpheme *kε*²¹ is an integral part of the complex predicate *iau*²¹-*kε*²¹, instead of being a dative marker for the R *ty*²¹. Thus the R is in the P position while the T is preverbal with the coding pattern is R = P ≠ T.

- (102) *kua*²¹ *ɬe*¹¹ *pui*¹¹ *tsa*²¹ *iau*²¹ *kε*²¹ *ty*²¹
1sg one CL book take KE 2sg
 ‘I give a book to you.’

In sum, different placements of the T and coding possibilities of the R enable the ditransitive in Puxian to assume different alignment features. It is also a way to

rearrange constituent orders so as to best meet the speaker's communicative intents.

4.5. Concluding remarks

The discussion so far has revealed a number of interesting semantic and syntactic properties concerning the multifunctional morpheme $k\varepsilon^{21}$. In the ditransitive constructions, we find that the morpheme $k\varepsilon^{21}$ can be a dative marker or a ditransitive marker in the respective indirect object or the secondary object construction. With respect to argument coding possibilities of T and R, there are three different alignment types attested, viz. the *tripartite*, *indirective* and *secudative*. In the causative/passive/intransitive constructions, a significant finding is that all of them are connected structurally and semantically: the personal passive resembles the analytic causative in that the former may be interpreted as a 'weak causative'; the $k\varepsilon^{21}$ -marked intransitives patterns the causatives in terms of an implicit 'external causation', which has to be realized by the expletive *i*. Also, the theory of 'valency increase', observed among causatives, is applied to account for a series of causative-related construction, e.g. the disposal construction, the complex causative construction, etc. which has enriched the typology of 'causee' markings across languages. In addition, a big concern in the discussion is Person and other Prominence factors in shaping different $k\varepsilon^{21}$ constructions, for example, R in the ditransitives is likely to be human and person forms yet prefer clause-final positions or there are the phenomena of DSM and DOM, as specified by the split on the NP hierarchy. Overall, this chapter has fulfilled the initial objectives of approaching different $k\varepsilon^{21}$ constructions in Puxian in terms of their thematic/grammatical relations, Person effects and argument encodings. Further research is still needed to address these issues as well as other related aspects.

Chapter 5 – Conclusion

In this thesis, I have discussed aspects of the grammar of Puxian pronominals, focusing especially on three issues, viz. impersonality, reflexive markings and Person effects on linearization. In the discussion, I identify a category of ‘pronominal impersonals’ and look into the semantic differences among them; I explore the issue of reflexive markers, which are found inherent with a series of grammaticalized functions, such as *intensification*, *logophoricity*, etc.; finally, I probe into the $k\varepsilon^{21}$ -marked constructions, the linearization of which are much related to the grammatical category of Person.

There are some important findings that have been revealed for the first time in Puxian. In Chapter 2, on the basis of a ‘top-order’ framework of impersonality, I refer to the chief impersonal constructions in Puxian as *pronominalized subject* constructions, *null subject* constructions, *dative subject* constructions and *expletive subject* constructions, as well as *passive*, *notional passive* and *middle* constructions. In terms of morphological realizations of the impersonal subjects, zero forms are found to be most frequent, followed by the 3rd person singular i^{533} and the 2nd person singular ty^{21} , while there are only a few instances for the 3rd person plural $y\theta\eta^{32}$ and no instances for the 1st person singular kua^{21} and 2nd person plural $ty\theta\eta^{32}$. The difference between impersonal uses of singular and plural person forms is statistically significant.

Also, the investigation goes one step further by seeking five semantic domains, namely, *vague*, *generic*, *non-referential indefinite*, *referential indefinite* and *referential definite*, which different impersonal subjects (pronominals) can be projected onto. Such domains are potentially constructive in that they provide some functional bases available for cross-linguistic comparison. One noticeable domain worth mentioning is *vague*, which may refer to *time*, *weather*, *location* as well as other situations that signal

maximal indefiniteness and abstractness. The *vague* domain in Puxian is represented by zero forms and occasionally the 3rd person singular *i*⁵³³, just like the overt or covert expletive subjects in some European languages (e.g. *pro-drop* in Spanish or *es* in German). The results also lend some support to Givón's (1984: 387) notion of 'helical hoop', whereby two adjacent semantic domains (on the hierarchical scale of (in)definiteness) tend to be coded the same. In the case of Puxian, only zero forms have consistent engagement with the five semantic domains (that is, neighboring domains are coded the same), followed by the 3sg *i*⁵³³ and the generalized noun *naŋ*²⁴ 'man', both of which are able to code at least four consecutive domains. As to other pronominal forms, with increased degrees of non-specificity, they may either resort to more complex morphology (e.g. attached with an emphatic marker) or have to be phased out in other domains;

Further investigation also reveals that there is a functional overlap between the impersonal pronoun *naŋ*²⁴ and the indefinite pronoun *naŋ*²⁴. The impersonal *naŋ*²⁴, delimited by its own structural and semantic properties (e.g. an independent form or a human agentive subject) is different from the indefinite *naŋ*²⁴ in that the former is a subcategory of the latter, engaging only three functions, viz. *specific unknown*, *irrealis non-specific* and *condition*, as attested on the typology of *semantic map*; What is more, the investigation also brings in the typology of '3pl IMPs', featuring the semantic distinctions of *universal*, *corporate*, *vague*, *inferred* and *specific*, and recognizes the acknowledged division, where 3pl coding devices are split between *universal/corporate* on the one hand and *vague/inferred/specific* on the other, as observed in with the *i*⁵³³ and *naŋ*²⁴ distinction. Besides, it is argued that, due to the restricted referential values of the subjects of 3pl IMPs (e.g. +human, +non-referential, +plural, -speaker, -hearer, etc.), they only pertain to the semantic domains *referential indefinite* and/or part of

non-referential indefinite (i.e. reported structures) and are inconsistent with the domain *vague*, *generic* and *non-referential indefinite*, as these domains may lack human referents or involve speech act participants.

In the discussion of reflexives in Chapter 3, one important finding is that the primary reflexive marker is *kai*⁴²-*kai*¹¹, which is used as DO of transitive verbs that feature prominently the thematic roles of Agent and Patient. Such a finding is associated with the bimorphemic nature of Mandarin *ziji* in the same syntactic position, both of which support the assertion that ‘languages go to great lengths to avoid simple reflexive instantiations of transitive predicates’ (Schladt 2000). In the case of Mandarin, it may pose some questions as to the widely-held definition of complex vs. simplex reflexives. The chapter also, for the first time, investigates the operation of reflexive verbs in Puxian, that is, via the reflexive marker *kai*⁵³³-, some transitive verbs can be transformed into unaccusative or unergative predicates that enable either A or P to be the subject.

The discussion is also concerned with some pragmatic functions of Puxian reflexives, such as intensification or viewpoint marking. The function of intensification is realized by different reflexive forms, i.e. the adnominal intensifier *kai*⁴² and the adverbial intensifier *kai*⁴²-*kai*¹¹. The former is also found to develop into LDRs or viewpoint markers that are known as *logophoricity*, *empathy* and *inter-empathy*. In terms of *inter-empathy*, it has not been reported in the literature, as far as I know. The corpus data shows that Puxian reflexives are more or less equally distributed between the functions of *empathy* and *logophoricity*, yet in Mandarin, such a distribution is more skewed towards *logophoricity*. In terms of LDRs in Puxian, they are regarded as ‘headless intensifiers’ or ‘untriggered reflexives’, motivated by the ‘Economy Principle II’ (Siemund 2000) or ‘Disjoint Reference universal II’ (Haspelmath 2008).

Finally, in this chapter, the discussion of reflexives in Puxian is summarized under the perspective of grammaticalization and has revealed that the reflexive marker *kai*⁴² started out as two lexical words and later evolved into highly grammaticalized functions, such as *middles*, *anticausatives*, *reflexive passives* and *impersonals*. What is significant is that the nominal reflexive *kai*⁴² or *kai*⁴²-*kai*¹¹ in Puxian is associated with *impersonals* or *anticausatives* respectively, as opposed to the verbal reflexive *kai*⁵³³ - used in *middles*. Such a finding is contrary to the common belief that *verbal reflexives* (non-pronominal morphology), e.g. *si/se* in Romance and Slavic languages, represent the highest degree of grammaticalization and are markers of *anticausatives*, *passives* or *impersonals*, whereas *nominal reflexives* (e.g. reflexive pronouns or nouns) are less grammaticalized and only used for marking identity, focus or some other pragmatic functions.

In chapter 4, the discussion reveals a number of frequently-used constructions in Puxian, which are associated with the multifunctional morpheme *kε*²¹ ‘give’. In terms of the *kε*²¹-marked ditransitive constructions, Puxian has three different types, namely, *indirect object* constructions, *double object* constructions and *secondary object* constructions (Haspelmath 2005). In addition, there is a unique type, where the R is only indicated by some adverbial elements, *tsai*⁴ ‘here’, metaphorically meaning ‘to the speaker’ or *kuai*⁴ ‘there’, metaphorically meaning ‘to non-speech act participants’. What is interesting is that T in ditransitives, be it indefinite, inanimate or morphologically ‘heavier’, always precedes the human, definite and pronominal R. Such a phenomenon is considered violation of the *prominence* or *weight* principles, as proposed by Heine and König (2010). Also in the causative/passive/intransitive constructions, a significant finding is that all of these constructions are somehow structurally and semantically connected. That is, for instance, the *personal passive* may resemble the *analytic causative* in that the former is a ‘weak causative’; or the *kε*²¹-marked intransitives may

pattern like the causatives with regard to an implicit ‘external causation’, encoded as the expletive *i*. In addition, the typology of ‘valency increase’ or ‘causee marking’ strategies is brought in to account for these causative-related constructions, such as the *disposal* construction, the *complex causative* construction, etc. It is also noted in the discussion that $k\varepsilon^{21}$ -marked causative constructions resemble semantically the ‘reflexive resultative’ constructions in Germanic languages, which nonetheless resort to reflexive morphology to express causation (Levin and Hovav 1999);

Turning to the typology of *word order* and *alignment*, it is believed that the main ‘case-marking’ strategy in Puxian as well as in many other Sinitic languages is *word order*, whereby syntactic rearrangement of the unmarked AVP order into the marked APV (e.g. of the causative) or PAV (e.g. of the passive) order almost invariably triggers the issue of argument role disambiguation. In the intransitive constructions, the sole S can be agent or patient/theme, which, in comparison to the AVP word order, shows properties of *active alignment*. Yet, there is a phenomenon of DSM, when it comes to the $k\varepsilon^{21}$ -marked S with unergative predicates and the unmarked S with unaccusative predicates; in the ditransitive constructions, the functional morpheme $k\varepsilon^{21}$ marks the R role in sentence-final position or as a ditransitive marker in secondary object constructions, where both R and T can be placed in P position. Thus, different placements of T and R in Puxian ditransitives constitute three alignment types, viz. *tripartite alignment*, *indirective alignment* and *secundative alignment*; finally, a big concern in this chapter is about Person effects and argument codings in different $k\varepsilon^{21}$ -marked constructions. It is found that DSM occurs only within the person category and as a result of split intransitivity (i.e. unergative vs. unaccusative), while DOM is specified by the split on the NP hierarchy, when there is a need to disambiguate A and P when they are placed together; in ditransitives, the R is more likely to be human and

pronominal. Otherwise, in some cases where it has to be inanimate/non-human, the ditransitive construction should be transformed into a benefactive-applicative one, where the R is interpreted as a beneficiary nominal, marked by the dative marker $k\varepsilon^2$ in preverbal position. Overall, this chapter has approached different $k\varepsilon^{21}$ constructions in Puxian with respect to their thematic/grammatical relations, Person effects and argument encodings.

However, there are some more issues that merit further research. One is: to what extent can the notion of Topic be viewed as a case-marking device? In other words, will a pragmatic notion of Topic in Puxian be associated with grammatical functions, i.e. to distinguish essential thematic relations between Agent and Patient in the clause. For example, in my discussion of *indirect passives*, we see that one of the syntactic constituents, e.g. a former Possessor, can be promoted to sentence-initial position, as a way of *topicalization*. We also know that, in Japanese, the promoted ‘Possessor’ in the indirect passives is marked with a nominative marker *ga*, instead of genitive *no*. Since Puxian has no overt case marking morphology, preverbal topic position must be a unique way to encode argument roles.

Another issue worth studying is the phenomena of zero forms. In this thesis, my study is limited to non-anaphoric zeros in subject position. There are, however, an estimated 40% of various zero forms in non-subject positions, e.g. in DO or PP. A case in point is that, for instance, it appears the agent demotion in passives (phonologically null or overt) is more complicated than it looks. For instance, it is generally believed that in Min dialects, the 3sg agent i^{533} is fused with the passive marker, e.g. $k\varepsilon^{21}$ in Puxian, without an overt presence. However, there are some cases, as far as I know, which require the 3sg agent to be overtly present in order for emphasis or subject to referential valences of i^{533} (e.g. animacy, abstractness). Thus, there is a question of

whether Puxian passives are considered canonical passives.

Last but not the least, there is a dire need to look into reflexives in other Min dialects, which may have different morphological features and semantic features. Such a study may lead to true understanding of Sinitic reflexives as a whole.

To conclude, I hope that this thesis will mark a beginning, and perhaps a motivation, for other linguists to take up the study of Puxian, a dialect that has always been termed ‘isolated’, a ‘mixture’ or ‘less known’ as well as make a contribution in its own right to typological studies of Sinitic languages.

Appendix - A Transcription sample

The following transcribed text is a story, narrated by a 70-year-old lady, Mrs. Huang, who talked about her experience of flying solo to Taiwan, for her daughter was about to give birth. This episode is about her internal struggle before the departure (for Taiwan is currently separated from Main Land China). The recording took place in August, 2008. The paragraph consists of individually glossed sentences in the sequence of the narration.

kua²¹ ku-ŋin²⁴ kiã⁵³³ tai-uan²¹. kua²¹ tan²⁴ kie⁵³³ naŋ²⁴ ky⁴².

Isg last-year walk Taiwan. Isg single CL man go.

‘I went to Taiwan last year. I went there alone.’

kua²¹ ŋ-me⁴² tsie¹¹.

Isg NEG-know letter

‘I don’t know a character.’

kua²¹ a⁴ pe⁵³³ kɔŋ⁴² pou-len-ua⁴². kua²¹ tsø-iã²¹ thɔ-i⁴² tai-uan²¹.

Isg too cannot speak Mandarin. Isg daughter marry Taiwan.

‘I cannot speak Mandarin either. My daughter married a Taiwanese.’

kuoŋ³² naŋ²⁴ ɬø-ki²¹ naŋ²¹ hɔ-lau-nui²¹, i⁵³³ kɔŋ⁴ kɔŋ⁴², ‘pe-naŋ-ɔŋ⁴², tsiu⁴² ty²¹

lpl man driver INTF come-back 3sg speak COMP not-to-say let 2sg

tsø hui²¹.

do anything.’

‘My driver carried me back. He said ‘not to say more, you can do anything.’

fi-fi²¹ pe-naŋ-ɔŋ⁴², ŋ-me tsi⁴², pe kɔŋ pou-len-ua⁴², ʔe²¹ y²¹ pe-le²¹ y⁵³³.

in fact not-to-say, neg-know letter, not speak Mandarin, having nothing

‘In fact, not to say more, (I) do not know a word and speak no Mandarin, having nothing.’

kua²¹ thø²¹ a⁴ kɛ²¹ ʔua⁴², mun-mun²¹ thø⁴² kɛ²¹ ʔua⁴², lan²⁴ ai¹¹ liau⁴².

Isg ever too KE_{CAUS} think silently even KE_{CAUS} think,make like smile

‘I ever thought about it, in private. (I) am amused by myself.’

tse⁴² kɔŋ²¹ ta²¹ pe²⁴ kiã⁵³³ thuai⁴², ta²¹ pe²⁴ ʔe-na²¹ kiã²⁴, kua²¹ ti⁴

this speak then want walk out, then want how walk, Isg AUX

ŋai-hiu⁴².

NEG-know

‘When I am about to leave, I didn’t know how to leave.’

he²¹ lan²¹ a⁴ liau-a⁴ ai⁵³³ liau²¹. ta⁴ kua²¹ kɔŋ⁴² kie⁴⁵³ tiã⁵³³.

that make too much like smile then Isg speak KE_{DAT:2sg} listen

‘That amused me a lot. Then, I tell you about this.’

kua²¹ tsø-kiã⁴ ku-niŋ²⁴ tsun-nau⁴⁵³ ti²¹ a⁴ kɔŋ⁴⁵³, pe⁴ ai⁴⁵³

Isg daughter last-year spring-head AUX PRT speak, want again

ʔã⁴² ʔe⁴ kie⁴⁵³.

bear one CL.

‘My daughter said she want another child last spring.’

hŋ-nau⁴⁵³ tɛ⁴ kie⁴⁵³ thø-kɔ²¹ ti⁴² kau-le-hui⁴² lo⁴. ma-tsiu²¹ ti²¹ tsao-ma²⁴.

There one CL mother-in-law AUX ninety-year-old PRT. eye AUX blind.

i⁵³³ thø²⁴ tai-nan⁴⁵³.

3sg stay South of Taiwan.

‘There, her mother-in-law is ninety-year-old, with a blind eye. She stays at southern Taiwan.’

kua²¹ tsø-iã⁴ ti²¹ thø²⁴ tai-pa⁴², tai-kai²¹ ky-li⁴ a⁴,

Isg daughter AUX stay northern Taiwan, about distance PRT,

u⁴ na⁴² tse²¹ kiã⁴⁵³ weni²¹ he⁴ hui⁴.

have 1pl here walk Wenzhou that far

‘My daughter stays at northern Taiwan, about the distance from here to Wenzhou.’

tue-lia²¹ tiau²⁴ tue⁴² ŋou-len-nueŋ²¹. ta²¹ li⁴ kɔŋ⁴² puai-len⁴ kɔŋ²⁴.

take-car must sit five-hours. Then AUX speak no-man serve.

‘It is about five hours’ bus ride. But no one can serve (her).’

ta²¹ li⁴ kiau⁴² kua²¹ kɔŋ⁴ kɔŋ⁴² ky²¹ kɛ²¹ kɔŋ²⁴.

Then AUX ask Isg speak speak go DAT serve

‘Then (she) aksed me to serve/help (them)’

kua²¹ thø⁴² a⁴ ʃua⁴² kɔŋ²¹ tse⁴² pe-le-tsi²¹, kɔŋ²⁴ hui⁴² naŋ-mø-hua²¹,

Isg ever too think speak this illeterate, speak what southern dialect,

kua²¹ piau-li²¹ kɔŋ²¹ tse⁴.

Isg cannot speak this.

‘I thought about it. I am illiterate. (They) speak Southern Min. I cannot speak it.’

u⁵³³ e²⁴ thø⁴² kɔŋ⁴² ie-lie⁴⁵³ pã⁵³³.

have PRT ever speak much flat.

‘Some do speak very flat (easy to understand).’

ta⁴ kua²¹ ʃua⁴² kɔŋ⁴ kua²¹ ti²¹ piau-li⁴ kɔŋ⁴² tha²¹ pe²⁴ ʃena²¹?

then Isg think speak Isg AUX cannot speak, then can how

‘Then I though that I cannot speak it. And what should I do?’

ta²¹ kua²¹ tsø-ia⁴, thø⁴² ti⁴ ky⁵³³ tsø⁴² tsiu-lue⁴.

Then Isg daughter, ever AUX go do procesures.

pan-li⁴² tsiu-lue²⁴ kɛ²¹ pan-li⁴ ʃe⁴ pua-ŋin⁴ lo⁴.

handle procedures KE_{CAUS} handle one half-year PRT.

‘Then my (another) daughter went for the application for me. The application lasts for a year.’

kŋ²¹ kya²¹ ti⁴ a⁴ kɔŋ⁴², kua²¹ kan⁴² ly-en-nia²¹, ten-ki-piau²¹

lpl son AUX PRT speak, Isg ask travel-agency, book tickets,

ti²⁴ a⁴ kɔŋ⁴² ty²¹ tse²¹ mŋ-be-tsi¹¹

AUX PRT speak 2sg this NEG-know-letter

a⁵³³ kua²¹ kuā⁴² tua²⁴ kan-kou⁴². huan-kan²¹ a⁵³³, ti²¹ pa-ui-to⁴².

PRT 1sg see much hard. Hong Kong PRT, AUX hundred CL

‘My son said I ask the travel agency and book tickets for you. (They) said you are illiterate and you will be difficult. Hong Kong has hundreds of procedures.’

ty²¹ ŋ-me²¹ tsi¹¹, ai⁴⁵³ pe²⁴ kɔŋ⁴² pou-len-hua⁵³³,

2sg NEG-know letter; too cannot speak Mandarin,

le⁴ pe²⁴ ɬena⁴² tho⁴⁵³ ŋai-hiu⁴².

and can how ever NEG-know

‘You don’t know letter and cannot speak Mandarin. Then how can you do with it?’

tsui-hø¹¹ a⁵³³, ti⁴ kiau⁴⁵³ tyøŋ²¹ tsi-nia¹¹, i⁵³³ kɔŋ⁴ kɔŋ²¹

best PRT, AUX call 2pl daughter 3sg speak speak

kao⁴² huan-kan²¹ ky⁴² tsi²¹.

go Hong Kong go receive

‘(You) had better let your daughter, he said, come to Hong Kong to receive (you).’

kao¹¹ huan-kan²¹, i⁵³³ a⁴ liau⁵³³ ai⁴⁵³ tsø²¹ tshiu-lue²⁴.

arrive Hong Kong, 3sg PRT must again do procedures.

‘(If) come to Hong Kong, she has to go through some procedures too.’

ta⁴ kuŋ²⁴ kyã²¹ a⁴ kɔŋ⁴² e⁴ ʔili¹¹, thø⁴² a⁴ ʔua²¹ kɔŋ⁴²,

then 1pl son PRT speak PRT time, ever PRT think speak,

tse²¹ pe¹¹ kao⁴⁵³ ʔi⁴ lo⁴, pe⁴⁵³ muo-kiã²⁴ lo¹¹.

this can arrive time PRT, can more-difficult-to-walk PRT.

‘Then when my son said (it), I did have some thinking. It is about time but it is getting more difficult.’

ta²¹ kua²¹ li⁴ kun⁴², kua²¹ tsø⁴² ʔe²⁴ kie⁴⁵³ maŋ⁴²,

then 1sg AUX sleep, 1sg make one CL dream

kɔŋ⁴ kɔŋ²¹ pe-ky⁴² tso-ko²¹, sai-ŋai²¹?

speak speak want-go out-place, know-NEG-knwo

‘Then I had a dream, which said, ‘do you know you are about to leave for a new place?’

Tse²¹ ʔã⁴² man⁴² pe²⁴ tso-ko²¹, tse⁴ pø²⁴ kɛ²¹ kua-in-nou²¹ kɔŋ⁴².

this think dream can go-out, this why-not DAT Budda say.

tse⁴ kua²¹ kai⁴² kiau⁴⁵³ u⁵³³ diau⁴⁵³ e⁴ le⁴.

this 1sg REFL call have PRT PRT SFP

‘As soon as I dreamt of leaving, (I) think I need to speak to Teacher Buddha, who I always worship.’

ta⁴ kua²¹ ti⁴ ky⁴² kan²¹, ta⁴ kua²¹ tiu⁴² tse-ki¹¹ puai-i-lian⁴ diau²⁴.

Then 1sg AUX go ask then 1sg choose one-CL bad-sign PERF

kua²¹ i-tsi⁴² ti²⁴ kɛ²¹ kiã⁴².

1sg once AUX KE fear.

tse⁴ ke-ko⁴ lo⁴², thiu²⁴ puai-i-lian⁴ diau²⁴.

this consequence SFP choose bad-sign PERF

‘Then I went to ask for (the Buddha), but I got a bad sign (bamboo slips used for divination). I felt frightened immediately that I got a bad-sign.’

ta²¹ kua²¹ li²⁴ koŋ⁴ koŋ⁴², ʔø-lie²¹ ti⁴ kau⁴⁵³ lo⁴. e⁴ ʔena⁴²,

then 1sg AUX speak speak, things AUX come SFP can anyhow,

ʔuo-hu⁴ ti⁴ tsø-kɛ⁴² kua²¹ kiã²⁴.

Teacher AUX bestow-KE_{CAUS} 1sg walk.

‘Then I say that things were coming now. No matter how, Teacher must enable me to go.’

ta²¹ in-ui¹¹ tse²¹, ʔe-ka⁴² ti²¹ ko-liŋ-nia²¹,

Then because of this one-family AUX pathetic,

‘Then because of this, (her) family is so in need,

lao-naŋ²⁴ ti⁴ pe-ao-le huai²¹. pe-liu-a²⁴ kɛ²¹ naŋ²⁴ koŋ⁴².

old-man AUX eighty or ninety-year-old. Not-able to DAT man serve

ty²¹ pe²⁴ e⁴ keŋ⁴² a⁵³³, tshien⁵³³ ai⁴⁵³ pø²¹ ʔe⁴ ki²¹

2sg can PRT allow PRT, sign again bestow one CL

‘The old man (mother-in-law) is too old to help. If you (Buddha) allow, please give me another sign again.’

References

- Aissen, Judith. 1999. Markedness and subject choice in Optimality Theory. *Natural Language and Linguistic Theory* 17: 673–711.
2003. Differential object marking: iconicity vs. economy. *Natural Language and Linguistic Theory* 21, 435–483.
- Alcorn, R. 2008. *To him vs. him to*: The variable syntax of pronominal prepositional objects in Old English. Richard M. Hogg Prize winning essay.
- Alonso-Ovalle, Luis. 2000. Is the ‘Arbitrary interpretation’ a semantic epiphenomenon? *Working Papers in Linguistics*. University of Mass.
- Alonso-Ovalle, Luis. 2001. Arbitrary pronouns are not that indefinite. In C. Beyssade, R. Bok-Bennema, F. Drijkoningen and P. Monachesi (eds), *Proceedings of Going Romance 2000*, 1-14. Amsterdam: John Benjamins.
- Alsina, Alex. 1994. *A theory of complex predicates: Evidence from causatives in Bantu and Romance*. ms. Stanford University.
- Andrews, Avery. 1985. The major functions of the noun phrase, in Timothy Shopen (ed.), *Language Typology and Syntactic Description*, vol. 1. Cambridge: Cambridge University Press, 62–154.
- Ariel, Mira. 2004. *The rise (and potential fall) of reflexive pronouns*. Ms., Tel Aviv University.
- Baker, Mark. 1988. *Incorporation*. University of Chicago Press, Chicago.
1995. On the Structural Positions of Themes and Goals, in Johan Rooryck and Laurie Zaring (eds.), *Phrase Structure and the Lexicon*, Kluwer, Dordrecht, pp. 7–34.
- Barddal, Johanna. 2006. The Impersonal Construction in Icelandic/Scandinavian /Germanic and its Development. <http://www.hf.uib.no/i/lili/SLF/ans/barddal/>

- Bauer, Brigitte. 2000. *Archaic syntax in Indo-European*, Mouton de Gruyter, Berlin.
- Bayer, Josef. 2008. Review on 'Clause structure in South Asian languages'. *Language* 84(3): 98-612
- Belletti, A. and L. Rizzi. 1988. Psych Verbs and Theta Theory. *Natural Language and Linguistic Theory* 6: 291-352.
- Benveniste, E. 1966. *Problèmes de linguistique générale*. Paris: Gallimard.
- Bhatt, D. N. S. 2004. *Pronouns*. Oxford: Oxford University Press
- Blackwell, Sarah E. 1998. Constraints on Spanish NP anaphora: The syntactic versus the pragmatic domain. *Hispania* 813: 606-618.
2000. Anaphora interpretations in Spanish utterances and the neo-Gricean pragmatic theory. *Journal of Pragmatics* 32: 389-424.
- Blansitt, Edward L. Jr. 1984. Deictic and dative. In: In: Plank, Frans (ed.) *Objects*. London: Academic Press, 127-150.
- Blevins, James P. 2003. Passives and impersonals. *Journal of Linguistics*.39: 473- 520.
- Botley, S. P. & McEnery, A. M. 2001. Demonstratives in English: a Corpus-based Study. *Journal of English Linguistics* 29: 7-33.
- Bouchard D. 1984. *On the Content of Empty Categories*. Foris, Dordrecht.
- Brinton, L. L.1995. Non-anaphoric reflexives in free indirect style: expressing the subjectivity of the non-speaker. In Stein, D. & S. Wright eds. *Subjectivity and subjectivization: linguistic perspectives*. Cambridge: Cambridge University Press. 173±94.
- Bresnan, J. Cueni, A. Nikitina, T. and Baayen, H. 2005. Predicting the dative alternation. In *Proceedings of the Royal Netherlands Academy of ScienceWorkshop on Foundations of Interpretation*.
- Burzio, Luigi. 1991. The morphological basis of anaphora. *Journal of Linguistics* 27:

81–105.

1994: Weak Anaphora. in G.Cinque, J.Koster, L.Rizzi and R. Zanuttini, eds. *Paths towards Universal Grammar*. Studies in honor of Richard S. Kayne, Georgetown University Press.

Cabredo Hofher, P. 2003. Arbitrary readings of theird person pronominals. in M. Weisgerber (ed.). *Proceedings of the Conference Sinn und Bedeutung 7*. Arbeitspapiere des Fachbereichs Sprachwissenschaften Vol 114. Universität Konstanz, FB Linguistik.

2006. Arbitrary pro and the theory of pro-drop. In P. Ackema et. al. (eds), *Agreement and Arguments*. Oxford: Oxford University Press.

Cai,Guomei. 2006. A study on Puxian dialect. Ph.D. dissertation. Fujian Normal University.

Cennamo, Michela. 1993. *The reanalysis of reflexives: A diachronic perspective*. Naples: Liguori

Chafe, Wallace. 1994. *Discourse, Consciousness, and Time*. Chicago: University of Chicago Press.

Chan, Alice Y.W. 2004. Noun phrases in Chinese and English: A study of English structural problems encountered by Chinese ESL students in Hong Kong. *Language, Culture and Curriculum* 17(1): 34- 47.

Chao, Yuenren. 1930. A system of tone letters. *La Maitre Phonétique* 45: 24-27.

1956. Chinese Terms of Address. In Anwar S. Dil (ed.).*Aspects of Chinese Sociolinguistics: Essays by Yuen Ren Chao*. Stanford,California: Stanford University Press, 1976.

1968. *A grammar of spoken Chinese*. Berkeley and Los Angeles: University of California Press.

- Chappell, Hilary. 1989. On so-called ‘empty particles’ in Yue-Guangzhou (Cantonese): a study of aspect. In *La Trobe Working Papers in Linguistics 2*.
- 1992a. Towards a typology of aspect in Sinitic languages. *Zhongguo Jingnei Yuyan ji Yuyanxue: Hanyu Fangyan* [Chinese Languages and Linguistics: Chinese dialects] 1.1: 67–106 (Academia Sinica, Taipei).
- 1992b. Causativity and the *bǎ* construction in Chinese. In *Partizipation: Das sprachliche Erfassen von Sachverhalten*, Hansjakob Seiler and Walfried Premper (eds.), 509-530. Tübingen: Gunter Narr.
1995. Inalienability and the personal domain in Mandarin Chinese discourse. In Hilary Chappell & William McGregor (eds.) *The Grammar of Inalienability: A Typological Perspective on Body Part Terms and the Part-Whole Relation*, 465–527. Berlin: Mouton de Gruyter.
1997. The grammaticalization of the verb *kóng* ‘say’ in Taiwanese Southern Min: A case of reanalysis. Paper presented in January 1997 at the Lake Arrowhead Conference on Morphological change in Chinese, University of California at Los Angeles and the University of California at Santa Barbara.
2000. Dialect grammar in two early modern Southern Min texts: A comparative study of dative *kit*, comitative *cang* and diminutive *-guia*. *Journal of Chinese Linguistics* 28: 247–302.
- 2001a. *Sinitic Grammar*. Oxford: Oxford University Press.
- 2001b. Language contact and areal diffusion in Sinitic languages. A.Y. Aikehvald & R.M. W. Dixon (eds), *Areal Diffusion and Genetic Inheritance*. Oxford: Oxford University Press.
2001. Synchrony and diachrony of Sinitic languages: A brief history of Chinese dialects. In Chappell (ed.) pp, 3–28.

2007. Hanyu fanyan de chuzhi biaoji de leixing 《汉语方言的处置标记的类型》 [A typology of object-marking constructions: A pan-Sinitic view]. *Yuyanxue Luncong* 《语言学论丛》 (*Anthology of Chinese linguistics*) 36: 183-209.
- 2007a. Grammaticalization zones for the identical marking of agents and patients in Sinitic languages. Paper presented at the Fifth Conference of the European Association of Chinese Linguistics, 5-7 September 2007, Leipzig, Germany
- Chappell, Hilary & A. Peyraube. 2006. The analytical causatives of Southern Min in diachronic perspective. In Dah-an Ho (ed.) *Festschrift for Ting Pang-Hsin*. Taipei: Academia Sinica, pp. 973-1011.
- Chappell, Hilary, Li Ming, & Alain Peyraube. 2007b. Chinese linguistics and typology: The state of the art. *Linguistic Typology* 11: 187- 211.
- Chen, Ping. 2004. Identifiability and definiteness in Chinese. *Linguistics* 42 (6): 1129-1184.
- Chen, Gong. 1999. On the nature of *ziji* in Chinese. *Dandai Yuyanxue* [*Contemporary linguistics*] 2: 33-43
- Chen Zhanqiang and Li Rulong. 1991. *Minyǔ Yánjiū* [Research on Min dialects]. Beijing: Yuwen Publishers.
- Chen, Zeping. 1998. Fuzhou Fangyan Yanjiu. [Fuzhou dialect Research]. Fujian People Press.
2003. *Minyu Xin Tansuo* 《闽语新探索》 [New Research on Min]. Shanghai: Yuandong Press
- Chen Leng. 1999. The Implications of Mismatched Personal pronoun in Chinese. *Text* 19.3: 345-70
- Cheng Ying & Tsao Fengfu. 1995. 閩南語 ‘ka’用法之間的關係 Minnanyu ‘ka’ yongfa zhi jian de guanxi [The relationship between uses of *ka* in Southern Min]. In *Taiwan*

- Minnanyu lunwenji*, Tsao Feng-fu and Tsai Meihui (eds.), 23–45. Taipei: Crane Publishing Co Ltd.
- Chief, Lian-Cheng. 1998. Mandarin Intransitive Reflexive Verbs and the Unaccusative Hypothesis. *Language, Information and Computation* 12: 48-59.
- Chomsky, N., 1980. Rules and Representations. Columbia University Press, New York.
1981. *Lectures on Government and Binding*. Dordrecht: Foris.
1982. *Some concepts and consequences of the theory of Government and Binding*. Chicago: MIT Press.
1986. *Barriers*. Cambridge: MIT Press.
1993. A minimalist program for linguistic theory. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, edited by Kenneth Hale and Samuel Jay Keyser, 1-52. Cambridge: MIT Press.
1995. Bare phrase structure. *Government and Binding theory and the Minimalist Program*, edited by Gert Webelhuth, 71-132. Oxford: BlackwellChierchia, Gennaro.
2004. A semantics for unaccusatives and its syntactic consequences. In *The unaccusativity puzzle: explorations of the syntax-lexicon interface*, Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert (eds.), 22-59. Oxford: Oxford University Press.
- Cinque, Guglielmo. 1988. On *si* constructions and the theory of *arb*. *Linguistic Inquiry* 19: 521–582.
- Cinque, G. 1988. On *Si* constructions and the theory of *arb*. *Linguistic Inquiry* 19: 521-581
- Clements, George N. 1975. The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Languages* 10(2): 141-177.

- Cohen, Dana. 1999. Toward a unified account of intensive reflexives. *Journal of Pragmatics* 31, 1041-1052.
- Comkieb, E. Knakli. 1981. Ergativity and grammatical relations in Kalaw Lagaw Ya (Saibai dialect). *Australian Journal of Linguistics* 1. 1-42.
1982. Grammatical relations in Huichol. *Studies in transitivity*, ed. Comrie, Bernard.
1976. *Aspect - An Introduction to the Study of Verbal Aspect and Related Problems*, Cambridge: Cambridge University Press.
- Comrie, B. 1977. In defense of spontaneous demotion: the impersonal passive. *Syntax and semantics*, Vol. 8, eds. P. Cole & J.M. Sadock, 47–58. New Academic Press.
- by Paul J. Hopper & Sandra A. Thompson.
1981. *Language Universals and Linguistic Typology*. Oxford: Blackwell.
1985. Causative Verb Formation and Other Verb-Deriving Morphology. In: Shopen Tim, Editor, *Language typology and syntactic description: Grammatical categories and the lexicon III*, Cambridge University Press, Cambridge (1985), pp. 309–348.
1989. *Language Universals and Linguistic Typology*, revised ed. Chicago: University of Chicago Press.
1995. *Syntax and semantics*, IS, 95-1 15. New York: Academic Press.
- Corbett, Greville G. 2000. *Number*. Cambridge: Cambridge University Press.
2005. The canonical approach in typology. In Zygmunt Frajzyngier, Adam Hodges and David S.Rood (eds.), *Linguistic Diversity and Language Theories*. Amsterdam: John Benjamins. 25-49
2006. *Agreement*. Cambridge: Cambridge University Press.
- Cornilescu, Alexandra. 2001. Romanian nominalizations: case and aspectual structure. *J. Linguistics* 37: 467-501

- Creissels, Denis. 2007. Impersonal and Antiimpersonal Constructions: A Typological Approach. Extended version of paper presented at The 7th International conference of the Association of Linguistic Typology, Paris, 24–28 September 2007. <http://www.ddl.ish-lyon.cnrs.fr/fulltext/Creissels/Creissels>.
- Croft, William. 1986. Surface Subject Choice of Mental Verbs. Paper presented at the Annual Meeting of the Linguistic Society of America, New York.
1990. *Typology and universals*. Cambridge: Cambridge University Press.
- 1994a. The semantics of Subjecthood. In M. Yaguello(ed.) *Subjecthood and Subjectivity*. The Status of the Subject in Linguistic Theory. Proceedings. Paris: Ophrys, 29-75.
- 1994b. Voice: Beyond Control and Affectedness. In *Voice: Form and Function*. Fox, Barbara A. and Paul J. Hopper (eds.), pp.89.
2007. Typological Approach. Extended version of paper presented at The 7th International conference of the Association of Linguistic Typology, Paris, 24-28 September 2007. <http://www.ddl.ish-lyon.cnrs.fr/fulltext/Creissels/Creissels>
- Cysouw, Michael. 2000. *The paradigmatic structure of person marking*. Ph.D. dissertation, Catholic University of Nijmegen.
2001. *The paradigmatic structure of person marking*. Doctoral dissertation, Katholieke Universiteit Nijmegen.
2002. Interpreting typological clusters. *Linguistic Typology* 6: 69–93.
2003. *The Paradigmatic Structure of Person Marking*. Oxford: Oxford University Press.
2009. *The Paradigmatic Structure of Person Marking*. New York: Oxford University Press.
- Culy, C. 1994. Aspects of logophoric marking. *Linguistics*, 32, 1055–1094.

1997. Logophoric pronouns and point of view. *Linguistics*, 35, 845–859.
- Deng, Siyin. 2004. 作格化和漢語被動句 [Ergativization and Chinese passives].
[Zhongguo Yuwen] 《中國語文》 [Chinese Literacy] 301(4): 291-301
- Diessel, Holger. 1999. *Demonstratives Form Function and Grammaticalization*.
Amsterdam: John Benjamins.
- Dixon R. M. W. 1991. *A New Approach to English Grammar, on Semantic Principles*.
Oxford: Clarendon Press.
- Dixon, R. M. W. & Alexandra Y. Aikhenvald (eds.). 2004. *Adjective classes: A
cross-linguistic typology*. Oxford: Oxford University Press.
- Dixon, R. 1994. *Ergativity*. Cambridge University Press, Cambridge.
- Dong, Xiufang. 2005. Dummy subject ta in Spoken Mandarin. *Language Teaching and
Linguistic studies* 6: 22-26.
- Dowty, David. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel.
1991. Thematic proto-roles and argument selection. *Language* 67: 547-619.
- Dryer, Matthew. 1986. Primary objects, secondary objects, and antitativity. *Language*
62: 808–845.
1989. Large linguistic areas and language sampling. *Studies in Language* 13: 257–292.
2006. Descriptive theories, explanatory theories, and basic linguistic theory. In Felix
Ameka, Alan Dench, & Nicholas Evans (eds.). *Catching Language: Issues in
Grammar Writing*. Berlin: Mouton de Gruyter.
- Edmondson, Jerry A. & Frans Plank. 1978. Great expectations: An intensive self
analysis. *Linguistics and Philosophy* 2: 373–413.
- Egerland, V. 2003. Impersonal pronouns in Scandinavian and Romance. *Working
papers in Scandinavian syntax* 71. Lund University, 75-102.
- Everaert, M. 2000. Binding theories: A comparison of ‘grammatical models’, in *Progress*

- in Grammar: Articles at the 20th Anniversary of the comparison of grammatical models group in Tilburg*. M. van Oostendorp and E. Anagnostopoulou, eds. Amsterdam: Meertens Institute, *Electronic Publications in Linguistics*,
- Fagan, Sarah. 1988. The English Middle. *Linguistic Inquiry* 19, 181-203.
- Faltz, Leonard M. 1977. *Reflexivization: A Study in Universal Syntax*. Diss. U of California, Berkeley.
1978. On indirect objects in universal syntax. *Chicago Linguistic Society* 14: 76–87.
1985. *Reflexivization: A Study in Universal Syntax*. New York: Garland.
- Fagan, Sarah. 1992. *The Syntax and Semantics of Middle Constructions*. Cambridge: Cambridge University Press,
- Filimonova, Elena. 2005. *Clusivity: Typology and Case Studies of the Inclusive-Exclusive Distinction*. Amsterdam: Benjamins.
- Fraurud, K. 1992. *Processing Noun Phrases in Natural Discourse*. Ph.D. Thesis (by Publications). Department of Linguistics, Stockholm University.
- Franco, Jon & Huidobro, Susanan. 2008. Ethical Datives, Clitic Doubling and the Theory of *pro*. *Selected Proceedings of the 10th Hispanic Linguistics Symposium*. ed. Joyce Bruhn de Garavito and Elena Valenzuela, 215-224. Somerville, MA: Cascadilla Proceedings Project.
- Foley, William A., and Robert D. Van Valin Jr. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press. xii, 416 pages.
- Gao, Q. 2002. *Argument Structure, HPSG, and Chinese Grammar*. Ph.D. Dissertation. The Ohio State University
- Gabredo Hofher, Patricia. 2003. Arbitrary readings of third person pronominals. In Wesigerber (ed), *Proceedings of the Conference Sinn und Bedeutung 7*. *Arbeitspapiere des Fachbereichs Sprachwissenschaften* Vol 114. Universitat

- Konstanz, FB Linguistik.
2006. Arbitrary pro and the theory of pro-drop. In Peter Ackema Patrick. Brandt, Maaïke Schoorlemmer & Fred Weermann P. (eds), *Agreement and Arguments*. Oxford: Oxford University Press.
- García, Ofelia. & Joshua A. Fishman. 2002. *Languages in New York City*. Berlin: Mouton de Gruyter.
- Gao, Qian. 1994. Chinese NP Structure. *Linguistics* 32: 475-510.
1996. Resultative Verb Compounds and BA-Construction in Chinese. *Journal of Chinese Linguistics*.
2002. Argument Structure and RVC in Chinese: Diachronic Implications. In Fengshi Liu (ed.) *Proceedings of Fourteenth North America Conference on Chinese Linguistics*. 108-25.
- 2003a. Valence Alternation and Verb Classification in Chinese. In *Proceedings of the 39th Annual Meeting of Chicago Linguistic Society*.
- 2003b. Variations in Argument Structure and Verb Classification in Chinese. In Yen-Hwei Lin (ed.) *Proceedings of Fifteenth North America Conference on Chinese Linguistics* 149-66.
2008. 汉语‘宾动’与‘动宾’的互换机制以及对汉语教学的启示. 《东方语言学》 [Oriental Linguistics] 3: 51-63.
- Gast, V. & König, E. 2004. Intensifier as parasitic cross-categorial operator. *Workshop on 'Noun phrases and pronouns – typology and theoretical problem*. Berlin.
- Gelderen (van), Elly. 1999. Bound pronouns and non-local anaphors: the case of Earlier English. In Z. Frajzyngier and T. Curl (eds.) *Reflexives: forms and functions*, 187-225. Amsterdam/Philadelphia: John Benjamins.
2000. *A History of Reflexive Pronouns*. John Benjamins, Amsterdam.

- Givón, Talmy. 1979. *On Understanding Grammar*. New York: Academic Press, Inc.
1981. Typology and Functional Domains. *Studies in Language* 5: 163–93.
1983. *Topic Continuity in Discourse: Quantitative Cross-language Studies*. Amsterdam: John Benjamins.
1984. *Syntax. A functional-typological introduction*. Vol. I. Amsterdam-Philadelphia: John Benjamins.
- 1989: The pragmatics of word order: predictability, importance and attention. *Studies in Syntactic Typology (Typological Studies in Language 17)*. Eds. M. Hammond, et al. Amsterdam and Philadelphia: John Benjamins. 243-284.
1990. *Syntax: A Functional-typological Introduction*, vol. 2. Amsterdam/Philadelphia, PA: John Benjamins.
1992. The grammar of referential coherence as mental processing instructions. *Linguistics* 30: 5-55.
1995. *Functionalism and Grammar*. Amsterdam: John Benjamins.
2006. *Multiple routes to clause-union: The diachrony of syntactic complexity*. Seminario Sobre Complejidad Sintáctica. Hermosillo: Universida de Sonora (ms).
- Glinert, Lewis. 1989. *The Grammar of Modern Hebrew*. Cambridge: Cambridge University Press.
- Goddard, Cliff. 1995. Who are we? The natural semantics of pronouns. *Language Sciences* 17(1): 99–121.
2001. Lexico-semantic universals: a critical overview. *Linguistic Typology* 5(1): 1–66.
- Creissels, Denis. 2008. Remarks on split intransitivity and fluid intransitivity. *Empirical Issues in Syntax and Semantics*. O. Bonami & P. Cabredo Hofherr (eds.) 7: 139-168.

- Grice, H. Paul, 1961. The causal theory of perception. *Proceedings of the Aristotelian Society, Supplementary* 35: 121-152.
1975. Logic and conversation. In: P. Cole and J.L. Morgan, eds. *Speech acts (Syntax and semantics, Vol. 3)*. 41-58. New York: Academic Press.
1978. Further notes on logic and conversation. In: P. Cole, ed., *Pragmatics (Syntax and semantics, Vol. 9)*, 113-128. New York: Academic Press.
- Grimshaw, Jane. *Argument Structure*. MA: MIT Press, 1990.
- Grosz, B. 1977. *The Representation and Use of Focus in Dialogue Understanding*. Stanford Research Institute Technical Notes 5. Stanford, CA: Stanford University Press.
- Gundel, Jeanette K., Nancy Hedberg and Ron Zacharski. 1993. Cognitive status and the form of referring expressions in discourse. *Language* 69: 274-307.
- Gundel J., Hedberg N. & Zacharski R. 2001. Definite descriptions and cognitive status in English: why accommodation is unnecessary. *English Language and Linguistics* 5.2: 273-295.
- Halldo'r A'rmann Siguresson, H. A. & Egerland, Verner. 2009. *Studia Linguistica* 63(1): 158 -185.
- Haiman, John. 1983. Iconic and economic motivation. *Language* 59: 781-819.
- Hans-Jürgen. 1991a. Aspect and aktionsart: A reconciliation. In: Veters & Vandeweghe (eds.). Perspectives on aspect and aktionsart. *Belgian Journal of Linguistics* 6. 31-45.
- Harris, Alice C. and Lyle Campbell. 1995. *Historical Syntax in Cross-Linguistic Perspective*. Cambridge, London: Cambridge University Press.
- Hashimoto, Mantaro J. 1982. The so-called 'original' and 'changed' tones in Fukienese. *BIHP* 54 (4): 645-659.

- Haspelmath, Martin. 1987. *Transitivity Alternations of the Anticausative Type*. Köln: Institut für Sprachwissenschaft der Universität zu Köln (Arbeitspapiere, N.F. 4).
1990. The grammaticization of passive morphology. *Studies in Language* 14 (1), 25-72.
1993. More on the typology of inchoative/causative verb alternations. In: Comrie, Bernard & Polinsky, Maria (eds.) *Causatives and transitivity*. (Studies in Language Companion Series, 23.) Amsterdam: Benjamins, 87-120.
- 1997a. *Indefinite Pronouns*. Oxford: Clarendon Press.
2005. Ditransitive constructions: the verb 'give'. In: Haspelmath et al. (2005), pp. 426–429.
2007. Ditransitive alignment splits and inverse alignment. *Functions of Language* 14 (1): 79–102.
- 2008a. Creating economical morphosyntactic patterns in language change. In: Good, Jeff (ed.), *Language universals and language change*. Oxford: Oxford University Press.
- 2008b. Frequency vs. iconicity in explaining grammatical asymmetries. *Cognitive Linguistics* 19(1): 1-33.
- 2008+a. Parametric versus functional explanations of syntactic universals. To appear in: Theresa Biberauer (ed.) *The Limits of syntactic variation*. Amsterdam: Benjamins.
- 2008+b. Ditransitive constructions: towards a new Role and Reference Grammar account?. To appear in: Van Valin, Robert D. (ed.) *Proceedings of the Role and Reference Grammar 2006 Conference*. Amsterdam: Benjamins.
- Haspelmath, Martin, Dryer, Matthew S. David, Gil, Bernard, Comrie (Eds.), 2005. *The World Atlas of Language Structures*. Oxford: Oxford University Press.
- 2008+c. A frequentist explanation of some universals of reflexive marking. *Linguistic*

Discovery. 6(1), 40-63

- He, Wenzhong. 2005. Zhongdong jiegou de jieding [The definition of middle constructions]. *Foreign Language Education*. 26(4): 9-13.
2007. Zhongdong Jiegou Jieding (Defining the Middle construction). *Waiyujiaoxue* [Foreign Language Education] 26(4): 9-14.
- Heidinger, Steffen & SCHÄFER, Florian. 2008. On the French reflexive passive and anticausative. A diachronic view from the par-phrase. In B. Fagard, S. Prevost, B. Combettes & O. Bertrand (eds.), *Etudes de linguistique diachronique*. Bern: Peter Lang.
- Heine, B., Claudi, U., & Hünemeyer, F. 1991. *Grammaticalization*. Chicago, IL: University of Chicago Press.
- Heine, Bernd & König, Christa. 2010. On the linear order of ditransitive objects. *Language Sciences* 32: 87-131.
- Heine, Bernd & Kuteva & Tania. 2005. *Language contact and grammatical change*. Cambridge University Press.
- Heine, Bernd & Tania Kuteva. 2002. *World lexicon of grammaticalization*. Cambridge: Cambridge University Press
2002. On the evolution of grammatical forms. In: Wray, A. (Ed.). *The Transition to Language*. Oxford: Oxford University Press, pp. 376–397.
2003. On contact-induced grammaticalization. *Studies in Language* 27.3: 529-72.
2007. *The Genesis of Grammar: A Reconstruction*. Oxford University Press, New York.
- Helasvuo, Marja-Liisa, & Vilkuna, Maria. 2008. Impersonal is Personal: Finnish perspectives. *Transactions of the Philological Society* 106: 2 216 -245
- Hermon, Gabriella. 2001. Non-canonically marked A/S in Imbabura Quechua.

- In Aikhenvald et al. pp. 149–176, forthcoming.
- Hengeveld, K., J. Rijkhoff & A. Siewierska. 2004. Parts of speech systems as a basic typological parameter. *Journal of Linguistics* 40.2, 527-570.
- Her, One-Soon. 2006. Justifying part-of-speech assignments for Mandarin *gei*. *Lingua* 116: 1274-1302.
- Hirose, Yukio. 2002. Viewpoint and the nature of the Japanese reflexive *zibun*. *Cognitive Linguistics* 13: 357–401.
- Hoekstra, Teun. 1988. Small clause results. *Lingua* 74.101–39. Hole, D. (2002). Agentive *selbst* in German, *Proceedings of the Sixths Annual Meeting of the 'Gesellschaft für Semantik', Osnabrück, October, 2001*. Ed. G. Katz, S. Reinhard and P. Reuter.
- Hollmann, Willem B. *Synchrony and diachrony of English periphrastic causatives: a cognitive perspective*. Ph.D. dissertation. Manchester: University of Manchester.
- Holmberg, Anders, and Urpo Nikanne. 2002. Expletives, subjects, and topics in Finnish. In *Subjects, expletives, and the EPP*, ed. by Peter Svenonius, 71–106. Oxford: Oxford University Press.
- Hopper, Paul; and Thompson, Sandra. 1980. Transitivity in grammar and discourse. *Language* 56, 251–299.
- Hopper, Paul J. and Elizabeth Closs Traugott. 2003. *Grammaticalization*. Cambridge, MA: Cambridge University Press.
- Horn, L. 1984. Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature. *Meaning, Form and Use in Context: Linguistic Applications*. ed. by D. Schiffrin, 11-42. Washington, DC: Georgetown University Press.
1989. *A Natural History of Negation*. Chicago: University of Chicago Press.
- Huang, Cheng-teh James. 1982, *Logical Relations in Chinese and the Theory of*

- Grammar*, Ph.D. dissertation, MIT, Cambridge, Mass.
1991. Remarks on the status of the null object. *Principles and parameters in comparative grammar*, ed. by Robert Freidin, 56-76. Cambridge, MA: MIT Press.
1999. Chinese passives in comparative perspective. *Tsing Hua Journal of Chinese Studies* 29: 423-509.
- Huang, C.-T. J. and C.-S. L. Liu. 2001. Logophoricity, Attitudes and *Ziji* at the Interface, in Peter Cole et al. (eds.) *Long Distance Reflexives, Syntax. and Semantics*, 33 (pp. 141-195) San Diego, CA: Academic Press.
- Huang, S. 1992. Getting to Know Referring Expressions: Anaphor and Accessibility in Mandarin Chinese. *Proceedings of ROCLING V*: 25–52.
- Huang, Y. 1994. *The Syntax and Pragmatics of Anaphora: A Study with Special Reference to Chinese*. New York: Cambridge University Press.
1984. Reflexives in Chinese. *Studies in Literature and Linguistics* 10.2
1996. A note on the head-movement analysis of long-distance reflexives. *Linguistics* 34: 833-840.
- Iljic, Robert. 1987. *L'Exploitation Aspectuelle de la Notion de Franchissement en Chinois Contemporain*. Paris: L'Harmattan.
1990. The verbal suffix -guo in Mandarin Chinese and the notion of recurrence, *Lingua* 81/ 4: 301–26.
1994. Quantification in Mandarin Chinese (two markers of plurality), *Linguistics* 32/1: 91–116.
2001. The origin of the suffix -men in Chinese, *Bulletin of the School of Oriental and African Studies* 64/1: 74–97.
- Iwasaki, S.&Yap F.-H. 2000. Give constructions in Thai_ and beyond: A cognitive_ and_

- grammaticalization perspective. *Proceedings of the International Conference on Tai Studies*. July 29-31, Bangkok: Institute of Language and Culture for Rural Development, Mahidol University. 371-382
- Jaeggli, O. A. 1986. Arbitrary Plural pronominals. *Natural language and Linguistic Theory* 4,43-76.
- Jiang Lansheng. 江蓝生.1999. Shǐyì yǔ bèidòng jiānyòng tànyuán 《使役与被动兼用探源》 (Exploring the origins of the syncretism of the causative and the passive). In: Alain Peyraube and Chaofen Sun (eds.). *In Honor of Mei Tsu-lin: Studies on Chinese Historical Syntax and Morphology*. Paris: CRLAO, 57-72.
- Jiang, Shaoyu. 1994. *Jindai Hanyu Yanjiu Gaikuang*. Beijing: Beijing Daxue Press.
1997. *Ba zi ju luelun – jian lun gongneng kuozhang* [Functional extensions of ba-constucions]. *Zhongguo Yuwen* [Chinese Literacy]. (4).
2002. Gěi zì jù, jiào zì jù biǎo bèidòng de láiyuán 《“给”字句、“教”字句》表被动的来源》 (Origin of the passive markers 'gěi' and 'jiào'). *Yǔyánxué lùncóng* 《语言学论丛》 26: 159-177.
- Kaiser, E. 2003. *The quest for a referent: A crosslinguistic look at reference resolution*. Unpublished Doctoral Dissertation, University of Pennsylvania, Philadelphia.
- Kaiser, E., & Trueswell, J. 2004. The Referential Properties of Dutch Pronouns and Demonstratives: Is Saliency Enough? *Proceedings of the Sinn und Bedeutung 8*, Arbeitspapier Nr. 1777, FB Sprachwissenschaft, Universität Konstanz.
2005. Investigating the Interpretation of Pronouns and Demonstratives in Finnish: Going Beyond Saliency. In E. Gibson & N. Pearlmuter (eds), *The Processing and Acquisition of Reference*. Cambridge, Mass., MIT Press
- Kageyama, Taro, 1978. On Identifying Grammatical Relations, *Gengo Kenkyu* 73, 43–61.

- Kameyama, Megumi. 1985. *Zero Anaphora: The Case of Japanese*. Doctoral dissertation, Stanford University. Available from University Microfilms at the University of Michigan.
- Kameyama, Megumi. 1986. A Property-sharing constraint in centering, in *Proceedings of the 24th Annual Meeting of the Association of Computational Linguistics*, New York, NY, 200.
1996. Indefeasible semantics and defeasible pragmatics, in *Quantifiers, Deduction, and Context*, CSLI, Stanford, CA.
1997. Recognizing referential links: an information extraction perspective, *Technical report*. AI Center, SRI International.
1998. Intrasentential centering: a case study, in Marilyn A. Walker, Aravind K. Joshi, and Ellen F. Prince, eds. *Centering Theory in Discourse*. Oxford: Oxford University Press, 89–112.
- Kaufmann, Ingrid. 2007. Middle voice. *Lingua* 117: 1677 – 1714
- Keyser, S., T. Roeper., 1984. On the Middle and Ergative Constructions in English. *Linguistic Inquiry* 15, 381-416.
- Keenan, Edward. 2002. Explaining the creation of reflexive pronouns in English. *Studies in the history of the English language*, ed. by Donka Minkova and Robert P. Stockwell, 325–54. Berlin: Mouton de Gruyter.
- Keenan, Edward. 1985. Predicate Formation Rules in Universal Grammar. In *Proceedings of WCCFL 4* J. Goldberg et al. (eds.), Stanford Linguistics Association: 6.
- Kemmer, Suzanne, 1993. *The middle voice*. Amsterdam-Philadelphia: Benjamins.
- Kitagawa, C & A. Lehrer. 1990. Impersonal uses of personal pronouns. *Journal of Pragmatics* 14, 739-759.

- Kibort, A. 2000. Morpholexical rules in Polish. In Ban' ski, P. & Przepio'rkowski, A. (eds.).
- 2008a. Impersonals in Polish: an LFG perspective. In: Siewierska, Anna (ed.). *Impersonal Constructions in Grammatical Theory*. Oxford: Wiley-Blackwell. 246-289
- 2008b. On the syntax of ditransitive constructions. *Proceedings of LFG08*. cslipublications. stanford.edu.
- Kim, M.-K. 1990. Korean Auxiliary Verb Constructions. *Linguistic Journal of Korea* 15, 31-48.
- Kim, Soowon. 1999. Sloppy/strict Identity, Empty Objects, and NP Ellipsis, *Journal of East Asian Linguistics* 8, 255–284.
- Kiparsky, Paul. 2008. Universals constrain change, change results in typological generalizations. In: Good, Jeff (ed.) *Language change and language universals*. Oxford: Oxford University Press, 23-53.
- Kitamura, Tatsuo Nishida, & Yasuhiko Nagano 1995. (eds.). *Current Issues in Sino-Tibetan Linguistics*, 98–113. Osaka: National Museum of Ethnology. On the utility of the concepts of markedness and prototypes in understanding the development of morphological systems. *Bulletin of the Institute of History and Philology, Academia Sinica* 66.4: 1149-1185.
- Kittilä, Seppo. 2006. The woman showed the baby to her sister: On resolving humannessdriven ambiguity in ditransitives. In *Case, Valency and Transitivity*, Kulikov, Leonid, Andrej Malchukov and Peter de Swart (eds.), 291-308.
- Klamer, Marian. 2000. How report verbs become quote markers and complementizer. 110: 69-98.
- König, Ekkehard. 1991. *The Meaning of Focus Particles: A Comparative Perspective*.

- London: Routledge.
2001. Intensifiers and reflexives. In Martin Haspelmath, Ekkehard König, & W. Oesterreicher (eds.), *Language Typology and Language Universals: An International Handbook of Contemporary Research*, 747–760. Berlin: Mouton.
2003. Intensification and reflexivity in the languages of Europe: Parameters of variation and areal features. In Ines Loi Corvetto (ed.), *Dalla linguistica areale alla tipologia linguistica*, 229–252. Roma: Il Calamo.
- König, Ekkehard and Letizia Vezzosi. 2004. The role of predicate meaning in the development of reflexivity. In: W. Bisang, N. Himmelman, B. Wiemer (eds.), *What Makes Grammaticalization? A Look from its Fringes and its Components*, 213-244. Berlin : Mouton de Gruyter.
- König, Ekkehard & Peter Siemund. 1999. Intensifiers and reflexives: a typological perspective. In Frajzyngier and Curl (eds.): 41-74.
- 2000a. Intensifiers and reflexives – a typological perspective. In Frajzyngier & Curl (eds.) 2000, 41–74.
- 2000b. The development of complex reflexives and intensifiers in English. *Diachronica* 17: 39–84.
- 2000c. Locally free *self*-forms, logophoricity and intensification in English. *English Language and Linguistics* 4: 183–204.
- König, Ekkehard & Shigehiro Kokutani. 2006. Towards a typology of reciprocal constructions: focus on German and Japanese. *Linguistics* 44–2 : 271–302
- König, Ekkehard & Volker Gast. 2002. Reflexive pronouns and other uses of *self*-forms in English. *Zeitschrift für Anglistik und Amerikanistik* 50: 225–238.
2006. Focused assertion of identity: A typology of intensifiers. *Linguistic Typology* 10-2. 223-276.

- Krifka, Manfred, Francis J. Pelletier, Gregory N. Carlson, Alice ter Meulen, Godehard Link, & Gennaro Chierchia .1995. *Genericity: An Introduction*.In Carlson, Gregory N. & Francis J. Pelletier (eds.) *The Generic Book*, 1-124. Chicago & London: The University of Chicago Press.
- Kulikov, Leonid. 2007. *The reflexive pronouns in Vedic: A diachronic and typological Poland*. Warsaw: Polish Academy of Sciences. 82–93.
- Kratzer, Angelika. 1997. German Impersonal Pronouns and Logophoricity. Handout of a talk presented at ‘Sinn und Bedeutung’ .
- Kuno, Susumu. 1972. Pronominalization, reflexivization, and direct discourse. *Linguistic Inquiry* 3.161-95.
1973. *The structure of the Japanese language*. Cambridge, MA: MIT Press.
1978. *Danwa no bunpô (grammar of discourse)*. Tokyo: Taishukan.
1987. *Functional Syntax: Anaphora, Discourse, and Empathy*. Chicago: The University of Chicago Press.
- Kuo, Eddie. 1980. The sociolinguistic situation in Singapore: unity in diversity. In A. Afendras and E. Kuo (eds). *Language and Society in Singapore*. Singapore: Singapore U.P.
- Lai, Huei-Ling. 2001. On Hakka Bun: A case of Polygrammaticalization. *Language and Linguistics* 2.2: 137-153
- Langacker, Ronald W. 1977. Syntactic reanalysis. In: Li, Charles N. (Ed.), *Mechanisms of Syntactic Change*. University of Texas Press, Austin, TX, pp. 57–139.
1991. *Concept, image, and symbol. The cognitive basis of grammar*. Berlin: Mouton de Gruyter.
2003. Coding causatives and putatives in a diachronic perspective. *Taiwan Journal of Linguistics* 1: 1-28.

- Lambrecht, Knud. 1994. *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
1991. *Foundations of Cognitive Grammar*, vol. II: *Descriptive Application*. Stanford: Stanford University Press.
- 2004a. *Grammar as image: the case of voice* In Barbara Lewandowska-Tomaszczyk & Alina Kwiatkowska (eds), *Imagery in Language Festschrift in Honour of Professor Ronald W. Langacker*, 63-111. *Lodz Studies in Language* 10. Frankfurt am Main: Peter Lang.
- 2004b. *Ten lectures on cognitive grammar* by Ronald Langacker. Foreign language Teaching and Research Press.
2006. Dimensions of defocusing. In Tasaku Tsunoda & Taro Kageyama (eds), *Voice and Grammatical relations*. 115-37. Amsterdam: John Benjamins.
- LaPolla, Randy. 1993. Arguments Against 'Subject' and 'Direct Object' as Viable Concepts in Chinese. *Bulletin of the Institute of History and Philology* 63.4: 759-813.
1994. On the change to verb-medial word order in proto-Chinese: Evidence from Tibeto-Burman. In Hajime
2005. Reflexive and Middle Marking in Dulong-Rawang. *Himalayan Linguistics* 2:1-13
- Lefebvre, C. 1998. *Creole Genesis and the Acquisition of Grammar: The Case of Haitian Creole*. Cambridge: Cambridge University Press.
- Lehmann, Christian. 2002. *Thoughts on grammaticalization*. Erfurt: Seminar für Sprachwissenschaft der Universität.
- Lee, Cher Leng. 2008. *Contact-Induced Grammatical Change: The Case of Gei³ in Taiwanese Mandarin*. Ph.D. Dissertation. Linguistic Research Institute, Taiwan.

- Lee, Eun-Ji. 1992. *On the Extended Projection Principle*. Ph.D. dissertation, UConn.
- Lee, Levinson, 1987. Stephen C. Levinson, Pragmatics and the grammar of anaphora. *Journal of Linguistics* 23: 379–434.
1991. Stephen C. Levinson, Pragmatic reduction of the Binding Conditions revisited. *Journal of Linguistics* 27: 107–161.
1995. Stephen C. Levinson, Three levels of meaning. In: Frank Palmer, Editor, *Grammar and meaning*, Cambridge: Cambridge University Press, 90–115.
- Levin, B. (1993) *English Verb Classes and Alternations: A Preliminary Investigation*. University of Chicago Press, Chicago, IL.
- Levin, B. and M. Rappaport Hovav. 1999. Two Structures for Compositionally Derived Events. *Proceedings of SALT 9*, Cornell Linguistics Circle Publications, Cornell University, Ithaca, NY, 199-223.
- Li, C.N. and Thompson, S.A. 1976. *Subject and topic: A new typology of language*. *Subject and topic*, ed. by Charles Li, 457-89. New York: Academic Press.
1979. ‘Third-person Pronouns and Zero-anaphora in Chinese Discourse’, in T. Givón (ed.) *Syntax and Semantics, 12: Discourse and Syntax*: 311–35. New York: Academic Press.
1981. *Mandarin Chinese: A functional reference grammar*. Berkeley and Los Angeles, CA: University of California Press.
1989. *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.
- Lin, H. 1998. *The Syntax-Morphology Interface of Verb-Complement Compounds in Mandarin Chinese*. Ph.D. Dissertation. University of Illinois at Urbana-Champaign.
- Lien, Chinfu. 2001a. A typological study of causatives in Taiwanese Southern Min. *Tsing*

- Hua Journal of Chinese Studies*. 29: 395-422.
- 2001b. Competing morphological changes in Taiwan Southern Min. in: H.Chappell (ed.), pp. 309-339.
2002. Grammatical function words 乞, 度, 共, 甲, 將 and 力 in Li4 Jing4 Ji4 荔鏡記 and their Development in Southern Min. In Dah-an Ho (ed.) *Papers from the Third International Conference on Sinology: Linguistic Section. Dialect Variations in Chinese*. 179-216.
2008. Special types of passive and causative constructions in Taiwanese Southern Min. In Redouane Djamouri, Barbara Meisterernst & Rint Sybesma (eds). *Chinese Linguistics in Leipzig*. Paris: Collection des Cahiers Asie Orientale, EHESS.
- Lidz, Jeffrey. 2001. Echo Reduplication in Kannada and the theory of word-formation. *The Linguistic Review* 18:375-394.
- Lin, Gu-Jing. 2005. The Morphological Causative of Tsou: Its Grammatical Relation. Presented at the Taiwan-Japan Joint Workshop on Austronesian Languages, Taipei, June 23-24.
- Lin, Jo-Wang. 1998. Distributivity in Chinese and Its Implications. *Natural Language Semantics* 6: 201-243.
- Lin, Jo-Wang, & Zhang, Niina Ning. 2006. The Syntax of the Non-Referential TA 'it' in Mandarin Chinese. *Language and Linguistics* 7(4): 79-824.
- Li, Audrey. 1990. *Order and constituency in Mandarin Chinese*. Dordrecht: Kluwer.
- Li, Fang-Kuei. 1937. Languages and dialects. *Chinese Year Book*, pp. 59-65.
- Li, N., Zubin, D., 1995. Discourse continuity and perspective taking. In: Duchan, J.F., Bruder, G.A., Hewitt, L.E. (Eds.), *Deixis in Narrative: A Cognitive Science Perspective*. Lawrence Erlbaum Associates, Hillsdale, pp. 287-307
- Li, Rulong 李如龙. 1962. Xiàménhuà de biàndiào hé qīngshēng 廈門話的變調和輕聲

- [Tone change and the neutral tone in Xiàmén]. *Xiàdà Xuébào* (Shèhuì kēxué bān) 廈大學報 (社會科學版) 3: 78-114
1963. Xiàménhuà de wén bái yídú 廈門話的文白異讀 [*Literary and colloquial reading in Xiàmén*]. *Xiàdà Xuébào* (Shèhuì kēxué bān) 廈大學報 (社會科學版) 2: 57-100.
2002. Lun Minyu yu Wuyu, Keganyu de guanxi 闽语与吴语、客赣语的关系. *Minyu yanjiu jiqi yu zhoubian fangyan de guanxi* 闽语 研究及其与周边方言的关系, ed. by Ting Pang-hsin 丁邦新 and Zhang Shuangqing 张双庆. Hongkong: The Chinese University Press.
2005. Guanyu dongnan fangyan de diceng yanjiu 关于东南方言的 底层研究 [Study of the Sub-stratum of the Southeastern Dialects]. *Minzu Yuwen* (National literacy) 5.1-15.
- Lí Rúlóng 李如龍 and Chén Zhāngtài 陳章太. 1984. Lùn Mǐn fāngyán de nèibù de zhūyào chāyì 論閩方言的內部的主要差異 / Primary distinctions among the Min dialects. *ZYB* 2: 93-173.
1983. Lùn Mǐn fāngyán de yízhìxìng 論閩方言的一致性 / The common features of the Min dialects. *ZYB* 1: 25-81.
1991. *Minyu Yanjiu* [Min Research]. Beijing: Yuwen Press.
2001. *Xianyou County Record*. Beijing Xianzhuang Shuju Press.
- Li, Shu. 2003. Min Dialect and Its Evolution: A Discussion. *Journal of Zhejiang University*(Humanities and Social Sciences). 33: 3
- Li, Yongming. 1959. *Chaozhou Fangyan* [*The Chaozhou Dialect*], Zhonghua, Beijing.
- Liu, Danqing 刘丹青 2001. Lùnyuán fēnlièshì huàtí jiégòu chū tàn 《论元分裂式话题结构初探》 [A preliminary investigation of split argument topic constructions.] In *Yuyán Yánjiu zài Rènshí* 《语言研究再认识, 74-93.

- Shanghai: Shanghai Jiaoyu Chubanshe 上海教育出版社.
2003. Yuxù Lèixíngxué yu Jiècí Lílùn 《语序类型学与介词理论》 [Word Order Typology and the Theory of Prepositions] Beijing: Shangwu Yinshuguan 商务印书馆.
2004. Identical topics: A more characteristic property of topic prominent languages. *Journal of Chinese Linguistics* 32: 20–64.
2005. Yuyán lèixíngxué yu Hànyu yánjiū 《语言类型学与汉语研究》 (*Linguistic typology and Chinese language research*). In Liu Danqing (ed.), Y~uyánxué Qiányán yu Hànyu Yánjiū 《语言学前沿与汉语研究》 (*The Forward Line of Linguistics and Research into Chinese*) , 199–228. Shanghai: Shanghai Jiaoyu Chubanshe 上海教育出版社
- Liu, Dangqing & Xu, Liejiong. 1998. *Topic Structure and Function*. Shanghai: Shanghai Jiaoyu Press.
- Liu, Fuzhu. 1994. *Putian County Record*. Zhonghua Shuju Press.
2002. A study of the Xinhua Dialect Romanization. *Journal of Puxian University*. 9(4).
2007. 莆仙方言熟语歌谣 (*Proverbs in Puxian dialects*). Fujian People's Press.
- Liu, Lijin. 2008. The Anaphoric Function of the Reflexive *ziji* in Modern Chinese. *Wai Guo Yu (Journal of Foreign Languages)* 31(1): 36-44.
- Liu, Yue-hua., Wen-yu Pan., Hua Gu., 1983/1996. *Shiyong xiandai hanyu yufa* [A practical reference book on Modern Chinese grammar]. Shida shuyuan, Taipei.
- Lødrup, Helge (1999). Inalienables and binding theory. *Linguistics* 37(3), 365–388.
- Lyons, John, 1969. *Introduction to Theoretical Linguistics*. Cambridge University Press, Cambridge.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: CUP.

- Malchukov, Andrej L. 2008. Animacy and asymmetries in differential case marking. *Lingua* 118: 203–221.
- Maling, Joan. 1984. Non-clause-bounded reflexives in Modern Icelandic. *Linguistics and Philosophy* 7: 211–241.
- Mao, Zedong. 1939. *Xuexi Baiqiuen (learn from Henry Norman Bethune)*. Published No 8-army division.
- Markman, Vita G. 2009. On the parametric variation of case and agreement. *Nat Lang Linguist Theory* 27: 379–426
- Moravcsik, E. A. (1978). Agreement, in J. A. Greenberg, (ed.), *Universals of Human Language*. vol. 4. Stanford: Stanford University Press, 331-374.
- Myhill, J. 1997. Towards a functional typology of agent defocusing. *Linguistics* 35, 799-844
- Nagaya, Naonori. 2006. Preferred Referential Expressions in Tagalog. *Tokyo University Linguistic Papers (TULIP)*25: 83-106
- Maling, Joan. 1984. Non-clause-bounded reflexives in modern Icelandic. *Linguistics and Philosophy*, pp. 211–241.
- Manninen, Satu & Nelson, Diane. 2004. What is a Passive? The case of Finnish. *Studia Linguistica* 58(3): 212-251
- Malandra, Alfred. 1955. *A new Acholi grammar*. Nairobi, Kampala, and Dar es Salaam: Eagle Press.
- Malchukov, Andrej L., Haspelmath, Martin, Comrie, Bernard. 2007. Ditransitive constructions: a typological overview. Typescript, Max Planck Institute, Leipzig.
2008. Animacy and Asymmetries in Differential Case Marking. *Lingua* 118: 203-221.
- Matisoff, James A.. Verb concatenation in Lahu. *Acta Linguistica Hafniensia* (Copenhagen) 12(1): 69-120.

- Matthews, S. Xu, H. & Yip, V. 2005. Passive and Unaccusative. In *The Jieyang Dialect of Chaozhou. Journal of East Asian Linguistics*. 14: 267-298.
- Meillet, Antoine. 1948. *Linguistique historique et linguistique générale*. Paris.
- Minkoff, Seth A. 2004. Consciousness, Backward Coreference, and Logophoricity. *Linguistic Inquiry*. 35: 485-494.
- Mithun, Marianne, 1991. Active/agentive casemarking and its motivations. *Language*, 67: 510–546.
- Moreno, J. Carlos. 1987. Universal and typological aspects of impersonality. Paper read at the XIV *International Congress of Linguistics*, Berlin.
- Niu, Xiaohong. 2008. Analysis of the Denotation of the Third-person Pronouns and the Reflexive Pronouns in Chinese. *Journal of Lanzhou University* 36(3): 112 -115.
- Newman, J., 1993a. A Cognitive Grammar approach to Mandarin *gei*. *Journal of Chinese Linguistics* 21 (2), 313–336.
- 1993b. The semantics of giving in Mandarin. In: Geiger, R.A., Rudzka-Ostyn, B. (Eds.), *Conceptualizations and Mental Processing in Language*. Mouton de Gruyter, Berlin & New York, pp. 433–485.
1996. *Give: A Cognitive Linguistic Study*. Mouton de Gruyter, Berlin & New York.
- Norman, Jerry & Mei, Tsulin. 1976. The Austroasiatics in ancient South China: Some lexical evidence. *Monumenta Serica* 32.374-301.
1979. Some ancient Chinese dialect words in the Min dialects. *FY* 3(3): 202-211.
1988. *The dialects of the Southeast. Chap. 9 in Chinese*. Cambridge: Cambridge University Press.
1991. The Min dialects in historical perspective. *Languages and dialects of China*, ed. by William S-Y. Wang, 325-60. [= *Journal of Chinese Linguistics. Monograph Series Number 3*.] Berkeley: Project on Linguistic Analysis, University of

- California, Berkeley.
- O'Grady, William 1991. *Categories and Case*, John Benjamins, Amsterdam.
- Oku, Satoshi. 1998. *A Theory of Selection and Reconstruction in the Minimalist Perspective*. Ph.D. dissertation. University of Connecticut.
- Oshima, D. Y. 2004. 'Zibun revisited: empathy, logophoricity, and binding'. In *Proceedings of the 20th NWLC, Vol. 23 of University of Washington Working Papers* : 175–190. Seattle: University of Washington.
- 2006a. *Perspectives in Reported Discourse*. Ph.D. thesis, Stanford University.
- 2006b. GO and COME revisited: What serves as a reference point? In *Proceedings of the 32nd Annual Meeting of Berkeley Linguistics Society*. Berkeley: University of California
2007. On empathic and logophoric binding. *Research on Language & Computation* 5: 19-35.
- Ōta, Tatsuo. 1958. *Chugokugo rekishi bunpo* [A historical grammar of modern Chinese]. Tokyo: Konan Shoin.
- Oya, Toshiaki. 2002a. Sintai eno kooi to kekkakoobun [Actions on one's body and resultative constructions]. In *Zisyoo to gengo keisiki* [Events and Language Forms], 145–175. Tokyo: Sansyuusya.
- 2002b. Reflexive and resultatives: some differences between English and German. *Linguistics* 40(5): 961-986
- Ou, Tzu-shan. 2007. *Suo* relative clauses in Mandarin Chinese. *Language and Linguistics* 8.4: 913-937.
- Papafragou, Anna. 1996. On generics. *UCL Working Papers in Linguistics* 8.
- Parker, F., K. Riley, & C. F. Meyer. 1990. Untriggered reflexive pronouns in English. *American Speech* 65: 50±69.

- Partee, Barbara H. 1989. Binding implicit quantifiers in quantified contexts. *CLS* 25.
1999. Weak NP's in HAVE sentences. In *JFAK [a Liber Amicorum for Johan van Benthem on the occasion of his 50th Birthday; CD-ROM]*, eds. J. Gerbrandy, M. Marx, M. de Rijke and Y. Venema. Amsterdam: University of Amsterdam.
- Reprinted in Partee, Barbara H.
2004. *Compositionality in Formal Semantics: Selected Papers by Barbara H. Partee*. Oxford: Blackwell Publishing, 282-291.
- Parry, Mair, 1998. The reinterpretation of the reflexive in Piedmontese: 'impersonal' se constructions. *Transactions of the Philological Society* 96: 63-116.
- Pawley & Syder. 1983. Natural selection in syntax. Notes on adaptive variation and change in vernacular and literary grammar, *Journal of Pragmatics* 7: 551-579.
- Post, Marike. *The serial verb construction in Fa d'Ambu*. In *Colibri*
- Perlmutter, David M. 1983. Personal vs. impersonal constructions. *Natural Language and Linguistic Theory* 1.141-200.
1983. Some proposed laws of basic clause structure. *Studies in Relational Grammar* 1, ed. by David Perlmutter, 81-128. Chicago: University of Chicago Press.
1984. Working Is and Inversion in Italian, Japanese, and Quechua. *Studies in Relational Grammar* 2, ed. by David Perlmutter and Carol Rosen, 292-330. Chicago: University of Chicago Press.
1984. The 1-Advancement Exclusiveness Law. *Studies in Relational Grammar* 2, ed. by David Perlmutter and Carol Rosen, 81-125. Chicago: University of Chicago Press.
1989. Multiattachment and the Unaccusative Hypothesis: The perfect auxiliary in Italian. *Probus: Journal of Latin and Romance Linguistics* 1.63-119.
2002. Language-internal explanations: the distribution of Russian impersonals. *Language* 78: 619-650.

- Peyraube, Alain & Xu Liejiong. 1997. On the double-object construction and the oblique construction in Cantonese. *Studies in Language* 21.1: 105-127.
- Pollard, Carl & Xue, Ping. 1998. Chinese Reflexive *ziji*: Syntactic Reflexives vs. Nonsyntactic Reflexives. *Journal of East Asian Linguistics*. 7: 287-318.
- Postal, Paul. 1970. On So-Called Pronouns in English. In *Readings in English Transformational Grammar*, edited by Roderick Jacobs and Peter Rosenbaum, pp. 56-82. Waltham, Mass.: Ginn.
- Postal, Paul, and Geoffrey Pullum. 1988. Expletive noun phrases in subcategorized positions. *Linguistic Inquiry* 19: 635–670.
- Primus, Beatrice, 1998. The relative order of recipient and patient in the languages of Europe. In: [Siewierska \(1998b\)](#), pp. 421–473.
- Rappaport Hovav, M. and B. Levin. 2002. Change of State Verbs: Implications for Theories of Argument Projection. *Proceedings of the 28th Annual Meeting of the Berkeley Linguistics Society*, 269-280.
- Ramsey, S. Robert. 1987. *The Languages of China*. Princeton: Princeton UP.
- Reinhart, Tanya and Eric Reuland. 1991 Anaphors and Logophors: An Argument Structure CHINESE REFLEXIVE ZIJI 317 Perspective, in J. Koster and E. Reuland (eds.), *Long-Distance Anaphors*, Cambridge University Press, New York, pp. 238–321.
1993. Reflexivity, *Linguistic Inquiry* 24, 657–720.
- Reinhart, Tanya & Tal Siloni. 2003. Thematic Arity Operations and Parametric Variations, *OTS working papers in linguistics*, TL-03-001, University of Utrecht, available also at <http://www.let.uu.nl/~tanya.reinhar>.
2004. Against an unaccusative analysis of reflexives. in A. Alexiadou, E. Anagnostopoulou and M. Everaert (eds) *The unaccusativity Puzzle: Studies on the*

syntax-lexicon interface

2005. The Lexicon-Syntax parameter: Reflexivization and other arity operations. *Linguistic Inquiry* 36: 389-436.
- Reuland, Eric & Jan Koster. 1991. Long-Distance Anaphors: An Overview, in J. Koster and E. Reuland (eds.), *Long-Distance Anaphors*, Cambridge University Press, New York, pp. 1–25.
- Reuland, Eric. 2001. Primitives of binding. *Linguistic Inquiry* 32.439–92.
- Rice, Sally A. 1987. Towards a cognitive model of transitivity. Ph.D. dissertation, University of California.
- Rivero, M. L. 2000. On impersonal reflexives in Romance and Slavic and semantic variation. In J. Camps and C. Wiltshire (eds.) *Romance syntax. semantics and their L2 acquisition*. Benjamins: Amsterdam.
- Rizzi, Luigi. 1986. Null objects in Italian and the theory of pro. *Linguistic Inquiry* 17: 501–57.
1990. *Relativized minimality*. Cambridge, MA: MIT Press.
- Saeed, John. 1999. *Somali*. Amsterdam: John Benjamins.
- Safir, Ken. 1982. Syntactic chains and the definiteness effect. Cambridge, MA: MIT dissertation.
1985. *Syntactic chains*. London New York New Rochelle Melbourne Sydney: Cambridge UP.
- Sagat, Laurent. 1993. Chinese and Austronesian: evidence for a genetic relationship. *Journal of Chinese Linguistics* 21. 1: 1-62.
- Sansò, A., 2006. ‘Agent defocusing’ revisited. Passive and impersonal constructions in some European languages. In: Abraham, W., Leisiö, L. (Eds.), *Passivization and typology: Form and Function*. John Benjamins, Amsterdam-Philadelphia, pp.

239-270.

2009. Grammaticalization paths or prototype effects? A history of the agentive reflexive passive in Italian', in *Language Sciences* (special issue on 'Prototypes and Grammaticalization: Grammaticalization as prototype?', guest editor Tanja Mortelmans Sasse.

Sells, P. 1987. Aspects of logophoricity. *Linguistic Inquiry*, 18 (3), 445-479.

Shi, Dingxu. Topic and Topic-Comment Constructions in Mandarin Chinese. *Language*.76: 383-408.

Schladt, Mathias. 2000. The typology and grammaticalization of reflexives. In *Reflexives: Forms and functions*, ed. by Zygmunt Frajzyngier and Traci S. Curl, 103–124. Amsterdam: John Benjamins.

Shibatani, Masayoshi. 1977. Grammatical Relations and Surface Structure. *Language* 53, 789–809.

1978. *Nihongo-no Bunseki* [Analyses of Japanese], Taishyuukan, Tokyo.

1984. *The Passive: A Contrastive Linguistic Analysis*. London: Croom

1985. Passives and Related Constructions: A Prototype Analysis, *Language* 61(4), 821-848.

1991. *Functional Grammar*. London: Routledge.

2008. Voice and case. In Andrej Malchukov and Andrew Spencer (eds.). *Handbook of Case*. Oxford: Oxford University Press. 322-339.

Shibatani, Masayoshi and Chiseks Cotton. 1976. Remarks on Double-Nominative Sentences, *Papers in Japanese Linguistics* 5, 261–277.

2006. On the conceptual framework for voice phenomena. *Linguistics* 44(2): 217-69.

Shibatani, Masayoshi, and P. Pardeshi. 2002. The causative continuum. In *The Grammar of Causation and Interpersonal Manipulation*, *Typological Studies in Language*

- 48, pp. 85–126. Amsterdam & Philadelphia: Benjamins.
- Shi, Qisheng. 1996. *Fangyan Lungao* [*Collected Papers on Dialectology*], Guangdong Renmin Chubanshe, Guangzhou.
- Shi, Yu-Zhi. 1996. Proportion of extensional dimensions: The primary cognitive basis for shape-based classifiers in Chinese. *Journal of the Chinese Language Teachers Association* 31.2: 37-59
2005. The Conceptual Foundations for Differences of Passive Constructions of Chinese and English. *Interfaces of Sub-systems of Language*. Shanghai: Fudan University Press.
- Shi, Yu-Zhi & Liu, Chunhui 石毓智 & 刘春卉. 2008. 汉语方言处置式的代词回指现象及其历史来源. 《语文研究》 (*Linguistic Research*) 3: 52-55
- Shlonsky, U. 1997. *Clause Structure and Word Order in Hebrew and Arabic*. Oxford: Oxford University Press.
- Siewierska, Anna. 1984. *The Passive: A Comparative Linguistic Analysis*. London: Croom Helm.
1996. Word order Type and Alignment Type, *Sprachtypologie und Universalienforschung* 49, 149-176
1998. Variation in Major Constituent Order: A Global and a European Perspective, in A. Siewierska (ed.), *Constituent Order in the Languages of Europe*. Berlin: Mouton de Gruyter, 475-551.
2003. Person Agreement and the Determination of Alignment, *Transactions of the Philological Society* 101.2: 339-370.
2004. *Person*. Cambridge: Cambridge University Press.
- 2005 Passive constructions, In M. Haspelmath . M.S. Dryer, D. Gil & B. Comrie (eds.). *World Atlas of Language Structure*. Oxford University Press, chapter 107:

434-437.

2007. Ways of impersonalizing: pronominal vs. verbal strategies. In Lachlan Mackenzie, Anne-Marie Simon-Vandenberg, Elsa Gonzáles Álvarez & María de los Angeles Gomez- González (eds), Amsterdam John Benjamins. 27-61.

2008. Introduction: Impersonalization: an agent based vs. a subject based perspective. *Transactions of the Philological Society* 106.2: 1-23.

Siewierska, A., and D. Bakker. 1996. The Distribution of Subject and Object Agreement and Word Order Type, *Studies in Language* 20-1, 115-62.

Siewierska A. & D. Bakker. 2009. Case and alternative strategies. In. A. M. Malchukov & A. Spencer (eds), *Handbook of Case*: Oxford: Oxford University Press, 290-303.

Siemund, Peter. 2000. *Intensifiers in English and German – A Comparison*. Routledge, London.

Siemund, Peter & Daniel Hole. 2006. Introduction: Operations on argument structure. *Linguistics* 44-2: 203-216.

Silverstein, Michael. 1976. *Hierarchy of Features and Ergativity*. In R.M.W. Dixon (ed) *Grammatical Categories in Australian Languages*, 112–71. Canberra: Australian Institute of Aboriginal Studies.

Simpson, Jane. 1983. Resultatives. Papers in Lexical-Functional Grammar, ed. by Lori Levin, Malka Rappaport, and Annie Zaenen, 143–57. Bloomington: Indiana University Linguistics Club.

Smith, Michael B. 2005. The Conceptual Structure of German Impersonal Constructions. *Journal of Germanic Linguistics* 17.2: 79-140

Sohng, Hong Ki. 2003. *Topics in the syntax of East Asian languages: Long-distance anaphora and adverbial case*. Doctoral Dissertation, University of Washington.

Song, Jae Jung. 1996. *Causatives and Causation: A Universal-Typological Perspective*.

- London and New York: Addison Wesley Longman.
- Speas, M. 2004. Economy, agreement and the representation of null arguments. Ms. UMass, Amherst. Helm.
- Steinbach, Markus. 1999. Unaccusatives and anticausatives in German. Ms. University of Mainz (to appear in *Studies on unaccusativity*, Artemis Alexiadou et. al. (eds.) Amsterdam: Benjamins.)
- Sun, Chaofen and Givón, Talmy. 1985. On the so-called SOV word order in Mandarin Chinese: A quantified text study and its implication. *Language* 61: 329-351.
- Sung, Li-May. 2006. Verbal reflexives/reciprocals in (some) Formosan languages. Tenth International Conference on Austronesian Linguistics, 17-20. Palawan, Philippines. Linguistic Society of the Philippines and SIL International
- Tai, James H.-Y. 1973. Chinese as a SOV language. *Chicago Linguistic Society* 9: 659–671.
1976. On the change from SVO to SOV in Chinese. *Chicago Linguistic Society* 12-2: 291–304.
- Talmy, Leonard. 1985a. Lexicalization Patterns: Semantic Structure in Lexical Forms. In T. Shopen, ed., *Language Typology and Syntactic Description, Vol.3: Grammatical Categories and the Lexicon*, pp. 57–149. Cambridge, MA: Cambridge University Press.
- 1985b. Force Dynamics in Language and Thought. In *Parasession on Causatives and Agentivity, Chicago Linguistic Society, 21st Regional Meeting*, pp. 293–337. Chicago: Chicago Linguistic Society.
- 2000a. *Toward a cognitive semantics. Vol. I: concept structuring systems*. Cambridge, MA/London: MIT Press.
- 2000b. *Toward a cognitive semantics. Vol. II: typology and process in concept*

- structuring*. Cambridge, MA/London: MIT Press.
- Tang, C.-C. Jane. 1989. Chinese Reflexives, *Natural Language and Linguistic Theory* 7, 93–121.
- Tang, S.W. 1998. On the ‘inverted’ double object construction. In Matthews, Stephen. (ed.). *Studies in Cantonese Linguistics*. Linguistic Society of Hong Kong.
- Tang, Ting-Chi. 1976. *Studies in Transformational Grammar of Chinese, Vol. 1*, Student Book Company Ltd, Taipei.
- Thepkanjana, Kingkarn & Uehara, Satoshi. 2008. The verb of giving in Thai and Mandarin Chinese as a case of polysemy: A comparative study. *Language Science* 30: 621-651.
- Tian, Han. 1955. *Tianhan Juzuo Xuan*[Selections of Tianhan operas]. Beijing: Renmin Wenxue Press. Timothy, Shopen(ed.) *Language Typology and Syntactic Description*. Cambridge: Cambridge University Press.
- Ting, Jen. 2003. The Middle Construction in Mandarin Chinese and the Presyntactic Approach, paper presented at the 15th North American Conference on Chinese Linguistics at Michigan State University,
- Ting, Pang-Hsin. 2002. *The Study of Min Dialects and Its Relationship with Other Peripheral Dialects*. (edited with Chang Song-hing) Hong Kong: The Chinese University Press, 2002.
- Tomioka, Satoshi 2003. The semantics of Japanese null pronouns and its cross-linguistic implications. In *The interfaces: deriving and interpreting omitted structures*. ed. Kerstin Schwabe and Susanne Winkler, 321– 339. Amsterdam: John Benjamins.
- Tsao, Feng-fu. 1991. On the mechanisms and constraints in syntactic change: Evidence from Chinese dialects. *International Symposium on Chinese Languages and Linguistics* 2: 370–388.

- Tung, T'ung-Ho. 1953. Languages of China. *Chung-kuo Wen-hua Lun-chi*, 1.83-103.
- Ura, Hiroyuki. Checking theory and dative subject constructions in Japanese and Korean. *Journal of East Asian Linguistics* 8: 223-254
- Vendryes, J. 1916. Sur deux faits de syntaxe celtique. *Mémoires de la Société de Linguistique de Paris* XX (4): 179-189.
- Wang, Futang 王福堂. 1999. *Hanyu fangyan yuyin de yanbian he cengci* 《汉语方言语音的演变和层次》 [The Evolution of Chinese Dialects Phonology and Strata]. Beijing: Yuwen Chubanshe.
- Wang, Li. 1958. *The Historical Manuscript on Chinese Grammar*. Beijing: Kexue chubanshe. [In Chinese]
- Wen, Chuan Hui. 2007. Causative, permissive, and Yielding: The Mandarin Chinese verb of *Rang*. *Linguistics: Special Issue* 1 (2): 69-90.
- Whaley, Lindsay. 1997. *Introduction in Typology*, SAGE Publications, Thousand Oaks.
- Wali, K. et al. (2000). 'Lexical Anaphors and Pronouns in Kashmiri'. In: Lust et al. (eds.), *Lexical Anaphors and Pronouns in Selected South Asian Languages*. Berlin: Mouton, 471-512.
- Wang, Jianshe 王建设. 2005. 《从明清闽南方言戏文中的人称代词考察》 *Cong Mingqing Mangan Fangyan Xiwen zhong de Rencheng Daici Kaocha*. [Personal pronouns in opera scripts of Min and Qin dynasty] *The 9th Min dialect International conference. Fuzhou*.
- Wang, Li. 1958. *Hanyu shigao* [The historical manuscript on Chinese grammar]. Kexue chubanshe, Beijing.
- Whitley, M. S. 1978. Person and number in the use of *we*, *you*, and *they*. *American Speech* 53: 18-53.
- Wales, K. 1996. *Personal Pronouns in Present-Day English*. Cambridge: Cambridge

- University Press.
- Walker, Marilyn, Masayo Iida, and Sharon Cote. 1994. Japanese discourse and the process of centering. *Computational Linguistics* 20(2): 193–233.
- Wehr, Barbara. 1995. *SE-Diathese im Italienischen*. Tübingen: Narr.
- Wu, Fuxiang. 2003. Further Discussion on the origin of the Disposal Construction. *Yuyan Yangjiu [Linguistic Study]*. 3: 1-14
- Wu, Yunji. 2005. *A synchronic and diachronic study of the grammar of the Xiang dialects*. Berlin: Mouton de Gruyter.
- Xiong, Xueliang. 1998. First person anaphora as a cognitive unit in Chinese. *Word* 49. 3: 383-401
- Xu Liejiong and Liu Danqing. 1998. *Huati de Jiegou yu Gongneng* [Topic construction and their functions]. Shanghai: Shanghai Jiaoyu Chubanshe.
- Xue, Ping, Carl J. Pollard, and Ivan A. Sag. 1994. A New Perspective on Chinese Reflexive *Ziji*, in *Proceedings of the 13th West Coast Conference on Formal Linguistics*, CSLI Publications, Stanford University, pp. 432–447.
- Yang, Hsiu-Fang. 1982. *A Study on the Literary and Colloquial Systems of the Southern Min Dialects*. Taipei: National Taiwan University Dissertation.
- Yang, Bojun and Leshi, He. 1992. *Gu hanyu yufa jiqi fazhang* (A grammar of ancient Chinese and its development). Beijing: Yuwen chubanshe.
- Yap, F., Iwasaki, S. 1998. ‘Give’ constructions in Malay, Thai and Mandarin Chinese: a polygrammaticization perspective. *CLS* 34, 421–438.
2003. From causative to passive: a passage in some East and Southeast Asian languages. *Cognitive Linguistics and Non-Indo-European Languages*. Mouton de Gruyter, Berlin & New York, pp. 419–445.
- Yuan, Yulin. 2003. A review of Topic Structure and Function. *Dandai Yuyanxue* [Contemporary Linguistics], 1: 54-63.

- Yue-Hashimoto, Anne 1993. *Comparative Chinese Dialectal Grammar: A Handbook for Investigators*, Centre des Recherches *Linguistiques sur L'Asie Orientale*, Paris.
1991. *Hanyushi Tongkao* 《汉语史通考》. Chongqing: Chongqing Press.
1999. The Min translation of the *Doctrina Christiana*. *Contemporary Studies on the Min Dialects (Journal of Chinese Linguistics Monograph Series 14)*, ed. by Pang-Hsin Ting. Berkeley: POLA, 42-76.
- Yip, V. & Matthews, S. 2007. *The Bilingual Child: Early Development and Language Contact*. Cambridge: Cambridge University Press.
- Zribi-Hertz, Anne. 1989. Anaphor Binding and Narrative Point of View: English Reflexive Pronouns in Sentence and Discourse. *Language* 65: 4, 695–727.
- 1995 Emphatic or reflexive? On the endophoric character of French *luimême* and similar complex pronouns. *Journal of Linguistics* 31: 333-374.
- 2007a. Bare NPs and deficient DPs in Haitian Creole and French: From morphosyntax to referent construal. In [Noun Phrases in Creole Languages](#), Baptista, Marlyse and Jacqueline Guéron (eds.), 265–298.
- 2007b. From intensive to reflexive: The prosodic factor. *Reciprocals and Reflexives Theoretical and Typological Explorations*, edited by König, et al. Berlin, New York: Mouton de Gruyter.
- Zwarts, Joost. 2008. Semantic map geometry: two approaches. *Workshop Semantic Maps: Methods and Applications*. Paris.
- Zubin, D. A. & Li, N. 1990. Discourse Continuity and Perspective Taking. *Proceedings of the Chicago Linguistics Society*, 26. Included (1995) in J. F. Duchan, G. A. Bruder & L. E. Hewitt (Eds.), *Deixis in Narrative* (pp. 287-308). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Zubin, D. A., Chun, S. A., & Li, N. 1990. Misbehaving Reflexives in Korean and

Mandarin. *Proceedings of the 16th Annual Meeting of the Berkeley Linguistics Society*,16: 338-354.