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**Tense, Aspect and Modality in Modern Shanghainese as
evidenced in the missionary linguistic and translation works
on/in modern Shanghainese**

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Thesis submitted for the degree of PhD

2021

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Abstract

This dissertation is a description of tense, aspect and modality in modern Shanghainese (1843 ~ 1950), based on investigations on a self-collected database of missionary linguistic and translation works in Shanghainese, with special reference to the realisation of the subjunctive meaning.

Verb-ending particles, sentence-final particles and temporal adverbs are the main objects of the study in discussing temporal grammatical encoding. The study proposes that the main function of verb-ending particles is to provide situation time at a sentential level. Particular focus is also placed on the semantics of two sentence-final particles: *tse* and *keh*. It is proposed that the *tse* is used within a sentence cluster to bring out a situation and is used at the end of a sentence to present a conclusion, a summary remark, or an end to a stretch of description. Both uses contribute to the discourse organization by introducing a current reference time point. *Keh* encodes a congruence of two usages: past time or assertion. The discussion of temporal adverbs focuses on reporting the examination of relevant data. This includes the distribution of temporal adverbs, their classification, and a comparison with contemporary Shanghainese and Mandarin. While describing the adverbs that occur both in modern Shanghainese and in contemporary Shanghainese and Mandarin, other adverbial expressions unique to modern Shanghainese are also reported with examples.

The dissertation then studies modal expressions, including modal auxiliary verbs and modal adverbs. Modal auxiliary verbs are examined in two aspects: epistemic and non-epistemic modality. It is proposed that epistemic auxiliary verbs in Shanghainese can override the meaning of verb-ending particles by changing realis situations to irrealis ones or enhancing the possibility of irrealis situations. The discussion of the modal adverbs focuses on describing the modal expressions that are common to contemporary Shanghainese and Mandarin but also identifies expressions unique in modern Shanghainese.

The investigation to subjunctivity focuses on the realisation of the subjunctive meaning in the data, as an amalgamation of tense, aspect and modal features. Subjunctivity refers to possible events that may occur, which I purpose that two factors contribute to the situation with subjunctive meaning: the state of situations in the actual world and other possible worlds and the relation with actuality. It is found that the temporal and modal expressions discussed previously contribute to the realisation model of the subjunctive meaning, while contextual information can also play this role in some cases.

Throughout the dissertation, theoretical discussions are exemplified with examples in modern Shanghainese obtained through database search.

As records of modern Shanghainese, which is very different from contemporary Shanghainese and is no longer used in spoken form, are only accessible as digitized files or as rare copies in special libraries outside China, this study is a first attempt in converting scanned scripts into a searchable database (of around 200,000 Chinese characters) and in conducting a grammatical study of Shanghainese utilizing the database. It is also one of the first attempts in studying the realisation of subjunctive meaning in Shanghainese.

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Abbreviations

1SG-first person singular

2SG-second person singular

3SG-third person singular

1PL-first person plural

2PL-second person plural

3PL-third person plural

ADJ-adjective

ADV-adverb(ial)

AG-agent

AGR-agreement

AM-assertion marker

ASP-aspectual suffix

AUX-auxiliary

CDM-conditional marker

CEP-cause and effect particle

CLF-classifier

CM-complement marker

COMPL-complementizer

COND-conditional

CONJ-conjunction

CUR-current state marker

DUR-durative

EM-SFP-emotive sentence final particle

FUT-future

EXP-experiential aspect marker

LE-perfective marker

MOD-modifying marker
NOM-nominative case
IMPFV-imperfective
IM-SFP- imperative sentence-final particle
IND-indicative
INF-infinitive
INTERJ-interjection
IPFV-imperfective
IRR-irrealis
LOC-locative
MP-modal particle
NEG-negation, negative
OBJ-object
PASS-passive
PFV-perfective
PM-pause marker
PN-proper name
PNP-perfective non-past
POSS-possessive
PR-the marker for potential PVCs
PRED-predicative
PREP-preposition
PRS-present
PROG-progressive
PRON-pronoun
PRT-particle
PST-past
Q-question marker

REFL-reflexive

SBJ-subject

SBJV-subjunctive

SFP-sentence final particle

SP-status-assertion particle

SUFF-Suffix

TOP-topic

VEP-verb ending particle

*-ungrammatical structure

Chapter 1 Introduction

1.1 Research objectives

Many of today's linguistic description came from missionaries (Hovdhaugen 1996), who learned local languages in order to preach and translated religious works into local languages. With the help of informants, the missionaries often worked as professional linguists. Missionaries recorded local languages and described unseen typological features with an adequate methodology (Zwartjes 2018). However, their linguistic and translation works have not received sufficient attention, including those in Shanghainese. There is a large gap in the study of Chinese missionary works (Zwartjes 2018), especially after the 1950s, when Mandarin Chinese became the official language, causing dialects to fall into disrepute and records and research on the dialect tend to be neglected. This dissertation will examine modern Shanghainese in missionary works with a goal to provide description and analysis on some aspects of the language.

While this dissertation is primarily data-based on the language used in the missionary works, it cannot avoid evaluating them to some extent. An examination of the missionary writings requires a re-analysis of the linguistic phenomena depicted from the perspective of modern linguistics, while also making it clear that records whose primary purpose is for language learning are not necessarily supported by a theoretical framework, and that some linguistic phenomena might not have been recognized at that period of time or went unnoticed by the authors themselves at the time these works were written (Zwartjes 2018). Thus, taking missionary writings as data for a more rigorous inquiry requires both historical and modern linguistic perspectives.

This dissertation will examine how *tense*, *aspect* and *modality* are realised in modern Shanghainese, with special reference to the subjunctive meaning. Traditionally, the subjunctive refers to a mood that is presented by verbal inflections, indicating subjective attitudes of speakers towards propositions. At the level of formal

representations, as Chinese lacks grammatical inflection, the study of the subjunctive cannot be limited to verbal forms and needs to extend to other forms, such as particles and temporal adverbs. At the level of semantics, the interpretation of the subjunctive is closely related to time and modal meaning, which in turn calls for the investigation of how temporal and modal meaning is expressed in the language. The scope of the subjective category in Chinese discussed here is broader than that in studies on English subjunctives, and includes a wider range of grammatical phenomena such as counterfactual conditionals, the past temporality, modality, etc. The current study is conducted from a descriptive point of view and makes heavy use of a database of missionaries works

The following questions are addressed in this thesis:

1. The grammatical encoding of temporal and modal meaning in modern Shanghainese.

-The contribution of verb-ending particles, sentence-final particles and temporal adverbs to the expression of time.

-The contribution of modal auxiliaries to the expression of modal meaning.

2. The grammatical encoding of the subjunctive meaning.

-How to realise the subjunctive meaning through the realisation of tense, aspect and modality (TAM).

-The interaction between tense, aspect and modality in expressing the subjunctive meaning.

1.2 Data used for the thesis

The current study takes modern Shanghainese (近代上海話) as the research object which denotes the Wu language or dialect spoken in the urban and suburban areas of Shanghai from 1843 to the early 1950s. Archival data from written works by missionaries mainly emerged from the time when Shanghai was opened as a treaty port in 1843 with the signing of the Treaty of Nanjing till the establishment of the People's

Republic of China (PRC) in 1949 and the consolidation of the PRC Government in the 1950s. Works in Shanghainese include biblical writings and translations, textbooks and grammar books, magazines and informal releases such as church pamphlets, which made modern Shanghainese the most recorded in published form compared with the language in any other historical periods.¹

Many works by missionaries have not been properly preserved in mainland China. One reason is that some of these works are informal publications, such as brochures printed by churches, which are difficult to preserve. Another is the devastation caused by the Cultural Revolution from 1966 to 1976, together with the hostility to religion by the government at that time, which led to the burning of many religious writings and other works of missionaries, making them even rarer today. However, these works have been preserved in overseas libraries as western missionaries brought them back when they returned to their countries. The digitalisation of rare library collections around the world has made those previous works accessible to the public, making it possible to conduct exhaustive research on them.

The large-scale texts of modern Shanghainese are the writings of missionaries, which can be regarded as living fossils of Shanghainese and as valuable linguistic material. Although the missionaries were not native speakers, they were highly trained in the language and were perfectly capable of describing it, and they often had local people as assistants. The language they recorded could be checked and proofread by these assistants.

The data chosen for this dissertation are those currently available. Other data also exist, but there is currently no access to them. For example, the Shanghai Library has the Old and New Testaments in modern Shanghainese, but the texts are not available electronically. From the point of view of historical linguistics, the idea is to draw as scientific a finding as possible from imperfect data, and although the data chosen for this dissertation is not exhaustive, it is adequate for the study of modern Shanghainese.

¹ A classification of Shanghainese will be given in 1.3.3.

I have built a database by manually inputting the scanned versions of missionary Shanghainese publications, which makes it possible to obtain first-hand information and search identified grammatical features.² The works consulted are listed in Table 1-1. The current study can be regarded as a synchronic study, as the research data is drawn from written works during a particular period.

Table 1-1: Missionary Shanghainese publications consulted in the study

Title	Translated name	Publish year	Characters	Library
Youlaba Guo (油拉八國)	European Countries	1849	25088	National Library of France
Hengli Shilu (亨利實錄)	The history of Little Henry and his bearer	1856	13455	Oxford Bodleian
Chenzao Yubei (趁早預備)	Prepare before it is too late	1868	1305	Oxford Bodleian
Gangdandiushi (剛担丟士)	The name of a Roman king	1868	1815	Oxford Bodleian
Shenpan Rijiao (審判日腳)	The time of judgment	1868	794	Oxford Bodleian
Lujia Chuan Fuyin Shu (路加 傳福音書)	The Gospel of Luke	1886	39289	Harvard- Yenching Library
Matai Chuan Fuyin Shu (馬太 傳福音書)	The Gospel of St. Matthew	1895	36573	Harvard- Yenching Library

² Cf. Appendix IV for the link to the database. Some libraries offer scanned copies online; some do not have scanned versions. No electronic version of the text was photographed. Both scanned copies and photographs were then manually inputted as searchable electronic versions.

Shengjing Shiji (聖經史記)	Old Testament History	Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890	54226	National Library of Australia
Shitu Yanxing Zhuan (使徒言行傳)	The words and deed of Apostolic	1891	15663	National Library of Australia
Yesu Yanxing Zhuan (耶穌言行傳)	The words and deed of Jesus	Vol.1:1894, Vol.2:1892, Vol.3:1887, Vol.4: 1887	37726	National Library of Australia
Shitiaojie Zongyi Wenda (十條誠總意問 答)	Questions and Answers to the Ten Commandments	1899	2488	National Library of Australia
Ali Paipai Feng Dao Ji (阿里排 排逢盜記, Ali- baba et les quarante voleurs)	Alibaba and the Forty Thieves	1921	23515	Northeastern People's University Library, ³ China

1.3 Chinese and Chinese languages

1.3.1 The Chinese language

³ The name of the library shown in the book is a former name used from 1952-1958 and it was changed to Jilin University Library in 1958.

The term ‘Chinese’ is an umbrella one that comprises many distinct variants. These different variants have been considered as one language represented by *Putonghua* (普通話 regulated Mandarin) as the standard language since 1955. And the variants of Chinese have been recorded with one unified written system which reinforces the standard unity view.

According to Yuan (2001), Chinese languages are traditionally classified into seven groups or dialect regions including the northern dialects, Hakka, Min, Cantonese, Wu dialects, Xiang dialects and Gan dialects (see figure 1-1). Putonghua is mainly based on the northern dialects and closely resembles the language spoken in Beijing, while Shanghainese belongs to the Wu dialects, a group of languages spoken in Shanghai, Zhejiang province, the southern half of Jiangsu province, and parts of Anhui, Fujian and Jiangxi provinces (see figure 1-2). A great many Chinese dialects are mutually unintelligible in terms of phonetic and phonology. The level of diversity is higher in certain areas. For instance, northern dialect speakers have difficulties in understanding the Wu dialects or Cantonese. On the whole, Wu dialects have a low percentage of mutual intelligibility with Mandarin Chinese phonetically and lexically (Tang and van Heuven 2015, Simpson 2018).

1.3.2 The relationship between Guanhua and Putonghua

Guanhua (官話) emerged as the official language of China during the Ming Dynasty⁴ (明朝) to facilitate communication between people from different areas. It was first based on the language spoken in Nanjing which was the capital at that time. Nanjing dialect remained the official language of China until the middle of the Qing Dynasty⁵ (清朝). Although the capital switched from Nanjing to Beijing in the mid-Ming Dynasty, the Beijing dialect did not become dominant until the middle of the 19th century.

⁴ Ming Dynasty: 1368-1644.

⁵ Qing Dynasty: 1636-1912. The mid - Qing Dynasty spanned from 1662 to 1840.

In 1728, Emperor Yong Zheng (雍正) of Qing Dynasty established the *Zhengyin Shuguan*⁶(正音書館, Academy for Correct Pronunciation) to promote the Beijing dialect. By the mid and late Qing dynasty,⁷ the Beijing dialect gradually gained influence and replaced the Nanjing dialect. After Qing Dynasty, the Republic of China (1921-1949) maintained Guanhua as the official language which was then regulated and redefined as Putonghua in 1955 after the establishment of the PRC.

In 1956, the Chinese government began to fully implement Putonghua all over the country, releasing instructions on promoting the language. For example, public media, including broadcasting, newspapers, publishing houses and other social media are required to promote Putonghua. Primary schools and middle schools are required to teach Putonghua and labour unions across the country are also asked to spread it actively. Before that, people in various parts of China spoke their local dialects. The promotion of Mandarin Putonghua gave rise to a Putonghua + dialect dual-language situation.

1.3.3 Historical background of Shanghai and Shanghainese

The Shanghai area was first called *Shen* (申), an abbreviation of *Chunshen* (春申), mainly because the Shanghai area was once the feudal enclosure of Chunshenjun Huangxie⁸ (春申君黃歇) during the Warring States Period⁹. Shanghai was first mentioned as a highly populated place in the northeast of Huating (華亭) county¹⁰

⁶ Emperor Yongzheng set up *Zhengyin Shuguan* to implement Beijing official dialect. He ordered Fujian and Guangdong provinces to promote the use of the Beijing dialect. In his imperial edict, he wrote that students who could not understand and speak the official language would not be allowed to take the imperial examination.

⁷ The late Qing Dynasty spanned from 1841 to 1911.

⁸ Chunshenjun Huang Xie (314BC—238BC) was a nobleman, general and Prime Minister of Kingdom Chun during the late Warring States period of ancient China.

⁹ Warring States Period: 475BC-221BC.

¹⁰ The earliest record is in *Song hui yao ji gao* (宋會要輯稿, Song Dynasty Manuscript Compendium), a work extracted in part from the Ming Dynasty *Yongle Encyclopedia*, composed by Xu Song (徐松, 1781-1848) of Qing Dynasty.

(Qian 2003:1). In 1291, the five townships in the West Bank of the Huangpu River merged (in the northeast of Huating County), establishing Shanghai County in 1292 which belonged to Songjiang (松江) Province. At that time, Shanghai had already become a busy coastal port with frequent exchanges between merchants. The Shanghainese language took shape along with the forming of the Shanghai administrative region in the period from the Spring and Autumn Period¹¹ (春秋) to the Han Dynasties¹² (漢朝), and the language spoken before 1843 is named as *early Shanghainese* (早期上海話).

After the First Opium War (1840-1842), Shanghai opened its port in 1843 and became one of the first five trading ports in China (Pott 1928:10). As a result, a large number of domestic migrants and foreigners entered Shanghai. And several foreign ‘concessions’ which were administered by Western countries were established in Shanghai. In 1927, the urban areas other than the concessions in Shanghai was officially granted special city status by the central government. After that, in 1958, the entire Shanghai area, including 10 surrounding suburban counties which originally belonged to Jiangsu Province, was zoned into the Shanghai municipality. After that, the area of Shanghai was fixed, including 10 districts and 10 surrounding suburban counties (see figure 1-3).

The above administrative region remained the same until the 1980s. Since the 1980s, administrative divisions have changed several times. For example, some counties were changed to districts, such as Jiading (嘉定) and Jinshan (金山). Some districts and counties combined to form new districts, such as the establishment of Pudong new district (浦東新區) in 1992, which mark a new upsurge of Shanghai’s economy following the economic reform and opening of China in 1978. By the end of

¹¹ Spring and Autumn Period: BC770-BC476.

¹² Han Dynasties: BC202-220.

2017, all the counties have been abolished and the number of districts had risen to 16 (see figure 1-4).

The changes in geographic and administrative regions in Shanghai cannot be separated from the flow of population, and every influx of immigrants has exerted influence on Shanghainese. After the opening to international trade in 1843, the domestic migrants mainly came from the surrounding provinces including Jiangsu and Zhejiang, and they started to learn Shanghainese when they arrived. Consequently, Shanghainese, which was originally based on Songjiang dialect, was also subject to the influences of other dialects, especially the Suzhou dialect in southern Jiangsu and the Ningbo dialect in northern Zhejiang (Hu 1978; Zhu 1999:2; Chen 2003:10). Another influx came from foreign immigrants who brought new words, including many English words, into Shanghainese.

Contemporary Shanghainese (當代上海話) refers to the language used after the early 1950s till now. The definition of contemporary Shanghainese is similar to the division by Liu (2004) but extends the starting time from the 1990s to the 1950s. Contemporary Shanghainese has been divided into three variants: the old, the middle, and the new. The old variant, used by people in the suburban areas, largely overlaps with modern Shanghainese. The middle variant which is used by most middle-aged people is considered as the standard variant. The new variant refers to the language used by young people in the urban area. Compared to other variants, although the new variant is most influenced by Putonghua, it has a lot of overlaps with the middle variant.

As a result, Shanghainese can be classified broadly into three categories: early Shanghainese, spoken before 1843; modern Shanghainese, spoken from 1843 to the early 1950s, and contemporary Shanghainese, spoken after the early 1950s up to now.

1.3.4 The current situation of Shanghainese

Due to the promotion of Putonghua, Shanghai has undergone an overall language shift (Simpson 2018). The use of Shanghainese is waning and the number of

Shanghainese speakers is declining. Most of the immigrants who came to Shanghai at the end of the 20th century were able to communicate with local people in Mandarin, and there was no need to specifically learn Shanghainese, which led to a significant increase in the number of occasions when Mandarin was used. In addition, due to the promotion and popularity of Mandarin, it has also become a language used by young people on a daily basis (Qian 2008: 886). In the 1990s, schools banned the use of Shanghainese, which was one of the main reasons for the decline in the spread of the language (Shen 2016). In the past decade, there has been a growing social concern on Shanghainese; for example, in 2012, a call ‘Saving Shanghai dialect’ is signed by scholars to protect the language across the academia and public (Shen 2016). At present, Shanghainese is included in the curriculum of some primary and secondary schools, but the extent to which it is effective in promoting Shanghainese in the absence of assessment remains to be examined. In addition, the complexity of Shanghai's demographic composition may also affect the preservation and promotion of Shanghainese. At the end of 2020, the total population of Shanghai was 24.8708 million, of which 14.3912 million are permanent household residents and 10.4796 million are permanent residents, accounting for about 42.1% of the total population.¹³ The permanent resident population also includes many new Shanghainese. Neither they nor the foreign population have a native language command of Shanghainese, which also makes it more difficult to use Shanghainese.

Figure 1-1: Chinese dialects regions¹⁴

¹³ From *Shanghai seventh National Population Census (2021)* which is co-edited by the Information Office of the Shanghai Municipal People's Government and the Shanghai Statistics Bureau.

¹⁴ From Norman (1988: 184).

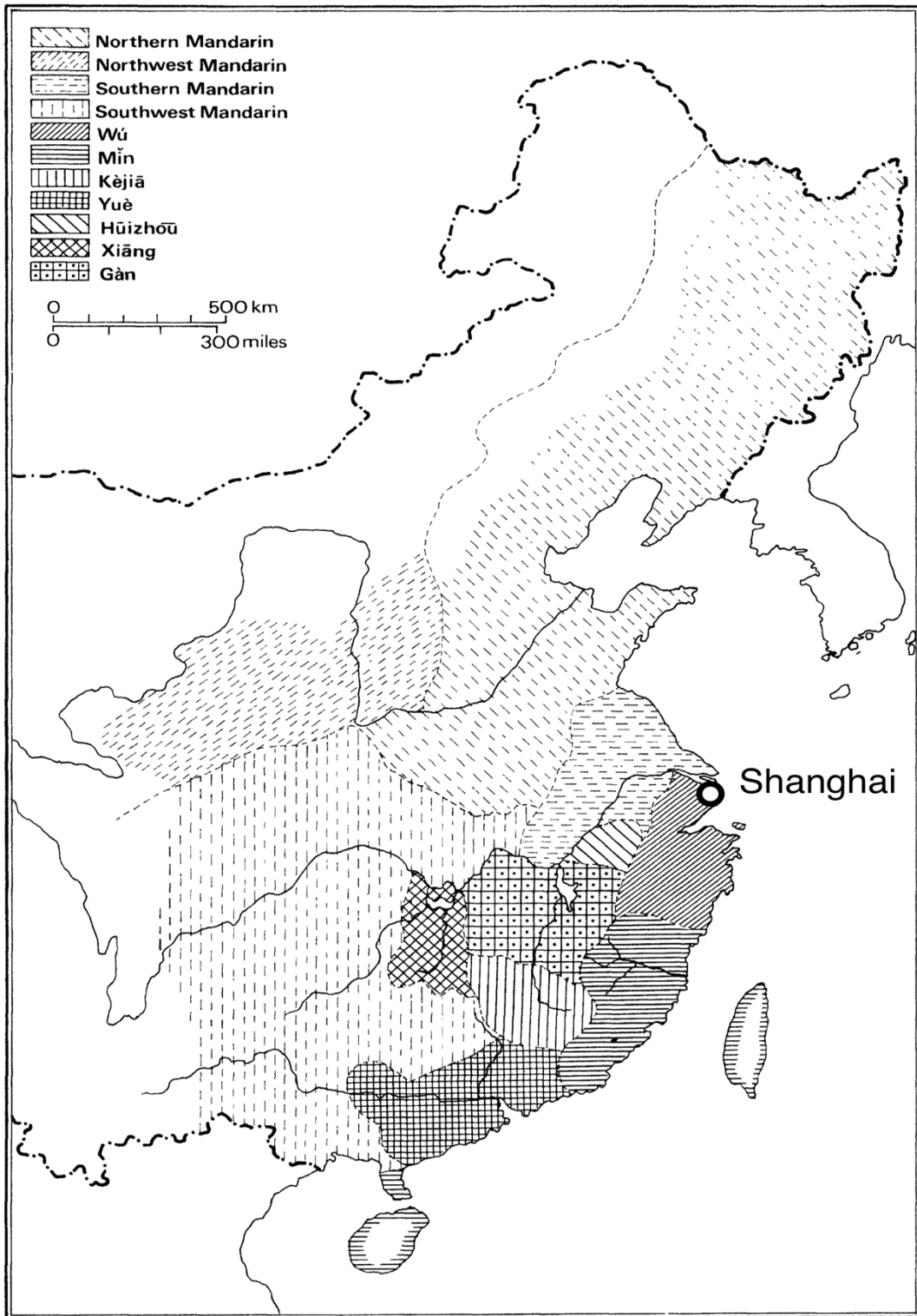


Figure 1-2: Wu dialect regions¹⁵

¹⁵ From llmap.org.

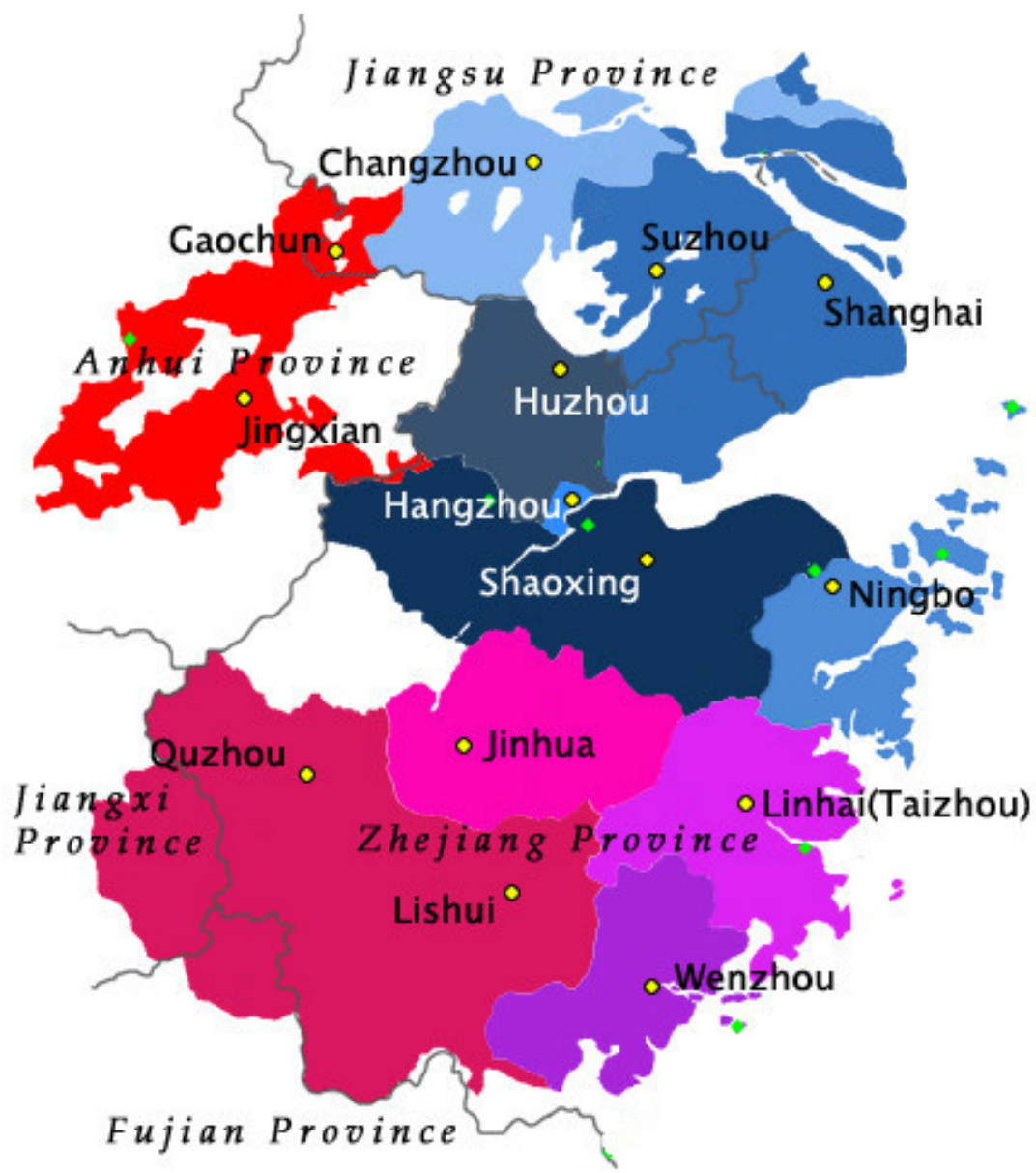


Figure 1-3: 1958 Shanghai area map¹⁶

¹⁶ From virtualshanghai.net.

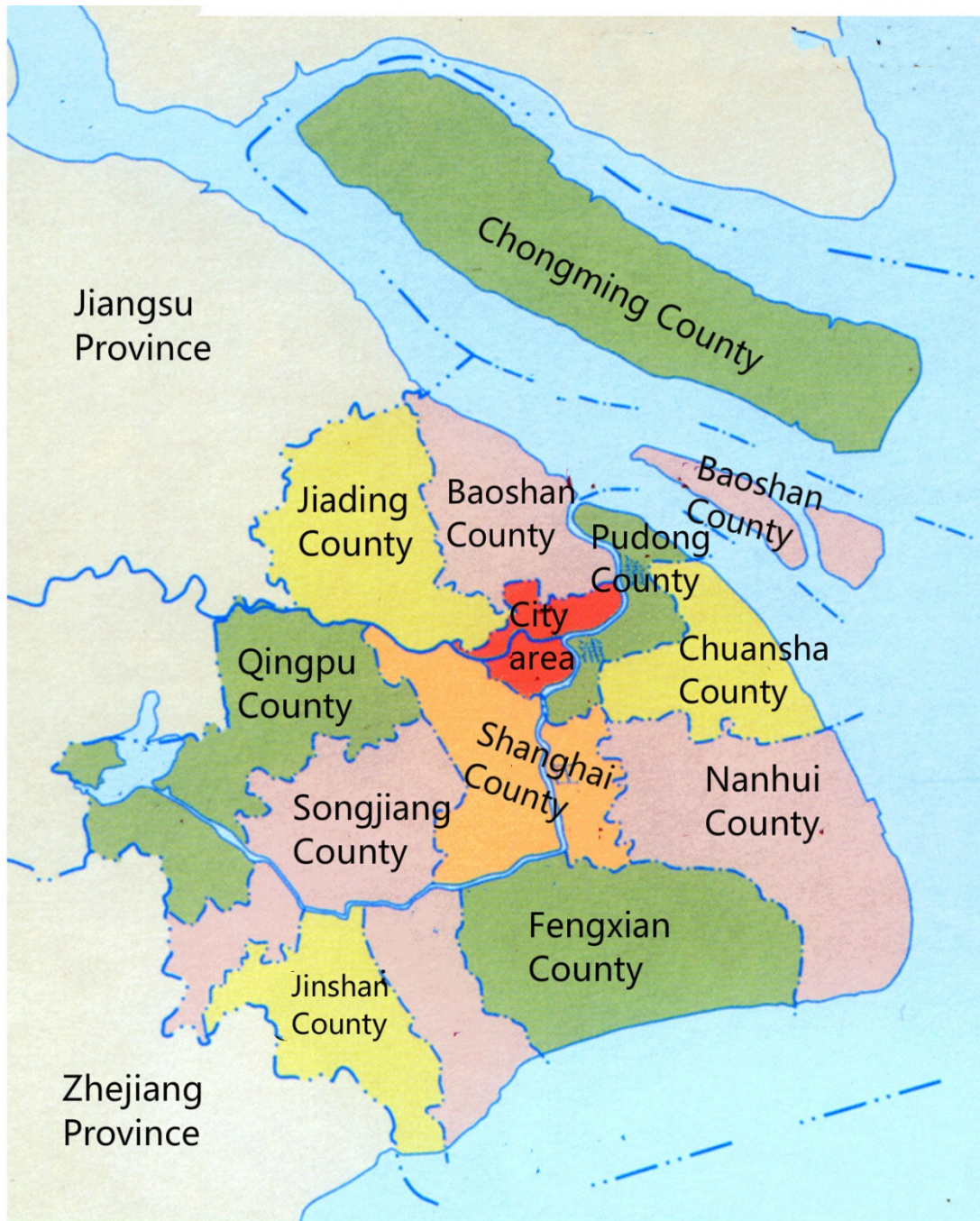
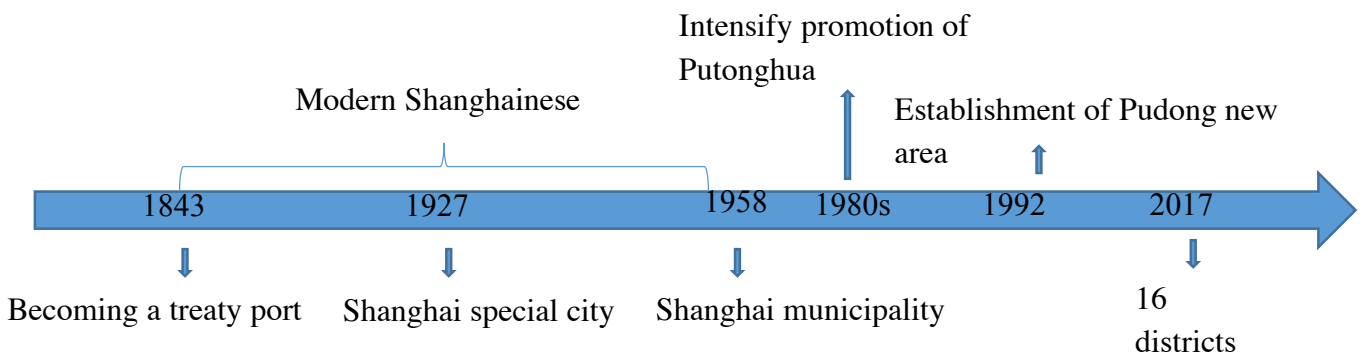


Figure 1-4: Shanghai area district map¹⁷

¹⁷ From travelchinaguide.com.



Figure 1-5: A timeline of Shanghai city



1.4 An overview of the practice of missionaries in China

1.4.1 Religious practice

The interaction between ancient China and the Christian world can be traced back to the *Daqin Jingjiao* (大秦景教, Nestorian Christianity) in the Tang Dynasty¹⁸ (唐朝), as shown by the Nestorian Tablet set up by Persian missionaries in 781 in the ancient imperial capital of Xi'an. The tablet recorded the spread of *Jingjiao* in the Tang Dynasty and the doctrines of the church in Chinese, accompanied by the Syrian language which is now preserved in the *Beilin* (碑林, a large collection of ancient stone tablets) of Xi'an. Later, Emperor Wuzong (武宗) ordered the persecution of Buddhism, which also spread to *Jingjiao*.

After the establishment of the Yuan Dynasty¹⁹ (元朝), the Catholic Pope sent envoys to China frequently. In 1294, an Italian priest, Montecorvino,²⁰ came to China to introduce Catholicism. Although there were Chinese Catholic believers in the Yuan Dynasty, they were almost all ethnic minorities, and no one was from the ethnic Han (Yang 1994:3). Later, with the demise of the Yuan Dynasty, Catholicism declined in China.

Two hundred years later, with the Reformations led by Martin Luther and the successful voyages of global circumnavigation, the Jesuits gathered a group of missionaries to spread the Gospel all over the world, including China. The first Jesuit missionary who came to China was Xavier.²¹ Unfortunately, neither Xavier nor his follower Valignano²² got access to the inland area (Gu 2004). In 1583, Valignano's student Ricci²³ arrived at Zhaoqing²⁴ and established the first missionary base. The

¹⁸ Tang Dynasty: 618-907.

¹⁹ Yuan Dynasty: 1271-1368.

²⁰ John of Montecorvino (1247-1328).

²¹ Francis Xavier (1506-1552).

²² Alessandro Valignano (1539-1606).

²³ Matteo Ricci (1552-1610).

²⁴ Zhaoqing (肇庆): a city in the Midwest of Guangdong province.

arrival of Ricci brought a positive start to the recovery of Catholicism in China. Ricci worked hard to learn Chinese and the Chinese culture. He published the first world map in Chinese and co-translated *Tianzhu Shilu* (天主實錄, Records of God) into Chinese with a native Chinese, which is the first Christian theological work in Chinese by Westerners. Moreover, he translated Western Catholic writings into Chinese with other missionaries, such as the *Ten Commandments* and *the Lord's Prayer*. Besides Catholic doctrines, Ricci introduced Western geometry, geography, astronomy and other aspects of knowledge to China. At the same time, he made contributions in spreading Chinese culture to promote East-West interaction. During his stay in China, the number of people baptised was as high as 4,000 (Yang 1994:3). Nevertheless, because of the etiquette collision in the early Qing Dynasty, Emperor Kang Xi (康熙) ordered the deportation of missionaries, and the spread of Catholicism in China was once again hindered.

The missionary work of protestants in China started relatively late. The first protestant missionary to come to China was Morrison,²⁵ arriving in 1813. After years of hard work, he finally completed the translation of *the Old and New Testament* and the compilation *A Dictionary of the Chinese Language*. Morrison was not only the first protestant missionary but also the first person to introduce all the original teachings of Christianity to China.

After the two Opium Wars (1840-1842,1856-1860), the situation changed dramatically. China was forced to open its ports and trade with foreign countries, seeing a flood of missionaries pour into China under the patronage of the West. The number of missionaries by 1849 reached 1324 (Yuan and Chen 2016:74). With the help of the terms of Treaties, missionary work was further carried out after the two Opium Wars. Missionaries first established parishes at the commercial ports and then moved along the Yangtze River into the interior of western China. In the case of Catholicism, after 1846, Catholic churches set up three diocese areas: Macao, Nanjing and Beijing.

²⁵ Robert Morrison (1782-1834).

Meanwhile, protestants sent churches to China to carry out missionary activities, including The London Conference, The Congregation, The Baptist Church, and The Evangelical Church. With the establishment of the church organisation, a large number of churches also began to emerge in urban and rural areas of China.

As one of the earliest port cities, Shanghai gradually developed into a missionary centre. As to the Catholics, the French Jesuit missionaries established the first of the Shanghai Diocese in Xujiahui (徐家匯) and extended it to Jiangsu and Anhui provinces (Dai 2005). On the part of the Christians, Medhurst²⁶ and other missionaries from the London Missionary Society entered Shanghai in 1843 and established the Shanghai Missionary Station and churches to carry out missionary activities. Subsequently, other churches, such as the Anglican Church of the United Kingdom and the Presbyterian Church of the United States, also went to Shanghai to set up churches and conduct missionary activities.

1.4.2 Other practices

The missionaries played an essential role in the modernisation process of China. Their practical activities covered a variety of aspects, including education, publishing, medical and other industries.

Regarding education, missionaries introduced modern Western education into China. By 1842, before the Second Opium War, they had established 50 schools in China. By 1875, the total number of church schools in China had reached about 800 (Gu 2004:213). In the Shanghai area, the Catholic Jesuit founded St. Ignatius High School in Shanghai in 1850, which was one of the earliest foreign academies founded by Catholic churches in China. The Anglican Church established an Anglo-American school in Shanghai, and the Presbyterian Church of the United States opened *Qingxin Shuyuan* (清心書院) in Shanghai. The development of higher education in China is inseparable from missionary work. The predecessors of many present Chinese

²⁶ Walter Henry Medhurst (1796-1857).

universities were founded by the missionaries. For instance, Yenching University (1919-1952), jointly founded by the Anglo-American Christian Church, was later incorporated into Peking University, Tsinghua University and China University of Political Science and Law. St. John's College, founded in 1879 by the merger of the Abbott Academy and the School of Grace, was later developed into St. John's University in Shanghai (1879-1952), and its faculties were later incorporated into Fudan University, East China Normal University, etc.

In addition to education, the missionaries have made a great contribution to medical care. By 1920, 820 hospitals and clinics had been established by missionaries in China (Yuan and Chen 2016:133). Many hospitals were also set up by churches in Shanghai, such as Yan Chai Hospital which was founded by the London Missionary Society in 1844; The West Gate Women's Hospital, which was opened in 1885; and the Sainte Marie Hospital which was built in 1907. Similar to the universities founded by the missionaries, many hospitals are also the predecessors of modern Chinese hospitals today.

The missionaries carried out much work in the publishing industry and ideological enlightenment. In 1815, the first Chinese newspaper, *Chinese Monthly Magazine*, was founded by Milne²⁷ and the punctuation system of western languages²⁸ was applied to Chinese. After that, another German missionary, Gutzlaff²⁹ founded the *Eastern Western Monthly Magazine* in 1833. By 1890, Western missionaries had founded 76 newspapers in China (Fang 1981:19).

In addition to newspapers, the missionaries also established publishing houses. In 1843, Medhurst, who was a missionary from the London Missionary Society, founded the *London Missionary Society Mission Press* (1843-1863) with others in Shanghai. It was one of the first publishing and printing institutions established by the missionaries

²⁷ William Milne (1785-1822).

²⁸ There is no punctuation in the writing of classical Chinese.

²⁹ Karl Friedlich Gutzlaff (1803-1851).

in China, and published and printed a considerable amount of Chinese books (Bai 2013). From 1844 to 1860, the London Missionary Society Mission Press published 171 books and periodicals, including 138 religious books (Xiong 1994:188; Di 2011).

After the London Missionary Society Mission Press, the next publishing agency established by the Christians in Shanghai was the American Presbyterian Mission Press (美华书馆 1860), while the most iconic publishing institution founded by the Catholic Church during the same period was the T'ou-Sè-Wè Printing House (土山灣印書館 1870).³⁰

The American Presbyterian Mission Press improved the efficiency of publishing by inventing the electroplate-matrix of Chinese characters and a rank frame based on the frequency of characters, which made it gradually come to rival the London Missionary Society Mission Press and became the largest modern publishing house at that time, carrying out extensive printing operations. For instance, it published handbooks of Christian doctrine and history which were used in spreading Protestant missions, and books on natural science such as *Wan guo yao fang* (萬國藥方 1886, prescription of the world), *Ge wu zhi xue* (格物質學 1898, the study of Physics).

T'ou-Sè-Wè Printing House was developed from a printing factory in an orphanage established by the Society of Jesuit. In the beginning, it was a printing department that printed older books (reprinting the theological works of the 17th and 18th centuries, such as those by Ricci). With the introduction of advanced printing technology from the West, it then became a press for printing and distribution. Its printing catalogue also extended from early religious works to other works in both Chinese and Western languages, especially in science and technology.

Since Shanghai became an international port, the American Presbyterian Mission Press and T'ou-Sè-Wè Printing House became the most representative Chinese and

³⁰ According to the 'The celebration of the 50 years of T'ou-Sè-Wè Printing House' (土山灣印刷所五旬金慶志盛 1920), in 1920, the T'ou-Sè-Wè Printing House had been established for 50 years, therefore the founding time of T'ou-Sè-Wè Printing House should be 1870.

western publishing institutions in Shanghai, turning the city into a stronghold for the introduction of modern printing technology to China (Zou 2010). It is worth mentioning that the newly published books by T'ou-Sè-Wè Printing House were generally in French except for the reprinted ones, as the establishment and development of the T'ou-Sè-Wè Printing House were strongly supported by the French Catholic Church (Huo 2011). Many other publications such as grammar books, textbooks and dictionaries written in modern Shanghainese were also published by T'ou-Sè-Wè Printing House.

These newspapers and publishing houses brought about profound changes in the modern Chinese newspapers (after 1949) as well as in the content and dissemination of the publishing industry. The audience for the press was no longer confined to the elite but gradually expanded to the general public.

The practical activities of missionaries in China exerted influence on several aspects of China's social development. Missionaries also made great efforts to mix with the Chinese society by experiencing and studying the culture and lives of ordinary people, which left us with invaluable written records.

1.5 Linguistic practice in the study of Shanghainese

The opening of the port of Shanghai led to an influx of foreigners, including government officials, businessmen, and sailors, in addition to the missionaries. These foreigners are in urgent need of learning Chinese languages and understanding the local culture. As a consequence, the linguistic writings by missionaries met their needs at that time. Although these works are primarily in the service of Westerners and cannot be regarded as complete academic studies, at the same time, they directly recorded Shanghainese methodically and preserved it for the present study.

Missionary linguistics involves ‘grammars, dictionaries, and any other work written by missionaries, such as catechisms or confessionaries, whenever they contain

relevant formation about the languages under study' (Zwartjes 2018:2). Missionary Shanghainese linguistic works constitute a sub-part of missionary linguistics.

1.5.1 Linguistic and translation works

Missionary works in Shanghainese cover several genres, including grammar books, textbooks, dictionaries and translation works. A brief overview is given in this section.³¹

Grammar books usually describe the language as a whole. According to Hovdhaugen (1996):

A missionary grammar is a description of a particular language created as part of missionary work by non-native missionaries. It is a pedagogical, synchronic grammar covering phonology, morphology and syntax based on data mainly from an oral corpus (in a few cases from religious—mainly translated—texts). (Hovdhaugen 1996:15)

The above definition might not apply to all cases rigidly, for example, some grammar books are not strictly synchronic, or some do not cover phonology, morphology, and syntax. Zwartjes (2018:3) suggests that from a communal point of view, grammar works may be considered 'older linguistic documentation'. From this perspective, missionary linguistic and translation works are records of local languages. In particular, the missionary records are an invaluable resource for the Shanghainese language, which lacks a unified writing form and has been scarcely recorded in published form since the 1950s.

Missionary works on Shanghainese grammar conform to Hovdhaugen's definition to some extent. For example, the three basic aspects of phonetics, vocabulary and syntax are all covered in *A grammar of colloquial Chinese, as exhibited in the Shanghai dialect*, written by the British missionary and sinologist Edkins in 1853, which is the

³¹ For detailed introductions, see You (2002) and Qian (2014).

first relatively systematic grammar book. This book was the first Chinese dialect grammar book to apply western linguistic theory and methods to provide a comprehensive analysis of the grammatical characteristics of Shanghainese. The book is divided into three parts: phonetics, lexical speech and syntax. Concerning phonetics, the author describes the phonetic system of Shanghainese, not only using Western vowels and consonants but also applying traditional Chinese *fanqie*³²(反切) to mark the pronunciation of words. The second part describes the composition of both monosyllable and compound words in detail. At the syntactic level, he focuses on the word order, especially on the temporal sequence of sentences. The other two books are *Grammaire du Dialecte de Changhai* (1941), by Bourgeois, a French missionary, and *Petit grammaire du dialecte de Song-kiang Chang-hai* by P. Rabouin, both of which were published by T'ou-Sè-Wè Printing House.³³

In contrast to the limited number of grammatical works, there are a larger number of teaching materials on modern Shanghainese. One of the earliest Shanghainese textbooks is *Lesson in the Shanghainese* written by Jenkins (1850), including 30 lessons. The book contains considerable vocabulary, phonetics and grammatical forms of modern Shanghainese. Most of the teaching materials serve specific groups, and their social significance is greater than that of education. For example, *Lecons ou Exercices de 'Langue Chinoise Dialecte de Song-Kiang* (1883), is a workbook, functioning as a tool to assist communication between monks and local churchgoers. Similarly, *Shanghai Dialect Exercises in Romanized and Character with Key to Pronunciation and English Index* (Davis 1910) was written for government clerks who needed to learn Shanghainese. The textbook *Lessons in the Shanghainese, in Romanized and Character with Key to Pronunciation* (Parker 1923) is for employees of the Shanghai municipal

³² Fanqie is a method in traditional Chinese lexicography to indicate the pronunciation of a monosyllabic character by using the onset of another character and the nucleus of a third one. A Chinese syllable does not usually contain a coda.

³³ The publication date of the latter is unknown.

government, and contains many topics related to a wide array of social events, allowing readers to learn the language while acquiring the local customs and culture.

The Missionaries in Shanghai compiled a number of dictionaries during the study of Shanghainese. The earliest English Shanghainese dictionary, *A Vocabulary of the Shanghainese*, was published in 1869 by Edkins, as a companion to his grammar book. Other Shanghainese dictionaries include *Shanghai Dictionary* (1936), compiled by a Japanese sinologist Teiichiroo; *A Dictionary of English and the Shanghainese*, which was reprinted and renamed as the *Dictionary of Shanghai Language in the Late Qing Dynasty* (2018). The initial version of this dictionary was published by the Presbyterian Church of Shanghai in 1901, providing valuable literature for the study of dialects. There also exist two French Shanghainese dictionaries, *Dictionnaire Francais-Chinois Dialecte de Chang-hai* (Rabouin 1894) and *Dictionnaire Francais-Chinois, Dialecte de Shanghai* (Bourgeois 1950).

The translation works by missionaries can be classified into two main categories. One is related to religion; one is works in other fields. The first person who translated religious writings into Shanghainese was Medhurst, translating the *Gospel of Saint John* in 1847. Later, Summers translated the *Gospel of Saint John* into Roman characters in 1853. Other translation works include five volumes of *Biblical Chronicles* (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890), *Henry's Record* (1856) etc. The second category covers several aspects, including novels, geography, etc. For example, the novel *Alibaba et les quarante* (1921) and a geographic book *Youlaba Guo* (1849).

1.5.2 Creating writing systems

The Chinese language uses characters to represent morphemes or words which is a logographic orthography (Simpson 2018). Chinese characters are very difficult for illiterate people to acquire, making it hard to write down Shanghainese with characters. As many people were illiterate at the time, both Chinese characters and other writing systems were new things for the locals to learn (Crawford 1888; Guo 2009). The

Chinese characters themselves are more complex, so the missionaries thought that a relatively simple writing system could be invented to record Shanghainese. It is relatively easy to spell the sounds of Shanghainese using the Roman alphabet, but it is difficult to implement among the general public, and the Roman alphabet is not always suitable for spelling words in Shanghainese. In order to allow the natives to read religious books and facilitate missionary activities, missionaries created alternative writing systems (Guo 2009). One of the most representative writing systems is a phonemic representation system that uses the strokes and the diacritics as phonetic notation for Shanghainese, which is created by an American Protestant missionary Crawford³⁴ in 1885.

The invention of the system starts from a report that was proposed by Taylor³⁵ at the monthly Missionary Conference, using Roman letters and diacritics for tones. Building on his report and further discussing the inability of the Roman alphabet alone to fully express Shanghainese, a decision was made at the conference to set up a special committee for its members to develop their own writing systems, after which the best of them would be selected (Simpson 2018). Although Crawford was not a member of the committee, he also developed his system. He stumbled upon the Chinese character *men* (門, door) in an attempt to create a form of writing that was more acceptable to Chinese. Crawford's (1888) phonetic characters are remotely linked to the Fanqie method. The writing form of a character consists of two parts, Yunmu and Yinyun.³⁶ With respect to the glyph, the Yunmu looks like a vertical stroke while Yinyun looks like a horizontal stroke.³⁷ The 76 Yunmu and Yinyun adopted in the book constitute the phonetic notations for Chinese characters that were read in Shanghainese pronunciation (Guo 2009; Simpson 2018). Crawford's system was recommended to missionaries by the committee. The proximity of the glyphs to Chinese characters is the most prominent

³⁴ Tarleton P. Crawford (1821-1902).

³⁵ Hudson Taylor (1832-1905).

³⁶ The 'Yunmu' here refers to what is known today as the 'initials', 'Yinyun' as a vowel.

³⁷ Yunmu (initials) writes vertically such as 門. Yinyun (vowel) writes horizontally such as 一.

feature of his writing system and the reason for its acceptance by other missionaries (Guo 2009).

Although Crawford's system was promoted and published, the actual situation was not ideal. Only a hundred or two hundred Shanghainese had learned the system due to the lack of official support (Guo 2009). Although this writing system was not popularised on a large scale, Crawford's work can be considered as a breakthrough and represents some of the research achievements in this field.

1.6 Methodology

The thesis collects and builds a searchable database of modern Shanghainese, and then gives a description and analysis of the linguistic forms presented in the database. The methodology underlying the current study is based on descriptive linguistics and documentary linguistics. Descriptive linguistics aims to systematically describe the diversity of languages based on the empirical observation of linguistic facts (François and Ponsonnet 2013). The first step in describing language is data collection, normally through carrying out fieldwork to delineate the grammar of that language. As the focus of this dissertation is not the language in use today, data cannot be collected through fieldwork or from the Shanghainese spoken today. Fortunately, the writings of missionaries have recorded Shanghainese spoken at the time and can be studied as second-hand data. The next step in descriptive linguistics is a systematic analysis of internal structures of the language. These internal structures are defined as emic categories: 'categories whose identification is based on the internal properties of a particular system' (François and Ponsonnet 2013: 186). My study also analyses certain expressions in modern Shanghainese and how certain categories are encoded based on existing data. A complete language description includes a grammar, a dictionary and a collection of texts (François and Ponsonnet 2013), but as the aim of this dissertation is

not to complete a grammar book, I focus on certain linguistic forms and investigate their meaning and functions, rather than describe all aspects of the language.

The research in this dissertation also involves some aspects of documentary linguistics. In contrast to descriptive linguistics, it focuses on the documentation and archiving of languages, especially endangered languages (Furbee 2010). In comparing descriptive with documentary linguistics, Furbee (2010) notes that documentary linguistics is concerned with the activity of languages, whereas descriptive linguistics follows linguistic theory in the recording and discussion of linguistic data. Language documentation is defined as ‘systematically recorded representations of both spoken and written forms of a language in their appropriate sociocultural context’ (Himmelmann 1998; Woodbury 2003; Austin 2006, 2007; Furbee 2010). The writings of the missionaries, in addition to grammars and dictionaries, which are part of descriptive linguistics, also contain records of conversations of speakers in communities, which meets the definition of language documentation. And since the primary purpose of these writings is not to provide materials for language description, their writings can also be seen, to some extent, as documentary linguistics in which collaboration is established with language speakers in communities to record linguistic facts.

1.7 The structure of the thesis

This dissertation is composed of eight chapters. Chapter 2 begins by laying out the theoretical dimensions of the research and looks at how the subjunctive is examined in previous studies. Chapter 3, Chapter 4 and chapter 5 focus on how time is expressed in modern Shanghainese. Chapter 3 and chapter 4 give a description of tense and aspect in terms of verb-ending particles and sentence-final particles. Chapter 5 mainly deals with another temporal expression, temporal adverbs, based on the examination of the data. A discussion of modal expressions in terms of modal auxiliary verbs and modal adverbs will be given in Chapter 6. Chapter 7 ties together previous chapters and draws

a complete picture of tense, aspect and modality in the realisation of the subjunctive meaning. The last chapter summarises the thesis and suggests possible directions for future research.

Chapter 2 Literature review

This chapter provides a review of relevant researches on subjunctivity, particularly on the investigation of subjunctive in modern Shanghainese, contemporary Shanghainese and Mandarin Chinese in previous studies, which serves to provide a background to the discussion in the following chapters.

2.1 Definition and mood selection

Before coming to the definition of the subjunctive mood, it will be useful to have a brief look at mood and the general concept of mood and its classification. Portner (2018) defines mood as follows:

Mood is an aspect of linguistic form which indicates how a proposition is used in the expression of modal meaning. (Portner 2018:4)

The general concept of mood has been employed in explaining various language phenomena, for example, the different forms of predicates in subordinate clauses, as shown in (1), or the different function of root clauses, as shown in (2).

(1)a. Pierre veut que Marie soit heureuse.³⁸ (French)

Pierre wants that PN is.SBJV happy

‘Pierre wants Marie to be happy.’

b. J’ai rêvé qu’il était président.

I dreamed that he was.IND president

‘I dreamed that he was president.’

³⁸ From Portner (2018:4).

- (2)a. Pick up a bird!³⁹
 b. Is Ben holding a bird?
 c. Ben is holding a bird.

The indicative and subjunctive form of the verbal head as shown in (1) is defined as ‘verbal mood’. The communicative function of root clauses is defined as ‘sentence mood’, and the most representative of which are imperative, interrogative and declarative as exemplified in (2a), (2b) and (2c) respectively. Both verbal and sentence mood indicate the realisation of the propositional meaning of sentences, but the difference lies in that verbal mood expresses a combination of compositional meaning within a sentence, while sentence mood focuses on indicating the communicative function between a speaker and a hearer. Although they are formally and semantically different, they are closely related, but I will not discuss their relationship too much here, except to clarify the concept of the two, which will help in the understanding of the subjunctive category.

2.1.1 The distribution of verbal mood

As a subtype of verbal mood, the subjunctive mood is considered as the use of verb-form different from that of the indicative mood (Fowler and Gower 1965; Quirk et al. 1985). It is often described as being alternating with a binary opposite, the indicative mood. The typical case of verbal mood selection commonly refers to the case where the embedded verb in a complement clause is determined by a matrix predicate (Portner and Rubinstein 2012) and has been mostly identified in Indo-European languages.

- (3)a. Marc sait que le printemps est/ *soit
 Marc knows that the spring be.IND.3SG/be.SBJV.3SG

³⁹ From Portner (2018:5).

arrivé.⁴⁰ (French)

arrived

‘Marc knows that spring has arrived.’

b. Marc veut que le printemps soit/ *est long.

Marc wants that the spring be.SBJV.3SG/be.IND.3SG long

‘Marc wants spring to be long.’

What contributes to the selection of the indicative or subjunctive form of the embedded predicate? As can be seen from the above example, what is different between (3a) and (3b) is the main predicate. From the perspective of the lexical semantics of the main predicate, *know* indicates knowledge and belief of the speaker while *want* indicates the speaker’s preference. In other words, the indicative or subjunctive form is determined by the matrix predicate semantically or the default semantic properties of the proposition determine the verbal mood form, which is an idealized but oversimplified explanation of mood selection. Some predicates do predict the choice of mood by their default semantic features, but this cannot be employed to all cases. The discussion then develops to how the relationship between the matrix predicate and the clause containing it should be interpreted.

There are two main strategies used to answer the above question. One is the method of *shifting parameters* that takes the selection of verbal mood in a complement clause to be due to the explication of modal parameters (Portner 2018). Taking the clauses with embedded verbs as a semantic argument, the verbal mood form is determined by the matrix predicate, which serves as a modal governor (cf. Giorgi and Pianesi 1997; Villalta 2000, 2006, 2008; Anand and Hacquard 2013; Portner and Rubinstein 2012 etc.).

⁴⁰ From Giannakidou (2016:177).

The other strategy is the method of *derived context* where the explication of modal parameters of the matrix predicate provides the common ground for the clause to choose verbal mood. To illustrate in a more detailed way, the example in (3) can be interpreted in another way that proposition of the (3a) and (3b) can be distinguished as realis and irrealis respectively, within grammatical contexts, which determines the truth of the clause in a designated set of worlds (cf. Huntley 1984; Farkas 1992; Giannakidou 1997, 1999, 2009, 2011, 2016; Quer 1998, 2001; Portner 2018 etc.).

The above discussion focuses on the complement clauses, but the subjunctive reading is not restricted to complement clauses. The verbal mood of subjunctivity is also found in other structures such as conditionals, relative clauses etc. For examples, *if* conditionals in English can have subjunctive mood which is termed as *subjunctive conditionals*, encoding conditional sentences that ‘have special tense or mood morphology in one or both of their clauses that have an irrealis flavour’ (Ippolito 2013:1), as shown in (4) where the past tense in the antecedent clause and the modal form *would* in the consequent clause express an ‘irrealis flavour’.

(4) If John died tomorrow, Mary would inherit a fortune.⁴¹

The choice of verbal mood in relative clauses is mainly based on the different meaning of the sentence. For instance, (5b) can be interpreted as *sending him presents to make him happy* is an event that happens in the actual world, in which the indicative is selected, while (5a) is in a possible world imagined by the speaker where the subjunctive form is used.

(5)a. Vull enviar-li regals que el facin content.⁴² (Catalan)
 want.1SG send.INF.him presents that him make.SBJV happy

⁴¹ From Ippolito (2013:1).

⁴² From Portner (2018:108).

‘I want to send him presents that make him happy.’

b.Vull enviar-li regals que el fa content. (Catalan)

want.1SG send.INF.him presents that him make.IND happy

‘I want to send him presents that make him happy.’

Additionally, when the matrix predicate is negated or is in an interrogative form, subjunctive mood can occur in the subordinate clause in the same position as it appears in complement clauses as shown in (6).

(6)a.Pierre ne croit pas que tout le monde soit venu.⁴³ (French)

PN NEG believe NEG that everybody be.SBJV come

‘Peter does not believe that everybody has come.’

b.Recordes que els hagin donat mai un premi? (Catalan)

remember that them have.SBJV given never a prize

‘Do you remember if they have ever given them a prize?’

The forms mentioned above are typical forms of expressing verbal mood, and other mood-indicating forms also exist in different languages.

2.1.2 Temporal and modal dependency

The subjunctive is typically regarded as ‘dependent’ mood because its temporal interpretation depends on the predicate of a higher clause. The *defective tense* of the subjunctive, denoting the temporal property of embedded subjunctive verbs, is triggered by the tense of the matrix verb, and the temporal relation between the two verbs can be regarded as that between an anaphora and its antecedent (Piccolo 1985). In

⁴³ From Portner (2018:111).

other words, the subjunctive does not exhibit independent time reference. Giorgi and Pianesi (1997, 2000) build on Piccolo (1985) and further point out that temporal dependency of subjunctive clauses is derived from the anchored events. Giorgi (2009) then focuses on Italian to highlight the features of the subjunctive in terms of the sequence of tense with reference to the syntax-semantic interface. She points out that in DAR⁴⁴ languages, mainly in embedded clauses, the speaker's coordinate does not have to be present when using the subjunctive. Namely that subjunctive forms cannot imply temporal interpretation in embedded clauses, which shares some similarities with Laskova's (2017) ideas that there is a temporal deficiency in the subjunctive. To put this in a more detailed way, verbal forms that indicate the subjunctive are not closely tied to time even though it appears so on the surface, as exemplified in (7).

- (7) Gianni dispiaceva che Maria partisse ieri/oggi/domani.⁴⁵
 PN sorry COMPL PN leave.PST.SBJV yesterday today tomorrow
 'Gianni was sorry that Maria left yesterday/ today/ tomorrow.'

Giorgi (2009) explains that the above-embedded clause is presupposed, but the relationship between the speaker and the event time cannot be determined. Although there are temporal adverbs, the relationship is still not clear. It is therefore hard to fix the value for the deictic adverbs in the sentence because it is hard to tell whether 'tomorrow' should be related to the time of utterance or to the time when Gianni felt sorry for the situation reported. However, the analysis here mainly concerns DAR languages. For non-DAR languages, Giorgi (2009) predicts that the temporal interpretation can be different. Additionally, the above analysis focuses on languages

⁴⁴ DAR: double access reading. It means the embedded clause can be interpreted according to the speech time of the utterance and the event time reported by the utterance. For example, in the sentence 'Tom said that Mary is pregnant', the pregnancy of Mary is interpreted both at the time when the speaker is uttering the sentence and the time when Tom said it (Giorgi 2009: 1838).

⁴⁵ From Giorgi (2009:1844).

that have a Sequence of Tenses (SoT), for languages without SoT, there is probably more variation in the temporal interpretation.

In addition to the temporal dependency, the selection of the subjunctive depends on a class of verbs that do not entail the truth of their complement in complement clauses, which is *nonveridicality*. Following the view that the distinction of indicative and subjunctive corresponds to the realis/irrealis division, Giannakidou (2011, 2016) advocated the view that mood selection is regulated by *nonveridicality* based on notional mood, concerning the truth assessment of clauses. She associates indicative verbs with the veridical and subjunctive with the nonveridical (Giannakidou 2016: 191).

Giannakidou approaches the mood selection from the perspective of the speaker's choice. When a speaker chooses between the indicative and subjunctive, a *nonveridical* modal space is created which contains *p* and *non-p* worlds. In this way, she makes an attempt to establish a unified claim on the modal features of the subjunctive cross-linguistically by discussing the evaluative process in mood choice. Although it is difficult to link the subjunctive to a certain type of modality as a variety of usages have been observed in the literature, *nonveridicality* can be seen as a modal regulation concept for the subjunctive by weakening the *veridicality* of the proposition expressed by the speaker. To be more specific, the subjunctive can be selected by the speaker when distinguishing between what he/she knows for sure and what he/she believes. If what the speaker expresses is not entirely sure, the *veridicality* of the proposition is weakened. Therefore, elements that indicate irrealis will be selected by the speaker, leading to a possible subjunctive reading.

Back to the aim of the current study, as mood is not encoded by verbal morphology in modern Shanghainese, it is difficult to judge the mood selection from the lexical semantics of predicates in complement clauses. The grammatical encoding plays out in different ways across languages, even though there are universal underpinnings for the representation of the subjunctive category. As a result, it is plausible to treat it as a category only with language-specific encoding. For modern Shanghainese, the

subjunctive expressions may involve more than one linguistic form, some are lexical, some are grammatical, whereas for English there are only grammatical forms.

2.2 Studies on the subjunctive in Mandarin Chinese

Unlike the European languages in which the subjunctive mood is either encoded by verbal inflection (such as Romance languages) or realised by uninflected particles which precede the verb, as shown in (8) (such as the particle *na* in Modern Greek) (Giannakidou 2009, 2011; Sampanis 2012), the expression of mood cannot be achieved by verb inflection or particles alone in languages that lack inflectional morphology like Chinese. The study of the subjunctive mood in Mandarin Chinese begins with the study of sentences which have irrealis flavour, leading to the issue of whether or not they contain the subjunctive mood and how it is encoded.

- (8) *Isos na erthi o Janis.*⁴⁶ (Modern Greek)
perhaps SBJV come.PNP.3SG the John
'Maybe John will come'.

The existing studies on subjunctive meaning in Mandarin Chinese take two perspectives, one studying clauses that express non-factual meanings, such as hypothetical conditionals, imperative sentences and interrogatives; the other aspect is to contrast between indicatives and subjunctives syntactically. In what follows, I will briefly summarize both the distribution of subjunctive expressions and the syntactic and semantic contrast between the subjunctive and indicative mood indicators in Mandarin.

2.2.1 The distribution of subjunctive expressions in Mandarin

⁴⁶ From Giannakidou (2011:62).

The initial exploration of the expression of subjunctive mood meaning focuses on hypothetical sentences where a hypothetical conditional of future or a counterfactual conditional is analysed, as shown in (9) and (10).

(9) 如果她能回來的話，保證我們的生活會很平靜的。⁴⁷

ruguo ta neng huilai dehua, baozheng women de shenghuo
if 3SG can come.back CDM be.certain our MOD life
hui hen pingjing de
will very peaceful AM

‘If she could come back, (I) promise our life will be very peaceful.’

(AM = assertion marker)

(10) 要是你早來一小時，就不會錯過那班車了。⁴⁸ (counterfactual)

yaoshi ni zao lai yi-xiaoshi, jiu buhui cuoguo na-ban
if 2SG early come one-CLF.hour then not.will miss that-CLF
che le
bus SFP

‘If you had come an hour earlier, you would not have missed that bus.’

Similar to the subjunctive conditionals in English mentioned above, conditionals containing the subjunctive meaning in Mandarin Chinese also satisfy the two conditions: there is temporal or modal elements in one or both clauses and the sentences have irrealis flavour. For instance, the epistemic modal auxiliary *hui* (會) carries an irrealis sense of future reading in the consequent clause of (9) and (10).

⁴⁷ From Luo (2016:2).

⁴⁸ Sentences in the paper that do not indicate the source are composed by myself.

Sentences that contain attitude verbs indicating wishes are identified as another sentence pattern to express the subjunctive mood, as shown in (11). Unlike the complement clauses in Indo-European languages, the subjunctive meaning expressed by the matrix verb is not reflected in the grammatical forms of the complement. The discussion of subjunctive meaning in the complement clause therefore focuses more on the semantic meaning of the predicate, treating the predicate verb as a direct mood-indicator. In this sense, the subjunctive meaning is determined by the semantic classification of the predicates.

(11)我希望早點完成論文。

wo xiwang zaodian wancheng lunwen

1SG hope early accomplish dissertation

‘I hope I can finish the dissertation early.’

Another type is sentences that express wishes and possibilities through modal auxiliaries as the mood-indicators. The following sentences contain modal auxiliaries of epistemic modality which are closely related to agents, such as *neng/hui/yao* (能/會/要) indicating possibility.

(12)他能來。⁴⁹

ta neng lai

3SG can come

‘He can come.’

(13)他會來。

ta hui lai

⁴⁹ (12) - (14) are from Cui (2003:342).

3SG will come

'He will come.'

(14)天要下雨。

tian yao xiayu

sky will fall.rain

'It is going to rain.'

Despite possibility, *neng* (能) and *hui* (會) also express ability. Peng (2005) further discusses circumstances under which polysemy modal verbs express epistemic modality. For example, an irrealis reading is produced when modal verbs co-occur with markers which express the continuity of a state, as exemplified in (15) and (16), in which *zhe* (著) and *xiaqu* (下去) describe a continuous state which normally expresses a realis situation, but modal verbs add a future temporal feature to make the situation irrealis.

(15)有蘿蔔我們還能渴著?⁵⁰

you luobo women hai neng ke zhe

have radish 1PL still can thirsty ASP

'We will not be thirsty with radishes.'

(16)賈里知道，自己干了件傻事，爸爸這人很固執，會追究下去。

Jiali zhidao, ziji gan-le jian shashi, baba zhe ren hen

PN know self do-PFV CLF silly.thing father this person very

stubborn, hui zhuijiu-xiaqu

stubborn will trace-COMPL

⁵⁰ (15) is from Peng (2005:142); (16) is from Peng (2005:158).

‘Jiali knows that he did something silly, and his father who is very stubborn will trace it.’

Epistemic modality can also be expressed by adverbs, such as *keneng* (可能 probably), *dagai* (大概 presumably), as shown in (17) and (18).

Possibility

(17)他可能去北京了。⁵¹

ta keneng qu Beijing le
3SG maybe go Beijing ASP
‘He may have gone to Beijing.’

(18)他大概二十歲了。

ta dagai ershi sui le
3SG presumably twenty years ASP
‘He is about twenty years old.’

Moreover, modal auxiliary verb and adverb can co-occur within one clause, semantically defined as *modal concord* (Portner 2018), both of them indicating a single modal meaning. A related situation exists in Chinese where an attitude verb co-occurs with a modal auxiliary as shown in (19). This also leads us to consider whether the subjunctive meaning in a sentence is represented by both the modal and the predicate verbs, or whether one of them is dominant,

(19)他懷疑我可能在說謊。

ta huaiyi wo keneng zai Shuohuang

⁵¹ (17) and (18) are from Qi (2002:21).

3SG suspect 1SG might PROG tell.lie

‘He suspected I might be lying.’

The distribution of subjunctive meaning discussed above is related to specific sentence types, and there may be other less typical expressions that also trigger subjunctive reading.

2.2.2 Syntactical contrast

The subjunctive mood is approached by Shi (2002) from a syntactical perspective through discussing indicative-subjunctive distinction, especially the distribution of negators. Shi (2001) terms sentences that express factual events as *indicative sentences*, while those expressing non-factual, hypothetical, subjective events or actions as *subjunctive sentences*. He focuses on syntactical patterns that are ill-formed in indicative expressions but are acceptable in subjunctive sentences. Four constructions have been discussed by Shi, including subjunctive subordinate sentences, the verb-complement structure, verb-reduplication (VV structure) and the structure with the duration marker *zhe* (著), as shown in (20) and (21).

Subjunctive subordinate sentences

(20)a.*我叫你先不看電視。⁵²

wo jiao ni xian bu kan dianshi

1SG ask 2SG first NEG watch TV

‘I ask you not to watch TV yet.’

b.我叫你先别看電視。

wo jiao ni xian bie kan dianshi

⁵² (20) – (26) are from Shi (2001:132-134).

1SG ask 2SG first NEG watch TV

'I ask you not to watch TV yet.'

(21)a.*老師要求我們沒在教室吃飯。

laoshi yaoqiu women mei zai jiaoshi chifan

teacher ask 1PL NEG in classroom eat.mean

'The teacher required us not to eat in the classroom.'

b.老師要求我們不要在教室吃飯。

laoshi yaoqiu women buyao zai jiaoshi chifan

teacher ask 1PL NEG in classroom eat.meal

'The teacher required us not to eat in the classroom.'

Sentences in (20) and (21) show that when the matrix predicate involves verbs of orders, an imperative meaning is expressed. As *bie* (別) and *buyao* (不要) are negators for imperative sentences, they are acceptable as the negators of the subordinate clauses. In other words, the subjunctive mood is presented by the selection of negators.

Verb-complement structure

(22)a.我沒有看完那本書。

wo meiyou kan-wan na-ben shu

1SG NEG read-COMPL that-CLF book

'I did not finish that book.'

b.*我不看完那本書。

wo bu kan-wan na-ben shu

1SG NEG read-COMPL that-CLF book

'I did not finish that book.'

(23)不看完那本書，我是不會睡覺的。

bu kan-wan na-ben shu, wo shi buhui shuijiao de
NEG read-COMPL that-CLF book 1SG be NEG sleep AM
'I will not go to bed if I have not finished the book.'

The negator of verb-complement structure in indicative sentences is *mei/meiyou* (沒/沒有) while *bu* (不) is treated as ungrammatical as shown in (22b). But *bu* (不) is acceptable in expressing a hypothetical condition in (23).

Verb-reduplication (VV structure)

(24)a.每星期都看看電影。

mei xingqi dou kankan dianying
every week all watch.watch movie
'Watch movies every week.'

b.*每星期都不看看電影。

mei xingqi dou bu kankan dianying
every week all NEG watch.watch movie
'Don't watch movies every week.'

c.每星期不看看電影就覺得少了點什麼。

mei xingqi bu kankan dianying jiu jude shao-le
every week NEG watch.watch movie then feel less-PFV
dian shenme.
bit what
'Feeling like missing something if (I) do not watch movies every week.'

The structure with the duration marker *zhe* (著)

(25)a. 他聽著收音機。

ta ting-zhe shouyinji

3SG listen-PROG radio

‘He is listening to the radio.’

b.*他不聽著收音機。

ta bu ting-zhe shouyinji

3SG NEG listen-PROG radio

‘He is not listening to the radio.’

c. 他不聽着收音機就學不進去。

ta bu ting-zhe shouyinji jiu xue bu jinqu

3SG NEG listen-PROG radio then learn NEG COMPL

‘He cannot learn without listening to the radio.’

According to Shi, examples in (24) and (25) show that the negator *bu* (不) is not acceptable in the negation of a habitual event as shown in (24b) or in an ongoing situation as shown in (25b), but when the sentence is a conditional or constrictive conditional, the negation of *bu* (不) is no longer ill-formed. He further proposes that the position of *bu* (不) can be used to distinguish indicative and subjunctive sentences. For example, in the construction of ‘pronoun + X + *dui* (對) + pronoun + Y + verb/adjective’, when *bu* (不) appears in the position of X, the sentence expresses the subjunctive mood, as shown in (26b). When it occurs in the position of Y, the sentence expresses the indicative mood, as shown in (26a).

(26)a. 他們對我不好，所以我很生氣。

tame dui wo bu hao, suoyi wo hen shengqi

3PL to 1SG not good so 1SG very angry
'They do not treat me well, so I am very angry.'

b. 他們不對我好，我就不理他們。

tame bu dui wo hao, wo jiu buli tamen
3PL NEG to 1SG good 1SG therefore ignore 3PL
'If they do not treat me well, I ignore them.'

To summarise Shi's discussion, he discusses two main cases: one is to distinguish between indicative and subjunctive by the different negators; the other is to see whether the sentence contains subjunctive meaning according to the position of the negator. Since there are no corresponding indicative and subjunctive verb forms in Mandarin Chinese, the distribution and position of negation can be seen as a way of illustrating subjunctive manifestation. Negation does change the meaning of the sentence, making an otherwise real event non-real, so that the sentence is semantically tainted with irrealis flavour. In fact, negation can also be seen in Indo-European languages as a grammatical device for expressing verbal mood: the subjunctive appears in subordinate clauses when the matrix predicate is negated and becomes non-affirmative. The relevant example has been given above as (6a).

2.3 Studies on the subjunctive in Shanghainese

Compared with the study of Mandarin Chinese, the study of the subjunctive category in Shanghainese is more specific and detailed, such as on the employment of protasis-final particles in conditionals or on some unique expressions to form an irrealis reading, many of such linguistic expressions are not found in Mandarin Chinese.

2.3.1 Conditionals in modern Shanghainese

Edkins (1868:127) discusses mood in modern Shanghainese and states that ‘in very many cases the mood is determined entirely from the sense and has no particular sign.’ He gives examples of indicative, subjunctive, and imperative sentences as shown in (27) – (29).

Indicative

(27)我去買。⁵³

ngu qi ma⁵⁴

1SG go buy

‘I will go buy (it).’

Subjunctive

(28)是儂去還便當。

zy nung qi he bitong

be 2SG go will.be convenient

‘If you go, it would be more convenient.’

Imperative

(29)儂去買。

nung qi ma

2SG go buy

‘You go buy (it).’

The sentence in (28) is an unmarked constrictive conditional which is formed by tightening a compound sentence, containing the antecedent *zy nung qi* 是儂去 ‘you go’ and the consequent result *bitong* 便當 ‘convenient’. Unlike conditionals in

⁵³ (27) – (29) are from Edkins (1868: 128). Shanghainese pinyin and glossing are mine.

⁵⁴ Cf. Appendix II for the correspondence between the Shanghainese pinyin system adopted here and the IPA.

English which ‘have special tense or mood morphology in one or both of their clauses and that have an irrealis flavour’ (Ippolito 2013:1), conditionals in Shanghainese present an irrealis meaning through a loose connection to time where forms of temporal features are not obligatory. For instance, in the case of (28), the adverb *he* (還) appears to express the ‘irrealis flavour’, as the sentence would show an indicative mood or an imperative rather than a subjunctive mood if *he* (還) is omitted, but the precise function of the adverb has not been pinned down. According to Edkins, the subjunctive mood is determined more by the ‘sense’, not grammatical forms.

Edkins points out that the sentence-final particle *meh* (末) and *tse* (者) mark conditionals and indicative propositions respectively, as shown in (30) and (31).

(30) 現在落雨末年世好者。⁵⁵

yize lohyu meh nisy hoa tse
 now fall.rain CDM year good SFP
 ‘This year will be better if it is raining now.’

(31) 年紀大末不要者。

niji du meh beh yoa tse
 age big CDM not need SFP
 ‘If those are old, we do not need them.’

The above examples given by Edkins show that components that appear external to verbs, such as adverbs and uninflected particles play a role in expressing mood, but these grammatical forms deserve further investigation.

⁵⁵ (30) and (31) are from Edkins (1868: 128).

Another particle that marks antecedent in conditionals is discussed by Qian (1999), which he terms *tsy* (仔/之/子)⁵⁶ with a subjunctive usage, indicating a future situation. For instance, the sentence in (32) is similar to the above example given by Edkins in (28) and (31). The clause *kazi ma le theh du* 價錢買來忒大 ‘the purchasing price is too high’ is an unrealised condition. The clause is also the subject of the whole sentence in (32), and its co-occurrence with *tsy* produces the hypothetical result.

(32) 價錢買來忒大仔既主客個。⁵⁷

kazi ma le theh du tsy m tsy kheh keh
 price buy AUX very big CDM not host customer AM
 ‘If the purchasing price is too high, you will have no customers.’

Qian (2004) further illustrates the particle *tsy* (仔/之/子) and takes it as a marker for subjunctive sentences based on the definition by Shi (2001). Instead of occurring at the end of an antecedent in constrictive conditionals in (32), *tsy* can also follow the verb in clauses as a verb-ending particle, as exemplified in (33) and (34).

(33) 格末十兩銀子，⁵⁸ 儂担來稱一稱啫，一齊換之現錢末者。⁵⁹

kehme h zeh-lian ningtsy, na na-le cengyehceng loa,
 so ten-CLF silver 2PL bring-COMPL weigh.weigh PM
 yehji woe-*tsy* yidi mehtse
 together change-PFV cash SFP
 ‘So you bring the ten liang silver and weigh it, then change to cash.’

⁵⁶ Three written forms of *tsy* are found in texts where 之 and 子 are found in the database of this dissertation.

⁵⁷ From Macgowan (1862) and re-quoted from Qian (1999).

⁵⁸ *Liang* (兩), a Chinese unit of weight.

⁵⁹ (33) is form T’ ou-Wo Tse-Nè, *Boussole du Langage Mandarin* (1908); (34) is from Macgowan (1862). All are re-quoted from Qian (2004a).

(PM = pause marker)

(34)比方儂做仔東家，亦要動气否？

bi fong nung tsu-tsy tungka, yih yoa dungqi feu
if 2SG be-PFV master also will get.angry Q
'If you are the master, will you be angry?'

Tsy (仔/子/之) in (33) and (34) follows verbs, expressing the complete status of an action which is not realised when the sentences are uttered by the speaker.

Qian (2004a) puts forth another type of particles called pause particles that, according to him, indicate a presupposition. But these sentence-final particles in fact play a similar role as the *tsy* (仔/子/之) in conditionals, as shown in (35)-(39).⁶⁰

(35)等伊再勿用心末，告伊跪之咭畫。

deng yi ze voh yungxin meh, koa yi gue-tsy
wait 3SG again not use.heart CDM tell 3SG kneel-PFV
loa hah
PM draw

'If s/he does not devote to it again, tell him/her to kneel to draw.'

(36)儂來末，我候儂。

nung le meh, ngu heu nung
2SG come CDM 1SG wait 2SG

'If you come, we will wait for you.'

(37)鐘頭到之，叫我一聲。

⁶⁰ (35), (38) and (39) are from *Lecons ou Exercices de Langue Chinoise Dialecte de Song-Kiang* (1883); (36) and (37) are from Ding (1936). All are re-quoted from Qian (2004a).

zungdeu toa tsy, jioa ngu yeh-sang
 hours arrive CDM call 1SG one-CLF
 ‘Call me when it is the time.’

(38)等伊再用心点佬，望神父賞一尊聖像拉里伊。

deng yi ze yungxin di loa, mong sengfu sang
 wait 3SG again use.heart bit CDM hope priest reward
 yeh-zeng sengxiang lali yi
 one-CLF saint.statue for 3SG
 ‘Hope the priest reward him/her a saint statue when s/he pays more attention.’

(39)頂頭摘脫之末，讓伊甯開來。

dingdeu zah-theh tsy meh, nyang yi coe-khele
 top take-COMPL PFV PM let 3SG grow-COMPL
 ‘Take off the top and let it (the plant) grow up.’

The above discussions by Edkins and Qian give analyses of conditionals containing particles as conditional markers, but how unmarked constrictive conditionals or common conditionals with particle markers denote irrealis flavour remains unclear. On the other hand, in the examples above, the presence of particles indicating temporal features can also be observed. It can be seen that particles do not merely serve as markers for conditionals, and their functional properties deserve more systematic exploration.

2.3.2 Temporal expressions in modern Shanghainese

For modern Shanghainese, which is rich in morphological-grammatical suffixes, especially in tense-aspect combinations according to Qian (2004a, 2004b, 2006, 2009, 2010, 2014), specific temporal grammatical features deserve scrutiny to reveal the

realisation of the subjunctive mood. In the discussion of subjunctive sentences, which he refers to as sentences denoting situations that have not happened, Qian (2004a) identified several temporal forms that belong to verb-ending particles, including *la* (拉) and *ku* (過); as well as some idiosyncratic structures after the verb, including *V theh tsy* (V 脫仔/子), *V theh yi* (V 脫伊), *V yi* (V 伊); and verb reduplication. These are illustrated with the following examples.

Using *la* (拉) to emphasise on future events

(40) 修補這只船銀子要費脫大拉。⁶¹

seubu keh-tseh zeu nintsy yoa fi-theh du la
 repair this-CLF boat silver will cost-COMPL big SFP
 ‘Fixing this boat will cost a lot of silver.’

(41) 再去通知各個典當，叫伊拉留心好拉。

ze qi thungtsy kohgeh didong, jioa yila lieuxin hoala
 again go inform every pawnshop ask 3PL careful IM-SFP
 ‘Then go to inform every pawnshop to ask them be careful.’

Ku (過) indicates once again

(42) 進學堂末，要考過個。

jin hohdong meh, yoa kho-ku keh
 enter study.hall CDM will test-COMPL AM
 ‘If you would like to enter the school, you need to take the exam.’

⁶¹ (40), (43), (46) and (47) are from Macgowan (1862); (41) is from Bourgeois (1939); (42) is from Ding (1936); (44) and (45) are from Lecons ou Exercices de Langage Chinoise Dialecte de Song-Kiang (1883); (48) is from T’ou-Wo Tse-Nè, Boussole du Langage Mandarin (1908). All are re-quoted from Qian (2004a).

According to Qian's account, the above two verb-ending particles indicate future situations rather than the original aspectual meaning that is usually considered to be carried by them. For example, *la* (拉) in (40) no longer ties closely to the verb, but it is used to confirm the situation expressed by the sentence. However, the interpretation of the two particles is rather vague. It is not very clear as to whether the two particles remain as verb-ending particles or function as independent modal particles, and the relation between the particle and other components in the sentence has not been discussed. The author's account treats them as verb-ending particles, but their correlation with other sentential components and contextual information is not addressed in his study.

The second type proposed by Qian involves idiosyncratic structures such as *V theh tsy* (V 脫仔/子), *V theh yi* (V 脫伊), *V yi* (V 伊), which express subjunctive meaning. In Qian's account, the structures containing such expressions denote a going-to-happen situation as shown in (43) - (45), while the contributors to the obligation action are epistemic modal verbs expressing necessity. Additionally, the *VV yi* (VV 伊) in (45) is a verb reduplication structure which also belongs to the third type, to be presented in the following.

(43) 第塊壁有點搖動，要拆脫子佬再砌。

di-khue bih yeu ti yoadung, yoa cah-thehtsy loa ze
 this-CLF wall have bit shake will take-COMPL CEP again
 tsih
 build

'This wall is a little shaken which needs to be taken down then built again.'

(44) 因為井水太陰，花容易死，後來只管澆水，勿要放伊幹脫。

yinwe jinsy tha yin, hu yungyih xi, heule tsehkuoe
 because well.water too cold flower easy die later always

jioasy, vohyoa fong yi koe-theh
water not let 3SG dry-COMPL

‘Flowers are easy to die because the water in the well is too cold, later
water them regularly, do not let them dry.’

(45)箇個學生子，神父應當賞賞伊。

geh-geh hohsangtsy, sengfu yindong saonsaon yi
this-CLF student priest should reward.reward 3SG

‘The priest should reward this student.’

The third type is the short subjunctive repetition. The reduplication of the verb denotes an action that lasts for a short period of time, but it cannot express the subjunctive reading all by itself. For instance, in (46), whether the ‘cleaning’ action is realised or not depends on the information expressed by the components preceding the verb *tangsoa* (打掃, clean). In this case, the modal verb *yoa* (要) expresses the temporal feature which yields an irrealis reading.

(46)裏外房子要打掃打掃。

li nga wongtsy yoa tangsoa tangsoa.
inside outside house will clean clean

‘Both inside and outside of the house will be cleaned.’

(47)到睏快前後門要關關好。

toa khueng khua zi heumeng yoa kuekue-hoa.
arrive sleep quick before back.door will close.close-COMPL

‘The back door will be closed properly before go to sleep.’

(48)我搭伊到園裏去看個看，乃末商量價錢那能。

ngu tah yi toa yoeli qi khoe-heh-khoe,
 1SG and 3SG arrive garden-PREP go see-PRT-see
 nemeh songliang kadji naneng.
 so discuss price how

‘I came to the garden with him/she to have a look, then we discuss the price.’

The above discussion concerns temporal forms contributing to the realisation of subjunctive meaning. But there still leaves many research gaps, especially the interplay between grammatical temporal forms and other factors.

2.3.3 Modal expressions in modern Shanghainese

Studies of modal expressions of the subjunctive mood have been mainly conducted on the so-called modal particles. For example, Qian (2004a) cites examples from missionary works involving modal particles, including *tse* (哉/者), *tsy* (仔/之/子), *chile* (起來), *laqi* (拉去), *li* (哩), *keh* (個), *xieh* (歇) and their variants, as shown in the following.

(49) 實蓋能末，別人喜歡到花園裏來跑跑者。⁶²

zehkeh neng meh, biehning xihuae toa huyoe-li le
 this like CDM other.people like come garden-PREP come
 boaboa tse
 run.run SFP

‘If it likes this, other people would like to come to the garden.’

⁶² (49), (50) and (52) are from *Lecons ou Exercices de Langue Chinoise Dialecte de Song-Kiang* (1883); (51) is from Macgowan (1862); (53) - (56) are from *T'ou-Wo Tse-Nè, Boussole du Langage Mandarin* (1908). All are re-quoted from Qian (2004a).

(50)馬桶倒脫之。

madung toa-theh tsy
closestool take-COMPL SFP
'Take out the closestool'

(51)第轴是古时间個名画，卖起來要多好铜钱。

di djioh zy ku zyji keh mingho, ma-qile yoa
this axis be ancient time MOD famous.painting sell-CDM will
duhoa dungdi
many copper.cash
'This is a masterpiece from ancient time which could be sold for lots of
money.'

(52)花田溝里，種點大豆拉去。

hodi keu-li, zung ti dudoe laqi
flower.field furrow-PERP plant bit soya.beans SFP
'Plant some soya beans in the furrows of the flower fields'

(53)等兩日我還要到寶號裏來，候候哩。

deng liang-nyih ngu he yoa toa bohoa-li le,
wait two-CLF 1SG again will arrive baohao-PERP come
heuheu li
wait.wait SFP
'I will come to Baohao to wait after a few days.'

(54)倘使花子無得，花秧也好個。

thongsy huttsy mteh, hoyang ha hoa keh
if flower.seed not.get, flower.seedling also good AM

‘If (we) cannot get a flower seed, getting a flower seedling is also good.’

(55) 若使平常落下來果子啉勿多，讓伊落拉地上歇。

zahsy bingcang loh-hoale kutsy loa voh tu, nyang yi
if usually drop-COMPL fruits PM not many let 3SG
loh-la dizong xieh
drop-PFV ground SFP

‘If there are usually not many fruits dropping, let them drop on the ground.’

The author provides a unique category called modal particles in classifying subjunctive sentences in modern Shanghainese, but does it play a role in expressing the subjunctive? Particles in the examples above occur at the end of a sentence, with the exception of the verb-suffix *qile* (起來) in (51). However, Qian considers these particles as contributors to future behaviour or events, indicating a temporal feature, which is rather unusual as temporal meaning in Chinese is usually conceived as being conveyed by other elements, rather than sentence-final particles. Taking (53) as an example, the temporal expression *deng liangnyih* 等兩日 ‘after a few days’ also contributes to the unrealised status of the context. These sentence-final particles seem to have a closer relation to the content expressed in the sentence rather than carrying a mere temporal interpretation. For the particle *qile* (起來), in (51), it plays the role of a conditional marker as *meh* (末) but occurs after the verb. The above analysis of particles shows that modern Shanghainese abounds in particles of various usages which needs further data investigation. Whether these particles can be seen as the expressions of the subjunctive meaning will be discussed in Chapter 7.

The temporal and modal expressions of modern Shanghainese mentioned above will be explored in greater detail in Chapters 3-7.

2.3.4 Subjunctive meaning in contemporary Shanghainese

Explicit subjunctive mood markers in contemporary Shanghainese are also examined in previous studies. For instance, a past subjunctive mood marker *mahoa* (蠻好, much-preferred) is studied by Qiang (2011). She analyses the function of *mahoa* (蠻好, much-preferred) as a sentence-initial higher predicate, from a syntactical perspective. Semantically, clauses with *mahoa* (蠻好, much-preferred) have a counterfactual reading, as shown in (56). The author proposes that there are two meanings indicated by clauses with *mahoa* (蠻好, much-preferred): at the semantic level, the event has not happened in reality; at the subjective level, the wishes of the speaker are counter to the existing fact, so a feeling of regret is implied, which indicates the speaker-oriented-modality.

(56) 我蠻好脫侬一道去白相。⁶³

ngu mahoa theh nung yehdoa qi bahxiang.

1SG much-preffered with 2SG together go play

‘I wish I had hung out with you together.’

Jiang and Wang (2016) approach ‘*mahoa* (蠻好, much-preferred) +S’ from both semantic and pragmatic perspectives. They propose that the proposition of the sentence which follows *mahoa* (蠻好, much-preferred) is contrary to the fact, but other meanings are denoted by implicatures. In addition, *mahoa* (蠻好, much-preferred) itself expresses a subjunctive meaning of ‘should have done’ or a sense of remorse from the speaker’s perspective, a deontic meaning, as shown in (57). But when the causative controller is not the speaker or addressee, the attitude becomes regret rather than remorse, which is an epistemic meaning, as shown in (58).

⁶³ From Qiang (2011:156).

(57) 蠻好(刚刚)乘地铁启孛! ⁶⁴

mahoa (gonggong) tseng dithih qi noa
much-preferred (just now) take underground go EM-SFP
'It would be much better that we took the underground at that time.'

(58) 蠻好今朝放假孛!

mahoa jingtsoa fongka noa
much-preferred today have.holiday EM-SFP
'It would be much better that today were a holiday.'

Jiang and Wang (2016) further expand the scope of investigation and identify other subjunctive markers, including *tsoaxioateh* (早晓得) + (S1) + *zieu* (就) S2, S + *a yoa hoa* (埃要好) and S + *toa hoa le* (倒好唻), *loa tsoa zieu hoa V le* (老早就好 V 唻), *yoa meh* (要么) + S. These markers indicate counterfactuality which are not available in Mandarin.

(59) 早晓得伊勿肯启, 俄就勿订位子了!

tsoa xioateh yi vohkheng qi, ngu zieu voh ding wetsy
earlier know 3SG not.willing go 1SG hence not reserve seats
le
ASP

'Had I know earlier that s/he would not go, I would not reserve the seats.'

(60)a. 伊看得懂迭种书埃要好!

yi khoe teh dung dih-zung sy eyoa hoa
3SG read CM understand this-type book would-be-good

⁶⁴ (57) - (62) are from Jiang and Wang (2016:4-7).

‘It would be good if s/he could understand this sort of book.’

b. 伊肯加俄工资倒好嘛!

yi kheng ka ngu kungtsy toa hoa le
3SG willing raise my salary would-be-good
‘It would be good if s/he could raise my salary.’

(61) 儂老早就好调到门口启嘛。

nung loatsoa zieuhoa dioa toa mengkheu qi le
2SG very.early should get to door go EM-SFP
‘It is high time you got to the door of the bus.’

(62) 俄哪能会挨得到出国呐? 俄要末去火葬场孛!

ngu naneng we e teh toa cehkueh nah?
1SG how can get-the-turn going.abroad EM-SFP
ngu yoameh qi hozongzang noa
1SG or go crematorium EM-SFP
‘How can I get the luck to be sent abroad? I would better be sent to the crematorium!’

The above studies on contemporary Shanghainese focus on unique expressions of the language and discussed the grammatical encoding of the semantic feature that is contrary to the fact, expressing a ‘should have’ reading or a presupposed situation which is different from the reality.

2.4 Diagnosing the language-specific category

The lack of in-depth studies of the subjunctive mood leaves gaps in the interpretation of the category in Mandarin Chinese, not to mention Shanghainese. At the same time, the existing research literature outlined above provides advantages in further exploring the category. According to the above discussion, the existing literature has approached the subjunctive mood from two perspectives, the semantic features and the grammatical encoding, but there are two particular problems which emerge from the literature in relation to studying the subjunctive in modern Shanghainese.

The first is that the semantic domain is unclear. The interpretation of the subjunctive mood falls under the irrealis category, including hypothetical conditionals or forms and structures with an irrealis flavour, but a clear definition has not been reached. The language-specific subjunctive category has been discussed in other Chinese dialects, for instance, Xing (2005) classifies the subjunctive mood in the Jin dialect of Shanbei into four subcategories: wish, the hypothetical, hesitation and the giving. He proposes that the main device for expressing the subjunctive is the modal particles, as shown in (63) and (64). Whether Shanghainese follows a similar path shown in the Jin dialect or presents a narrower or wider range of semantic interpretation remains unclear. At this stage, it is hard to give a specific semantic domain of the subjunctive mood in modern Shanghainese without a detailed description of the language. Therefore, the following chapters will approach the topic by looking at ways grammatical encoding denotes subjunctive meaning.

Simple sentence-final particles

(63)這場雨要早下上幾天時價！⁶⁵

zhe-chang yu yao zao xia shang jitian shijia.
 this-CLF rain will early fall AUX few.days EM-SFP

‘It will be better if it rains a few days early.’

⁶⁵ (63) and (64) are from Xing (2005:44).

Clause-final particles

(64)我那會兒好好兒念書時價，早考上大學了。

wo na huier haohaoer nianshu shijia, zao
1SG that moment good.good read.books EM-SFP early
kaoshang daxue le
admit university SFP

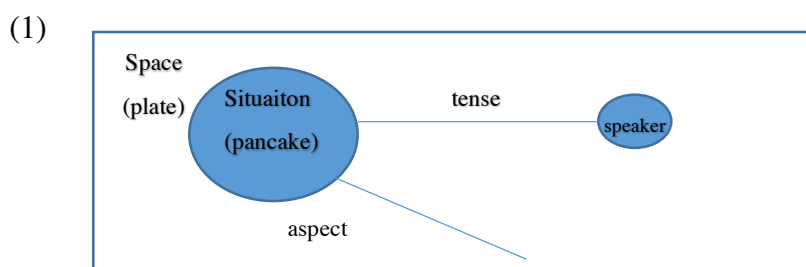
‘If I have studied hard at that time, I would be admitted to a university.’

The second is that current studies of grammatical encoding need to be carried to a further depth, with special reference to temporal and modal expressions. The existing studies show that modern Shanghainese has a complicated interlace of temporal and modal expressions, and the mood selection in modern Shanghainese is manifested not as verbal morphology, but in the form of several lexico-grammatical devices. Exact details about the manifestation of the subjunctive meaning remain to be worked out. There is not necessarily a correspondence between grammatical encoding and the subjunctive presentation, either through an expression or a structure, or through the interaction of several components, or through context-dependent manifestation. But in this dissertation, I will only focus on the elicitation of subjunctive meaning expressed through temporal and modal expressions, based on what will be observed in the data.

Chapter 3 Time expression (I): verb-ending particles

This chapter and the next two chapters will focus on how time is expressed in modern Shanghainese, namely the grammatical and lexical devices for expressing temporal features. Grammatical devices mainly refer to temporal particles and the main lexical device that I will examine is temporal adverbs, which will be investigated with examples drawn from the data.

Examining the way of time expression in languages is inseparable from *tense* and *aspect*. Michaelis (1998) illustrates how time is visually observed in languages. A situation⁶⁶ can be treated as an object, such as a pancake. The region where the pancake is located is the plate which is regarded as *space*. *Tense* indicates the distance between the pancake and the speaker while *Aspect* demonstrates where the pancake is located in the plate, for example, in the centre or on the edge of the plate, or covering the whole plate, or even extending over the edge, as shown in (1). In this and the next two chapters, I will look at how the temporal categories are presented in modern Shanghainese in terms of the linguistic facts found in the database.



The current chapter is organized as follows. 3.1 briefly introduces temporal relation in languages, the theoretical framework and the relation between tense and aspect. 3.2 reviews studies on temporal particles of Shanghainese. Based on 3.2, 3.3 describes how verb-ending particles express time, with examples drawn from the

⁶⁶ The situation here is in a broad sense, referring to all the states expressed by sentences, including all sorts of actions, events, processes etc.

database. Then 3.4 gives a report of the distributions of verb-ending particles in the database and 3.5 concludes the chapter.

3.1 Temporal relation in languages

Lexical content has no temporal features. For example, the expression *opening a window*, expressing two states of a window: open and not open, but not showing the happening time of the action, how long the action continues, and whether the action is bounded or not (Klein 1994). Klein (1994) claims that lexical content is equipped with temporal features by the utterance. When lexical content relates to temporal features, there is time of the described situation in a sentence, which is termed as *event time*, which in turn was first proposed by Reichenbach (1947). Klein (1994) terms it as *situation time* (Tsit).

Tense is traditionally regarded as presenting the relation between two parameters: *situation time* and *utterance time* (UT). The initial observation of *tense* is through different grammatical forms of lexical verbs. These forms present three cases with respect to situation time and utterance time, which are past, present and future with grammatical forms corresponding to the three cases. In this sense, *tense* marks a situation which is before the UT, at UT or after UT. However, this is *tense* under the simplest definition. The actual picture in languages is more complex than the three traditional notions. For example, grammarians found that there are more than three verbal forms in presenting tenses. In other words, there are more forms of expressing tense than the traditional three categories, and these forms do not necessarily present simple temporal relations of past, present, and future. Therefore, the question arises as to what temporal forms indicate when they do not express the simple relation of past, present, and future. To solve this problem, the most notable method is to involve a reference time as proposed by Reichenbach (1947). In addition to utterance time and situation time, an additional time interval for observing events is introduced, which is

relatively flexible and can precede or follow either utterance time or situation time, thus presenting complex temporal relationships. Three temporal parameters are termed as: the event time, the utterance time and the reference time which have been extensively applied to the study of tense. Compared with the reference time, the first two parameters are fairly perspicuous. Klein (1994) summarises the reference time according to studies based on Reichenbach's theory.

R is the time point or time interval of some event which is typically mentioned in the preceding context and which, for example, can also be in the past. (Klein 1994: 21)

However, Klein does not regard this definition as a sufficient explanation of reference time, although in some cases, the temporal relation of a sentence can be interpreted by a reference time drawn from the above definition. For example, in (2), the reference point for 'John left' is 'Mary came to the party', so 'Mary came to the party' is named as 'some event'. But this 'some event' might not be the reference point in other sentences, as shown in (3). There is no other event or situation except for 'John was in Surbiton', of course, the time at which 'John was in Surbiton' can be interpreted by 'some event' mentioned in the previous context, but it is not necessary. According to Klein (1994: 21), (3) is treated as the case in which 'no other event is involved'. However, 'last year' in (3) can also be seen as 'some event' which plays the role of reference time. From this point of view, 'some event' is not limited to a specific event presented in previous contexts, but is an observation point, which could be provided by the event, or by contextual information, or by known background information shared by speakers and listeners. To give a more precise definition of the reference time, Klein (1994: 7) proposes to define it as 'the time period to which the speaker's claim on this occasion is confined', terming as *topic time* (TT).

(2) When Mary came to the party, John had left.⁶⁷

(3) Last year, John was in Surbiton.

According to Klein, temporal relation is presented by three parameters: *situation time* (Tsit), *utterance time* (TU) and *topic time* (TT). Unlike the traditional Reichenbach system of *tense* and *aspect*, in which *tense* indicates the relation between TU and RT, while *aspect* expresses the relation between Tsit and RT (Reichenbach 1947), Klein proposes that *tense* concerns the temporal relation between TU and TT, while the temporal relation of *aspect* is expressed by Tsit and TT.

3.1.1 Tense and aspect

Traditionally, *aspect* is regarded as demonstrating the internal structure of a situation, such as the continuity or completeness of a situation, which are the most typical features presented by *aspect*. In other words, situation-internal time is what *aspect* concentrates on, whereas *tense* views situations from an external perspective through locating situations on the temporal line (Comrie 1976).

Verkuyl (1988) proposes the contrast between *inner aspect* and *outer aspect*, where the former refers to the aspect of an independent sentence and the latter is the aspect together with adverbials or phrases, as shown in (4) and (5) respectively. (4) is characterized by a terminative aspect in which the situation is bounded. The durative adverbial in (5) presents the durative aspect together with the terminative aspect of originally presented in (4).

(4) Judith ate six sandwiches.⁶⁸

⁶⁷ (2) and (3) are from Klein (1994:21).

⁶⁸ (4) and (5) are from Verkuyl (1988:72).

(5) Judith ate six sandwiches for an hour.

The above classification of aspect treats it as recursively composed. According to this proposal, both the verb and the verb phrase in the sentence might have an effect on the aspect. Verbs can express continuous states, such as *run*, or instant states, such as *cough*. Some actions have an internal end point, such as *break*, but some do not, such as *sing*. The verb itself provides the first layer of aspect, termed as the lexical layer. However, core verbs generally do not appear alone in clauses, which leads to the second layer. For example, the verb *sing* occurs with the object *a song*, which transfers the action *sing* that has no internal end point to a situation with an end point. It can be seen that situations are not only related to verbs, which also interact with the object and other modifiers (Verkuly 1993). The second layer is lexical and phrasal (grammatical aspect), which is similar to *aspectual viewpoints* proposed by Smith (1991). According to Smith (1991), aspectual viewpoints are the lens of a camera, and situations are objects that the lens focuses on. The lens can focus on the whole situation or a part of it to observe the internal structure.

To wrap up, the process of how aspect is realised in sentences runs from the lexical level to the grammatical level, and the whole process is superimposable. The *grammatical aspect* views the situation from the outer level, which accords with the *outer aspect* of Verkuly (1988). The two-layer relation is illustrated in (6).

(6) Lexical + phrasal (Grammatical aspect)



Lexical aspect

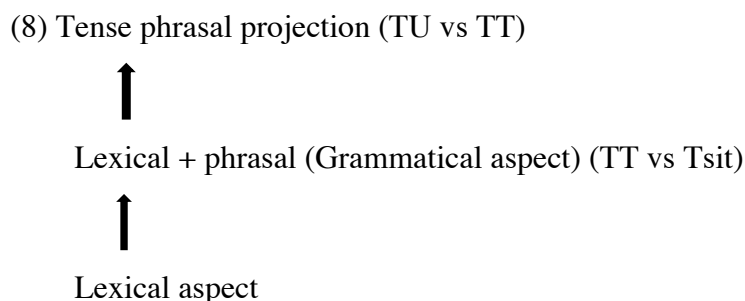
In addition, inconsistency exists within the two layers, which means aspects produced by each layer may not be the same. Michaelis (1998) puts forward the concept of a tense phrasal aspect which is a third analytical layer in addition to the viewpoints

(lexical aspect) and situation aspects (grammatical aspect). The main function of this mode is to explain the relationship between situations. To put this in more detail, the aspect presented by the whole situation is different from that expressed by a verb phrase. For example, in (7), the verb phrase ‘repair the fence’ expresses a situation with a finishing point and a change of state. But when it is put into a progressive aspect, the whole situation has lost the original finishing point and becomes a continuous situation.

(7) Harry was repairing the fence.⁶⁹

The inconsistency shows that aspect is able to change the finishing point of a situation. Since there is no specific formal marker to express the logical ending point in both English and Chinese, it can be achieved through the perfective aspect (Liu 2008). Perfective and imperfective aspect are distinguished by the relation between the situation time and the topic time. The situation time is included in the topic time in perfective aspect. But for the imperfective aspect, the topic time is included in the situation time or they share an overlap relation (Klein 1994).

Tense phrase is located above the second layer of aspect where the topic time is related to the utterance time to show the temporal relation within the outside world. A tense-aspect relation is shown in (8):



3.1.2 Temporal reference in Mandarin Chinese

⁶⁹ From Michaelis (1998: 4).

The time system in modern Chinese is regarded as a ‘lexical and grammatical system’ (Gong 1995), in which temporal categories expressed in English by grammatical inflection are realised in Chinese by lexical and grammatical means. Lexical devices such as temporal words, as shown in (9), and grammatical devices such as *le* (了), *guo* (過) which are typical of temporal particles, as shown in (10). Contextual information is another way of providing temporal reference, as shown in (11).

(9)他昨天去學校上課。

ta zuotian qu xuexiao shangke
3SG yesterday go school have.class
‘He went to school yesterday.’

(10)他吃了一條魚。

ta chi-le yi-tiao yu
3SG eat-PFV one-CLF fish
‘He ate a fish.’

(11) A: 你做什麼？

ni zuo shenme
2SG do what
‘What are you doing’

B: 吃飯。(Answering the above question)

chifan
have.meal
‘Eating.’

However, how can temporal reference be achieved when sentences do not contain temporal words or particles, and when there is no contextual information? Lin (2002, 2003) examines temporal reference of such sentences as shown in (12) and (13).

(12)a. 他很聰明。⁷⁰

ta hen congming

3SG very clever

‘He is very clever.’

b. 我相信你。

wo xiangxin ni

1SG believe you

‘I believe you.’

c. 地球繞太陽旋轉。

diqiu rao taiyang xuanzhuān

earth circle sun around

‘The earth turns around the sun.’

(13)a. 他打破一個花瓶。

ta dapuo yi-ge huaping

3SG break one-CLF vase

‘He broke a vase.’

b. 他把我趕出教室。

ta ba wo gangchu jiaoshi

⁷⁰ (12) and (13) are from Lin (2003:262-263).

3SG AUX 1SG drive.out classroom

‘He drove me out of the classroom.’

c.他在上海出生。

ta zai shanghai chusheng

3SG in Shanghai give.birth

‘He was born in Shanghai.’

According to Lin, bare sentences as shown above contain two covert tenses: covert present tense and covert past tense. Although there are no morphological tenses as English, covert tenses that are similar to absolute tenses are encoded by the aspectual viewpoint or aktionsart of situations expressed in sentences. In other words, the aspectual viewpoint of a situation determines the tense of a sentence. If a situation is perfective, the predicate of the sentence is telic which expresses a completed or realised state. Imperfective situations are expressed by atelic predicates that have one state that falls under the predicate (Lin 2002, 2003). Such correlation follows a notion of *default aspect* (Bohnmeyer and Swift 2004) that a telic predicate denotes perfective and an atelic predicate denotes imperfective. Given this notion, sentences in (13) are perfective situations which contain telic predicates while those in (12) are imperfective expressed by atelic predicates. To distinguish covert present tense from covert past tense, Lin (2002, 2003) proposes that they are subject to selectional restrictions: sentences of covert present tense must select a homogeneous situation as its complement while that of covert past tense must select a heterogeneous situation as its complement. A homogeneous situation refers to a situation which has ‘a uniform internal structure’, so the whole situation cannot be treated as individuals from a logical perspective (Herweg 1991). For example, *congming* (聰明, smart) in (12a) is a continuous collection of overlapping entities during the topic time. The topic time and the utterance time overlap in this case. However, if a situation can be counted as individuals from a logical point

of view, the situation includes an entity which satisfies the predicate, but has other entities that may not satisfy what the predicate expresses. For instance, *dapo yige huaping* 打破一個花瓶 ‘break a vase’ in (13a) is a telic situation but it consists of several sub-situations such as holding the vase, dropping it on the floor, and so on, which are not homogeneous as *break*, making the whole process heterogeneous. Situations in (13) terminate before the utterance time, so the topic time precedes the utterance time. In this way, sentences without temporal adverbs or aspectual markers are equipped with covert tenses through the aspectual viewpoint of the described situations.

If covert tense is similar to absolute tense, then it raises the question whether of covert future tense also exists. The answer is no, this is because future tense in Mandarin Chinese needs to be expressed by expressions such as time adverbs or modal auxiliaries (Zhang 1998a, b; Lin 2002), as shown in (14).

(14)a. 我明天去上海。

wo mingtian qu shanghai
 1SG tomorrow go Shanghai
 ‘I will go to Shanghai tomorrow.’

b. 我會去上海。

wo hui qu shanghai
 1SG will go Shanghai
 ‘I will go to Shanghai.’

Although covert present and past tense can account for many bare sentences without time adverbs or aspectual markers in Mandarin Chinese, there remains the issue of whether covert tense still exists when temporal expressions occur in such sentences. For example, if adding a time adverb *yiqian* (以前, before) to (12a), as shown in (15),

the original covert present tense and the past time adverb produce a contradiction. Supposing there is a tense node, and it agrees with the adverb in this case, which is different from covert tense. Lin (2003) terms the phenomenon as agreement tense to distinguish from covert tense as the former is not subject to selectional restrictions. In the case of (15), the adverb determines the relation between the topic time and the utterance time rather than the aspectual viewpoint of the situation. To put in a simpler way, the case of (15) presents the typical way that temporal adverbials play a dominant role in determining the temporal reference in Mandarin Chinese no matter if there is a tense node or not. If there is a tense node and it is covert with selectional restrictions, the temporal adverbial is still more decisive for the specifying tense. If the tense node is empty, the temporal adverbial provides the topic time for the sentence. Therefore, when there are no overt adverbials in sentences, the default topic time is now, the utterance time.

(15)他以前很聰明。

ta yiqiang hen congming

3SG before very clever

‘He used to be very clever.’

To wrap up, there is a similar morphological variation of the absolute temporal system in bare sentences without temporal adverbials, the difference being that it is covert, and there are only present and past tenses, which are determined by the aspectual viewpoints of situations presented by the predicate.

For non-bare sentences without time adverbs or aspectual markers, how is the temporal relation specified and what contributes to it? Unlike bare sentences which are subject to selectional constrictions, the temporal interpretation of complex sentences is more complicated. Lin (2003) explores three types of complex sentences and analyses their temporal reference. The first is sentences with complement clauses, as shown in

(16) and (17) in which two situations are expressed by the matrix verb and the embedded verb respectively, called e_1 and e_2 . Some matrix verbs can impose different constraints on the temporal locations of the situations of the subordinate clauses. For instance, the situation time of the subordinate clause that precedes, follows or overlaps that of the matrix clause, as exemplified in (16). On the other hand, some matrix verbs do not impose constraints, as shown in (17).

(16)a. 他建議我考大學。⁷¹ $e_1 < e_2$

ta jianyi wo kao dauxe
3SG suggest 1SG take-exam university
'He suggested that I take the entrance exam for colleges.'

b. 他很後悔說謊。 $e_1 > e_2$

ta hen houhui shuohuang
3SG very regret tell.lie
'He regrets having told lies.'

c. 我看見他打李四。 $e_1 \text{ O } e_2$

wo kanjian ta da Lisi
1SG see 3SG hit PN
'I saw him hit Li Si.'

d. 我喜歡她穿短裙。 $e_1 = e_2 = \text{generic interpretation}$

wo xihuan ta chuan duanqun
1SG like 3SG wear skirt
'I like her in a short skirt.'

⁷¹ (16) and (17) are from Lin (2003: 282-283).

(17)a. 張三說李四會處理。 $e_1 < e_2$

Zhangsan shuo Lisi hui chuli
PN say PN will handle
'Zhang San said Li Si will/would handle it.'

b. 張三說李四說謊。 $e_1 > e_2$

Zhangsan shuo Lisi shuohuang
PN say PN tell.lie
'Zhang San said that Li Si told lies.'

c. 張三說李四在洗澡。 $e_1 O e_2$

Zhangsan shuo Lisi zai xizao
PN say PN PROG take.a.bath
'Zhang San said that Li Si is/was taking a bath.'

d. 張三說李四喜歡棒球。 $e_1 = e_2 = \text{generic interpretation}$

Zhangsan shuo Lisi xihuan bangqiu
PN say PN like baseball
'Zhang San said that Li Si likes baseball.'

The temporal reference for the above sentences is determined by the inherent temporal relation introduced by the matrix verb. For example, the verb *jianyi* (建議, suggest) in (16a) requires a situation which has not happened by the topic time, but it does not specify a concrete temporal reading of the embedded clause, such as a present or future reading. However, for (16c) in which the verb *kanjian* (看見, see) requires a realised situation by the topic time, a past interpretation is given.

The second type concerns relative clauses which are different from complement clauses as relative clauses are not argument of the matrix verb, as shown in (18) where

the argument of *mai* (買, buy) is *shu* (書, book) rather than *Zhang San xiede* 張三寫的 ‘written by Zhang San’. Therefore, the matrix verb may not impose constraints on the relative clause directly as it does to a complement clause mentioned above. According to Lin (2003), the temporal reference of relative clauses is more complicated than pure temporal control, as it involves other factors. If taking the main clause as the starting point, the temporal reading of the relative clause is also subject to the nature of the predicate in some cases. Similar to the temporal control imposed by matrix verbs on complement clauses, the inherent relation introduced by matrix verbs also play a role in indicating the temporal reading of the relative clause, as the verb *mai* (買, buy) in (18a) requires the object NP to exist before the action of buying, which leads to an assumption that the buying follows the situation expressed in the relative clause. However, the inherent feature of the matrix verb only accounts for an initial interpretation, what determines the temporal reading in (18a) is the verb-ending particle *le* (了) and the modal auxiliary *hui* (會) in (18b). The situation time of the matrix verb is in the past in (18a) and that of (18b) is in the future, so the relative clause can have the same temporal reading as the matrix clause. However, this temporal control is not wholly applicable to all relative clauses, such as (19a) in which the past interpretation is not directly introduced by the matrix verb but is also affected by the demonstrative determiner *na* (那, that). The object NP is no longer generic after being modified by *na* (那, that). Additionally, factors such as our world knowledge also contribute to the temporal reference of relative clauses. For example, the proper noun *Li Bai* (李白) relates to a person who is already dead, so it is not possible for him to write poems at the utterance time. The whole object NP which is modified by the relative clause *Li Bai xie de* 李白寫的 ‘written by Li Bai’ must therefore carry a past reading as a result.

(18)a.他買了張三寫的書。⁷²

ta mai-le Zhangsan xie de shu
3SG buy-PFV PN write MOD book

‘He bought a book/books that Zhang San wrote.’

b.媽媽會拿走我男朋友寄給我的信。

mama hui nazou wo nanpengyou ji gei wo de
mother will take.away 1SG boyfriend send to 1SG MOD
xin
letter

‘My mother will take away the letter that my boyfriend sent/will send to me.’

(19)a.我喜歡張三寫的那首詩。

wo xihuan Zhangsan xie de na-shou shi
1SG like PN write MOD that-CLF poem

‘I like the poem that Zhang San wrote.’

b.我喜歡李白寫的詩。

wo xihuan Libai xie de shi
1SG like PN write MOD poem

‘I like poems that Li Bai wrote.’

The third type involves sentences which contain adverbial clauses. Using the same convention as when discussing complement clauses, the event of the matrix clause and that of the adverbial clause are termed as e₁ and e₂ respectively. On the surface, e₂ introduces a temporal relation for e₁. *Shihou* (時候, at the moment) in (20) introduces

⁷² (18) is from Lin (2003:285-286); (19) is from Lin (2003: 293)

a situation time that overlaps with the situation time of the matrix clause. Similarly, the *zhiqian* (之前, before)-*clause* in (21) and the *yihou* (以後, after)-*clause* in (22) introduce a temporal sequence between e1 and e2. However, adverbial clauses themselves do not have fixed temporal reference as time nouns or some time adverb do. Their temporal reading still depends on the matrix clause. For instance, the modal auxiliary *hui* (會) indicates a future reading and the maker *guo* (過) contains a past reading. The same goes for (21) and (22). This shows that there is no tense projection of adverbial clauses and the anchoring of time on the time axis depends on the matrix clause. An interesting point is that adverbial clauses which contain temporal connectives can impose constraints on the temporal relation in some cases. Temporal connectives, such as *before* in (21), locate an unspecified time prior to the situation described by the matrix clause. Same for (22).

(20)a. 他來的時候，我會告訴他。⁷³

ta lai de shihou, wo hui gaosu ta
 3SG come MOD when 1SG will tell 3SG
 ‘When he comes, I will tell him.’

b. 我住在美國的時候，吃過龍蝦。

wo zhu zai meiguo de shihou, chi-guo longxia
 1SG live in PN MOD when eat-EXP lobster
 ‘When I lived in America, I ate lobsters (I had the experience of eating lobsters).’

(21)a. 我去之前，會先打電話給你。

wo qu zhiqian, hui xian da dianhua gei ni

⁷³ (20) - (22) are from Lin (2003: 294-295).

1SG go before will first make call to 2SG

‘Before I go, I will call you first.’

b.我去之前，打過一通電話給他。

wo qu zhiqian, da-guo yi-tong dianhua gei ta

1SG go before make-EXP one-CLF call to 3SG

‘Before I went, I made a phone call to him.’

(22)a.我考上研究生以後，會買一輛新車。

wo kaoshang yanjiusheng yihou, hui mai yi-liang

1SG admit graduate.school after will buy one-CL

xin che

new car

‘I will buy a new car after I am admitted to a graduate school.’

b.我考上研究生以後，買了一輛新車。

wo kaoshang yanjiusheng yihou, mai-le yi-liang

1SG admit graduate.school after buy-PFV one-CLF

xin che

new car

‘I bought a new car after I was admitted to a graduate school.’

To sum up, in bare sentences that do not contain time adverbs or aspectual markers and are not subject to the influence of contextual information, covert present and past tense information can be gathered from aspectual viewpoint of events in the sentence, and the information is not presented by morphological affixes. In complex clauses that do not contain temporal adverbs or aspectual markers, the temporal reference is even more complex, involving several factors, such as the intrinsic characteristics of the

matrix verb, and the temporality of the matrix clause plays a decisive role in anchoring time.

Another point to note is that if there is no tense node in a clause, although it is possible to specify covert present or past tense similar to the absolute tense in English, overall, tense in Mandarin Chinese is still relative due to the lack of systematic verb conjugation. Another point to be noted for all languages is that, although there seems to be no reference to the time of utterance, the utterance time is always present, and in cases where there are no explicit time expressions in the sentence, the topic time and the utterance time overlaps, or the default reference time is the utterance time. In other words, in many cases, when judging the temporal relationships of Chinese sentences, utterance time can be seen as a hidden parameter, making it possible to compare situation time with topic time on the one hand, and topic time with utterance time on the other.

3.2 Encoding time in Shanghainese

3.2.1 Tense-aspectual compounds

Qian (2004a, 2004b, 2006, 2009, 2010, 2011, 2014, 2016) proposes that modern Shanghainese employs tense-aspectual compounds. According to Qian, time in modern Shanghainese is sometimes expressed by the combination of an aspectual particle and a tense particle. An aspectual particle normally follows verbs and denotes the aspectual feature of the predicate, while a tense particle follows the aspectual particle which can mark absolute tense in modern Shanghainese. Moreover, the compound usually appears at or towards the end of a sentence. Five types of the tense-aspectual compounds have been identified and discussed by Qian (2004a, 2004b, 2006, 2009, 2010, 2011, 2014, 2016), as shown in the following.⁷⁴

⁷⁴ (23) is from Macgowan (1862) and quoted from Qian (2004); (24) and (25) are from Obata (1908) and quoted from Qian (2010); (26) is from Bourgeois (1939); (27) is from T'ou-Wo Tse-Nè, *Boussole du Langage Mandarin*

1. Present perfective: perfective particle *la* (拉) + PRESENT tense marker

tse (哉/者).⁷⁵

(23) 一百塊洋錢我已經收拉哉。

yebah-khue yangdji ngu yijing seu-la tse
one.hundred-CLF foreign.money 1SG already keep-PFV CUR

‘I have kept the 100 dollars.’

(CUR= current state marker)

2. Present progressive: progressive particle *la/lala* (拉/拉拉)⁷⁶ + PRESENT

tense marker *tse* (者/哉).

(24) 儂拉瞎來來者。

nung la hahlele tse
2SG PROG mess CUR

‘You are messing it up.’

3. Present going-to-happen state: the going-to-happen aspect marker *khau*

(快) + PRESENT tense marker *tse* (哉/者).

(25) 落下來快者。

loh-hoale khua tse
fall-COMPL quick CUR

‘It is falling down soon.’

4. Past perfective: perfective particle *la* (拉) + PAST particle *keh* (個).

(26) 第張遺囑是一個大阿哥假做拉個。

(1908); (28) and (29) are requoted from Qian (2016).

⁷⁵ *tse* (哉/者) will be discussed in detail in Chapter 4.

⁷⁶ The progressive particle *lallala* (拉/拉拉) precedes verbs.

di-zang yizoh zy yeh-geh da aku katsu-la keh
 this-CLF will be one-CLF big brother forge-PFV PST
 ‘This will was forged by an elder brother.’

5. Past progressive: progressive particle *la/lala* (拉/拉拉) + PAST particle *keh* (個).

(27) 若使偷出去賣之，有我拉經管個。

zahsy theu-cehqi ma-tsy, yeu ngu la jingkuoe keh
 if steal-COMPL sell-PFV have 1SG PROG charge PST
 ‘If (fruits) are stolen, I am in charge of it.’

For sentences with either a tense marker or an aspectual marker, Qian (2014, 2016) classifies them into *tense sentences* and *aspectual sentences*. The former refers to a sentence with a sentence-final tense particle while the latter one with an aspectual particle. And if both grammatical and lexical means can indicate time, the case of a combination of a tense marker and an aspectual marker may indicate the temporal features of a sentence in the absence of temporal adverbials. If on the other hand, the overt time information carried by a sentence is not sufficient, I go back to the cases discussed in 3.1.2, where it was argued that time anchoring is still possible for Mandarin, so it can be carried over for Shanghainese as well.

I also note in passing that according to Qian, tense and aspectual markers, especially tense-aspectual compounds are gradually being replaced by time adverbials along with the development from modern Shanghainese to its contemporary version. In the current and the following chapters, I will investigate verb-ending particles and sentence-final particles *tse* (哉/者) and *keh* (個) respectively to describe their temporal uses and other uses in the database.

3.2.2 Verb-ending particles in contemporary Shanghainese

The discussion of verb-ending particles as aspectual-indicators in contemporary Shanghainese is given by Qian (1997) and Zhu (2006). Both of them classify the verb-ending particles according to the type of aspect presented in sentences. Qian (1997) proposes that there are 12 types of aspects as shown in (28) – (39).⁷⁷

(28)生活要做了。(Going-to-happen)

sangweh yoa tsu le

work will do SFP

‘(I) will do the work.’

(29)生活做快了。(Going-to-happen soon)

sangweh tsu khua le

work do quick SFP

‘(I) will do the work soon.’

(30)生活做做看。(Attempting)

sangweh tsutsu khoe

work do.do ASP

‘Try to do the work.’

(31)生活做起来了。(Inchoative)

sangweh tus-qile le

work do-COMPL SFP

‘Get to work.’

(32)生活辣辣做了。(Progressive)

sangweh lala tsu le

⁷⁷ (28) – (39) are from Qian (1997: 214).

work PROG do SFP

‘Doing the work (now).’

(33)生活做下去。(Continuous)

sangweh tsu-hoaqi

work do-DUR

‘Keep the work going.’

(34)生活做辣海。(Durative)

sangweh tsu-lahe

work do-DUR

‘Doing the work (now).’

(35)生活做拉了。(Completive)

sangweh tsu-la le

work do-PFV SFP

‘The work is done.’

(36)生活做了。(Realised)

sangweh tsu le

work do PFV

‘The work is done.’

(37)生活做個。(Recent experiential)

sangweh tsu keh

work do PST

‘The work was done.’

(38)生活做過了。(Experiential)

sangweh tsu-ku le

work do-EXP SFP

‘The work was done.’

(39)生活做過歇。(Remote experiential)

sangweh tsu-kuxieh

work do-EXP

‘The work was done.’

It should be noted that for the classification of experiential aspect, in addition to the most representative *ku* (過), Qian also proposes *keh* (個) for recent experiential aspect and *kuxieh* (過歇) for remote experiential aspect. Two questions are raised here, first, whether and under what circumstances *keh* (個) can be regarded as an aspectual maker needs further investigation, which will be worked out in detail in the next chapter. Secondly, whether there is a distinction between *ku* and *kuxieh* (過歇), which will be examined in 3.3.2.

There are a lot of overlaps in the classification and discussion of aspects in Qian (1997) and Zhu (2006), including the progressive aspect, the experiential aspect, the perfective aspect, the durative aspect and the future aspect. Since some aspects have more than one marker, Qian subdivides the experiential, perfective, durative, and future aspect, while Zhu does not subdivide them into subcategories. The difference lies in the classification of the verb-ending *lallahe* (拉/辣海), where it is seen as the marker for the duration by Qian, while Zhu classified it as a resultative marker, as shown in (40).

(40)本事學辣海將來派用場。⁷⁸ (Resultative)

⁷⁸ From Zhu (2006:82).

benzy hoh lahe jiangle payungzang
 skill learn PFV future apply

‘Acquire the skill for later use.’

The aspectual markers of contemporary Shanghainese mentioned in the above studies will be used as a guideline in the study of the data of modern Shanghainese in the next section. I will find out whether the same members as in contemporary Shanghainese exist in modern Shanghainese, and how they relate to the presentation of time in sentences.

3.3 Verb-ending particles in data

I start by making an exhaustive study of missionary texts to count the occurrence of verb-ending particles, as listed in Table 3-1. In addition to the particles identified in contemporary Shanghainese, *theh* (脱), which has not been mentioned by Qian (1997) and Zhu (2006) but occurs frequently in the database of modern Shanghainese, is also added.

Table 3-1: The number of occurrences of verb-ending particles

Members	Number of occurrences (total)
<i>tsy</i> (之/子)	2567
<i>ku</i> (過)	21
<i>kuxieh</i> (過歇)	4
<i>xieh</i> (歇)	43
<i>la1</i> (拉) ⁷⁹	830
<i>lala/la2</i> (拉拉/拉)	22

⁷⁹ *La1* appears after verbs to express continuity; *la2* precedes to verbs express progressive.

<i>theh</i> (脫)	571
VV + <i>khoe</i> (看)	6

3.3.1 Temporal reference of clauses with verb-ending particles

This section will discuss how verb-ending particles encode time in sentences based on the first-hand information and distribution of verb-ending particles provided by the database.

When a verb occurs with a verb-ending particle, the situation described by the predicate is equipped with a situation time. Before investigating their temporal role in sentences, members shown above are classified into particles of perfective and imperfective according to the aspectual meaning they indicate in relation to the verb. *Tsy* (之/子)⁸⁰ and *theh* (脫), which indicate the completion of a situation, the experience-indicator *ku/kuxieh/xieh* (過/過歇/歇), and *la1* (拉) of duration, are identified as verb-ending particles of perfective, as shown in (41) – (47) respectively.

(41) 到之京城末，伊做人原是牢實啐端正，撥伊個東家極喜歡。⁸¹

toa-*tsy* *jingseng* meh, *yi* *tsu* *ning* *nieusy* *loazeh*
 arrive-PFV capital PM 3SG be person originaly honest
loa *doezeng*, *beh* *yi-heh* *tungka* *djih* *xihuo*
 PM decent PASS 3SG-'s master extreme like

‘When he arrived in the capital, he was honest and decent originally, and his master liked him very much.’

(42) 蓋啐歌子勿多幾時，伊做個事體，禿換子樣式者。

kehloa *xieh-*tsy** *voh-du-jizy*, *yi* *tsu* *keh* *zythi*, *toh*

⁸⁰ Two written forms of *tsy* are found in the data.

⁸¹ Cf. Appendix I for the sources of example sentences drawn from the database.

then pass-PFV not-much-time 3SG do MOD thing all
woe-tsy yangseh tse
change-PFV look SFP

‘Then after a short time, everything he did changed.’

(43)前頭自我雖然話過儂勿當是我個丫頭，可以隨便自儂。

zideu tsyngu soezoe wo-ku nung voh dang zy ngu-heh
before 1SG although say-EXP 2SG not as be 1SG-’s
yadeu, kyuyi zoeyi tsynung
servant can feel.free 2SG

‘Although I said before that you should not be my servant and that you could do as you please.’

(44)到復活個時候，拉七個人裏，算伊是啥人個娘子，因為全討過歇個。

toa fohweh keh zyheu, la qih-geh ning li, soe
arrive resurrection MOD time among seven-CLF person in count
yi zy saning-heh niangtsy, yinwe djyuoe thoa-kuxieh keh
3SG be who-’s wife because all marry-EXP PST

‘Whose wife will be counted among these seven at the resurrection, for they have all married her.’

(45)然而第個用人，是拜佛個，勿曾曉得歇真道理，蓋啐勿能覈告訴別人。

zoe’e digeh yungning, zy bafeh keh, vohceng
but this servant be worship Buddhism AM not.yet
xioateh-xieh zeng doali, kehloa vohnengkeu koasu
know-EXP true principle so not.can tell
biehning
other.people

‘But this servant, however, was a worshipper of the Buddha and did not know the truth, so s/he could not tell other people.’

(46) 生出來末，禿運到英吉利去賣脫個。

sang-chule meh, toh yuntoa yingjihli qi mai-theh keh
born-COMPL PM all ship.to PN go sell-COMPL PST

‘If they were born, they were shipped to England and sold.’

(47) 亨利拉五歲個辰光，有一個姑娘，到伊個娘娘場化來住拉。

Hengli la ng seu keh zengkuong, yeu yeh-geh kuniang,
PN at five year MOD time there.is one-CLF lady
tao yi-heh niangniang zanghua le zyu-la
arrive 3SG-'s mother place come live-PFV

‘When Henry was five years old, a lady came to live at his mother's place.’

The particles of imperfective include the progressive marker *lala/la2* (拉拉/拉) and *khoe* (看) that expresses attempting to do something after verb reduplication, as shown in (48) - (50) respectively.

(48) 亨利話，我勿會相信耶穌基督個前頭，不過拉拉想邱個事體。

Hengli wo, ngu vohceng xiangxing yasu jidoh keh
PN say 1SG not.yet believe Jesus Christ MOD
zideu, behku lala xiang chieu keh zythi
before just PROG think bad MOD thing

‘Henry said, before I believed in Jesus Christ, I just was thinking about bad things.’

(49) 伊首詩，姑娘去子後首，亨利一路里拉念個。

yi-seu sy, kuniang qi-tsy heuseu, Hengli yehluli
 this-CLF poem lady leave-PFV after PN all.the.way
 la nyi keh
 PROG recite PST

‘The poem, which Henry was reciting all the way after the lady left.’

(50) 儂用先見之明話話看，打儂個是啥人。

nung yung xijitsy ming wowo-khoe, tang nung keh zy saning
 2SG use foresight say.say-ASP hit 2SG MOD be who

‘You use your foresight to say who it was that hit you.’

Then the temporal usage of verb-ending particles will be examined as three groups of cases according to their distribution in sentences. In the first group, there are only verb-ending particles in sentences, with no other temporal components, as shown in (51) – (54). Verb-ending particles provide a situation time for the situation described in clauses. For example, *tsy* (之) in (51) introduces a situation time which precedes the time of the situation in the matrix clause. In the case of (51), *Tsit1* given by *tsy* (之) and *Tsit2* of the matrix clause both take place before the sentence is uttered by the speaker. By the same token, *kuxieh* (過歇) in (52) expresses a past situation in the matrix clause. Both *kuxieh* (過歇) and the frequency adverbial *yeh-we* (一回, one time) introduce a past reading, so the situation time precedes the topic time. For verb-ending particles of imperfective features, the situation time introduced by them either overlaps with the topic time or after the topic time, as shown in (53) and (54) respectively. *Lalalla2* (拉拉/拉) in (53) expresses a progressive situation without an end point, so the situation time overlaps with the topic time. The co-occurrence of verb reduplication and *khoe* (看) in (54) indicates a situation which has not happened by the topic time, imparting a sense of future reference. To wrap up, for sentences that contain only verb-ending particles and no other explicit time expressions, the temporal relation is achieved by

particles that locate the situation time, with or without the information provided by the adverbials.

(51)我聽得之第個話頭，就一嚇啐覺哉。

ngu thing-teh-tsy digeh wodeu, zieu yeh hah loa jioh
1SG hear-CM-PFV this word therefore one scare PM wake
tse
CUR

‘I woke up with a start when I heard that.’

(52)阿里排排雖然拉樹林當中，看見過歇強盜頭一回。

Alibaba soezoe la zyuling dongzung, khoeji-kuxieh jiangdoadeu
PN although in forest among see-EXP robber.head
yeh-we
one- CLF

‘Although Alibaba had seen the leader of robbers once in the forest.’

(53)忽然聽得皮袋裏向有個人聲音，拉拉問啱話，時辰到拉末。

huehzoe thing-teh bihde-lixiang yeu ning-heh sangyin,
suddenly hear-CM leather.bag-PERP there.is person-’s sound
lala meng loa wo, zyzeng toa-la meh
PROG ask PM say time arrive-PFV SFP

‘Suddenly (she) heard a person’s voice from the leather bag, asking whether it is the time.’

(54)四美先生話，蓋未儂讀點拉伊聽聽看。

Syme xisang wo, kehme nung doh ti la yi

PN mister say then 2SG read bit to 3SG
 thingthing-khoe
 listen.listen-ASP

‘Mr Simei says, then you try to read to him.’

The second category is where the matrix clause contains a verb-ending and the subordinate clause contains other time expressions. Following the interpretation of the first category, verb-ending particles introduce a situation time at first. The problem lies in its relationship to the clause with time expressions. Taking (55) as an example, *theh* (脫), which has not been mentioned by Qian and Zhu but occurs frequently in the data, indicates a resultative aspect. I treat it as a verb-ending particle with a past reading. The clause with *theh* (脫) introduces a situation time, termed as Tsit1, and the time adverb *heule* (後來, afterwards) introduces Tsit2 which take place before Tsit1. In this case, the temporality of *theh* (脫) and *heule* (後來, afterwards) are compatible. On the other hand, there could be a temporal mismatch between the temporality of the two clauses. For instance, *la* in (56) expresses a continuous and unbounded situation, so the situation can take place in the past, present and future, depending on the utterance time or contextual information. For (56), *yalixiang* 夜裡向 ‘at night’ can be interpreted as indefinite when there are no contextual restrictions, so the topic time overlaps with the utterance time. But since (56) is a sentence in discourse, here *yalixiang* 夜裡向 ‘at night’ should be interpreted as specifically one night in the past. Therefore, the matrix situation is seen as a durative one during that night, so a past reading is produced. In this sense, clauses with verb-ending particles which have a more open-ended temporal interpretation can be restricted within the scope created by other time expressions.

(55) 後來我仍舊回到廚房間裏，拿燈未吹隱脫之。

heule ngu ningieu wetoa zyufongke li, na deng meh
 later 1SG still back kitchen.room inside take light PM

qoe ying theh tsy
blow hidden COMPL SFP

‘Later I still went back to the kitchen and blew out the light.’

(56)夜裏向，我搭我小囡一淘坐拉。

ya-lixiang, ngu tah ngu xioanoe yehdoa zu-la
night-PERP 1SG and my child together sit-PROG

‘I was sitting with my child at night.’

The third category involves verb-ending particles which co-occur with other temporal expressions in one clause. There is a hidden consistency relationship between them. Verb-ending particles which indicate perfective aspectual meanings are compatible with expressions that have past reading, as shown in (57) in which *theh* (脫) co-occurs with *yijing* (已經, already). For those with imperfective interpretation, they do not require a time consistency with other temporal expressions within the clause, as shown by the relationship between *la* (拉, suffix with on-going meaning) in the adverbial and the main clause in (58). The difference between the first and the third category lies in that, when verb-ending particles occur together with explicit time adverbials, they jointly play the role as modifiers to the situation in the matrix clause with other time expressions rather than giving a situation time. The aspectual feature of verb-ending particles still exists but is not the major function, as shown in (57) and (58).

(57)儂個東家，已經撥拉強盜殺脫拉者。

nung-heh tungka, yijing pehla jiangdo sah-theh la tse
2SG-’s master already PASS robber kill-COMPL PFV CUR

‘Your master has been killed by the robbers.’

(58)貼準馬拉跑個時候，王聽得聲氣，越聽越鬧熱。

thihzeng ma la boa keh zyheu, wong thing-teh
 just horse PROG run MOD momen King hear-CM
 sangqi, yuh thing yuh noanih
 sound exceed hear exceed noisy

‘The King heard the sound of voices getting louder and louder when the horse was running.’

To sum up, verb-ending particles determine the temporal relationship of a sentence when there are only a verb-ending particle and no other temporal expression in the sentence. In the case where there are both verb-ending particles and other temporal expressions in the sentence, there is a hidden coherence relationship between the verb endings of perfective and the other temporal expressions, while there is no similar relationship between the verb-ending particles of imperfective.

3.3.2 *Ku* (過) and *xieh* (歇), *kuxieh* (過歇)

According to Qian (1997:212-213), there is a distinction between *ku* (過) and *xieh* (歇) and *kuxieh* (過歇). *Ku* (過) stands for experiential aspect and *xieh* (歇) and *kuxieh* (過歇) stand for remote experiential, referring to something that has happened far from now. But this distinction is not reflected in the data, as shown in (59) – (61). How far back in the past a situation occurs is more context-dependent. Therefore, I will treat all three them as the same experiential maker with different written forms.

(59) 種百姓搭之稅吏聽見之，就讚美神個義氣，因為受過約翰個洗禮啱。

zung bahxing tahtsy seuli thingji-tsy, zieu zeme
 all people and tax.official hear-PFV hence praise
 seng-heh niqi, yinwe zeu-ku yahhoe-heh sili loa
 God-'s loyalty because bear-EXP John-'s baptism CEP

‘Local people and tax collectors praised God for his loyalty after hearing it,

because they have been baptized.’

(CEP = cause and effect particle)

(60) 耶穌話，我豈勿對儂話歇，儂若然相信，可以看見神個榮耀否。

yasu wo, ngu qivoh te nung wo-xieh, nung zahzoe
Jesus say 2SG isn't to 2SG say-EXP 2SG if
xiangxing, khuyi khoeji seng-heh yungyoa feu
believe can see God-'s glory Q

‘Jesus says, have I ever told you before, if you believe, you would see God’s glory.’

(61) 徒衣頭，近罷恩個江口，就拉第個戶蕩，包恩鐵打仗過歇個。

duyideu, djing baen-heh kongkheu, zieu la digeh wudong,
PN close PN-'s estuary just at this place
boenthih tangsang kuxieh keh
PN fight EXP PST

‘Tuyitou, which is near the estuary of baen river, Baoentie had fought at this place.’

3.4 Data report

The distribution of verb-ending particles in missionary Shanghainese publications collected in my database is listed in Table 3-2.

Table 3-2: The distribution of verb-ending particles in texts

Members	Publications and distribution	Number of occurrences
<i>tsy</i> (之/子)	Youlaba Guo (1849)	86

	Hengli Shilu (1856)	170
	Chenzao Yubei (1868)	14
	Gangdandiushi (1868)	19
	Shenpan Rijiao (1868)	7
	Lujia Chuan Fuyin Shu (1886)	435
	Matai Chuan Fuyin Shu (1895)	350
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	463
	Shitu Yanxing Zhuan (1891)	243
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	443
	Shitiaojie Zongyi Wenda (1899)	3
	Ali Paipai Feng Dao Ji (1921)	334
<i>ku</i> (過)	Hengli Shilu (1856)	1
	Lujia Chuan Fuyin Shu (1886)	6
	Matai Chuan Fuyin Shu (1895)	5
	Shengjing Shiji (Vol.1:1886)	1
	Shitu Yanxing Zhuan (1891)	1
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.4: 1887)	5
	Ali Paipai Feng Dao Ji (1921)	2
<i>kuxieh</i> (過 歇)	Youlaba Guo (1849)	1
	Matai Chuan Fuyin Shu (1895)	1
	Ali Paipai Feng Dao Ji (1921)	2

<i>xieh</i> (歇)	Youlaba Guo (1849)	1
	Hengli Shilu (1856)	3
	Lujia Chuan Fuyin Shu (1886)	6
	Matai Chuan Fuyin Shu (1895)	10
	Shengjing Shiji (Vol.3:1889, Vol.5:1890)	4
	Shitu Yanxing Zhuan (1891)	4
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	13
	Ali Paipai Feng Dao Ji (1921)	2
<i>lai</i> (拉)	Youlaba Guo (1849)	48
	Hengli Shilu (1856)	58
	Chenzao Yubei (1868)	4
	Gangdandiushi (1868)	4
	Shenpan Rijiao (1868)	16
	Lujia Chuan Fuyin Shu (1886)	129
	Matai Chuan Fuyin Shu (1895)	104
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	186
	Shitu Yanxing Zhuan (1891)	71
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	160
	Shitiaojie Zongyi Wenda (1899)	4
	Ali Paipai Feng Dao Ji (1921)	46

<i>lala/la2</i> (垃 拉/拉)	Hengli Shilu (1856)	5
	Chenzao Yubei (1868)	1
	Gangdandiushi (1868)	4
	Lujia Chuan Fuyin Shu (1886)	1
	Matai Chuan Fuyin Shu (1895)	3
	Shitu Yanxing Zhuan (1891)	3
	Yesu Yanxing Zhuan (Vol.3: 1887)	1
	Shitiaojie Zongyi Wenda (1899)	1
	Ali Paipai Feng Dao Ji (1921)	3
<i>theh</i> (脫)	Youlaba Guo (1849)	16
	Hengli Shilu (1856)	20
	Chenzao Yubei (1868)	2
	Gangdandiushi (1868)	5
	Lujia Chuan Fuyin Shu (1886)	85
	Matai Chuan Fuyin Shu (1895)	90
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	201
	Shitu Yanxing Zhuan (1891)	20
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	78
	Ali Paipai Feng Dao Ji (1921)	54
<i>VV + khoe</i> (看)	Youlaba Guo (1849)	1
	Hengli Shilu (1856)	1
	Shengjing Shiji (Vol.2:1892)	1

	Yesu Yanxing Zhuan (Vol.2: 1892, Vol.4: 1887)	2
	Ali Paipai Feng Dao Ji (1921)	1

Reporting on the distribution of each verb-ending particle in different texts can present similarities and differences between the particles, as well as between texts. Firstly, the difference in the number of occurrences of verb-ending particles in different texts is determined by the length of the text. Secondly, the distribution of the individual particle shows that *tsy* (之/子) and *la₁*(拉) appear in all texts, which shows that they are the most commonly used among the examined verb-ending particles in the database. The second most common verb-ending particle is *theh* (脫), which occurs in all texts except *Shenpan Rijiao* (1868) and *Shitiaojie Zongyi Wenda* (1899). The three members of experience-indicator *kul/kuxieh/xieh* (過/過歇/歇) are found only in *Matai Chuan Fuyin Shu* (1895) and *Ali Paipai Feng Dao Ji* (1921), while in other texts two or one of them exist, and somewhere none of the three is found in the text. This uneven distribution also suggests that they can be regarded as different written forms of one verb-ending particle denoting the same semantics and are interchangeable with each other. Therefore, it is sometimes not necessary for all three to be present in a single text. For *Ali Paipai Feng Dao Ji* (1921) in which all three occur, the number of occurrences of all three is the same, whereas in *Matai Chuan Fuyin Shu* (1895) the number of occurrences of all three is inconsistent, possibly due to different recorders or translators. The least frequent occurrences in the text are *lalal₂* (垃拉/拉) and *VV + khoe* (看). *lala/l₂* (垃拉/拉) appears in eight of the thirteen texts, all of them less than or equal to five times. *VV + khoe* (看) appears in five of the thirteen texts, all of them less than or equal to two times.

Thirdly, the distribution of verb-ending particles shows differences between texts. All the eight verb-ending particles discussed in this chapter appear in *Ali Paipai Feng Dao Ji* (1921). This is probably because *Ali Paipai Feng Dao Ji* (1921) is a novel,

which requires a clearer timeline in the narration of the story, and so the temporal particles appear more often. Seven verb-ending particles occur in *Hengli Shilu* (1856), *Shitu Yanxing Zhuan* (1891) and *Yesu Yanxing Zhuan* (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887). *Kuxieh* (過歇) is found in none of the three works, but members of the same category are found in them, so they are also regarded as including all the aspectual markers discussed in this chapter. In addition, seven verbal-ending particles besides VV + *khoe* (看) construction are found in *Matai Chuan Fuyin Shu* (1895). *Hengli Shilu* (1856) is in the same genre as *Ali Paipai Feng Dao Ji* (1921), which is not as long as the consulted religious translation works, but it contains a wealth of aspectual markers due to the timeline of the story. The other works containing seven members are all translations of religious works. Texts that include six verb-ending particles are also religious works *Lujia Chuan Fuyin Shu* (1886) and *Shengjing Shiji* (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890). The text that contains five members is *Youlaba Guo* (1849) which is a geographical record, mainly describing objective facts and not dealing with descriptions of events that have not occurred or are in progress, so markers indicating progressive and attempting are not found in it.

3.5 Summary

The current chapter discusses how temporal relation is expressed by verb-ending particles, concentrating on temporal features given by these particles on the sentential level. I regard verb-ending particles as a device of giving situation time in modern Shanghainese and will continue to discuss sentence-final particles in the next chapter.

Chapter 4 Time expression (II): sentence-final particles

After describing verb-ending particles, this chapter will continue to investigate another way of time expression in modern Shanghainese: sentence-final particles.

The current chapter is organized as follows. 4.1 briefly reviews sentence-final particles in Mandarin Chinese. 4.2 gives a review of claims about sentence-final particles in modern Shanghainese. 4.3 and 4.4 describe and analyse sentence-final particles with examples drawn from the database. The last two sections are the data report and the conclusion.

4.1 Sentence-final particles in Mandarin Chinese

Sentence-final particles have no grammatical relationship with the other components of the clause and they are in a combinatorial relationship with the clause. Following Rizzi's (1997) classification of sentences into three levels: lexical layer, inflectional layer and complementizer layer, sentence-final particles in Mandarin can exist at the inflectional layer and the complementizer layer. For example, *le* (了) as a verb suffix indicating temporal features when appended to the predicate arguably belongs to the inflectional level, while the question marker *ma* (嗎) belongs to the complementizer level, as shown in (1). This also reflects the strict requirements of the Chinese language in terms of orders, as shown in (2) (Tang 2019).

(1) 你去過倫敦了嗎?

ni	qu-guo	lundun	le	ma
2SG	go-EXP	London	SFP	SFP

‘Have you been to London?’

(2)[complementizer layer [inflectional layer [lexical layer 你去過倫敦]了]嗎] ⁸²

Unlike the classification based on the formal description at the sentential level, functional grammar examines sentence-final particles in discourse. Luke (1990) refers to sentence-final particles as *utterance particles* or *utterance-final particles*, and the study of sentence-final particles is no longer restricted to clauses but extends to discourse. Sentence-final particles reflect different types of utterance tone,⁸³ and these tone types also reflect the interpersonal functions in discourse (Xu 2008). From the types of utterance tone to interpersonal functions to communicative roles, functional grammar defines the nature of sentence-final particles as expressions of the speaker's communicative role based on a discourse perspective and considers sentence-final particles as grammatically non-essential components and semantically non-notional words. In other words, it is not a necessary component of the grammatical structure, and its presence or absence does not affect the legitimacy of the grammatical structure. For example, *ba* (吧) is seen as a discourse marker indicating modality, expressing the speaker's inference of the content of the proposition which requires the listener's confirmation (Xu 2003). The speaker of (3) decides that 'you are not likely to come' based on the weather conditions, but is not entirely sure and awaits the listener's approval.

(3)我說，你昨天晚上來過？不可能吧，昨天晚上下那麼大的雨，你怎麼會來？⁸⁴

wo	shuo,	ni	zuotian	wanshang	lai-guo?	bu	keneng
1SG	say	2SG	yesterday	evening	come-EXP	NEG	possible
ba,	zuotian	wanshang	xia	name	da	de	yu, ni

⁸² From Tang (2019:39).

⁸³ Utterance tone (口氣) is a more traditional term used in Chinese grammatical studies.

⁸⁴ From Xu (2003:143).

SFP yesterday evening fall so big MOD rain 2SG
 zenme hui la
 how will come

‘I said, did you come here last night? It was raining so hard last night. How could you have come here?’

The function of sentence-final particles at the complementizer level also varies. According to Li (2006), different sentence-final adjuncts present different functional projections, where the sentence-final particles are treated as the head of the functional projection in the complementizer domain. Li (2006) argues that the main function of *ne* (呢) is to mark the evaluative mood, the main function of *ma* (嗎) and *ba* (吧) is to mark the degree, and the main function of *a* (啊) is to highlight the discourse relevance, as shown in (4) – (7) respectively. Using these functions as a basis, the author establishes a hierarchy of functional projections, as shown in (8). Similarly exploring the functions of sentence-final particles are Shi (2009) and Tang (2010). Despite the differences in the functional classifications they propose, Li, Shi and Tang discuss the distribution and functions of sentence-final particles on the objective propositional and subjective modal continuum at the complementizer layer.

(4)你還沒去倫敦呢。

ni hai mei qu lundun ne
 2SG still not go London SFP

‘You haven't been to London yet.’

(5)你去過倫敦了嗎？

ni qu-guo lundun le ma
 2SG go-EXP London SFP SFP

‘Have you been to London?’

(6)你去倫敦了吧。

ni qu lundun le ba
2SG go London SFP SFP
'You've been to London, haven't you?'

(7)你去倫敦了啊。

ni qu lundun le a
2SG go London SFP SFP
'You've been to London.'

(8) Discourse > Degree > Evaluative⁸⁵

a (啊) *ma* (嗎) *ba* (吧) *ne* (呢)

The sentence-final auxiliaries of modern Shanghainese, to be discussed in this chapter, are also members located at the complementizer layer.

4.2 Recent claims about sentence-final particles in modern Shanghainese

4.2.1 Qian (2004b, 2006, 2009, 2010, 2011, 2014, 2016)

It has been argued that sentence-final particles play a role in encoding tense in modern Shanghainese (Qian 2004b, 2006, 2009, 2010, 2011, 2014, 2016). According to Qian, there are two markers for tense: one is *tse* (哉/者), which marks the time related to the utterance time; the other one is *keh* (個), which marks the PAST.

Tse (哉/者) relates a situation to the temporal information indicated by the time adverbial in a sentence, as shown in (9). When a sentence contains no temporal

⁸⁵ From Li (2006:63).

adverbial, *tse* (哉/者) is seen as the default PRESENT, as shown in (10) and (11). *Keh* (個) as a RECENT PAST indicator is exemplified in (12) - (15).

Qian treats *tse* (哉/者) as the marker of *current relevant state* which means ‘a state of affairs has special current relevance with respect to some particular situation’ (Li and Thompson 1981:240). *Current relevant state* is originally used to explain the communicative function of the sentence-final auxiliary *le* (了) in Mandarin (Li and Thompson 1981; Li et al. 1982). *Current* is different from *present*, as shown in (9) where *tse* (哉/者) relates to a particular situation that *zong liba xiakeh* 上禮拜寫個 ‘it was written last week’. This relevance between *tse* (哉/者) and the particular situation is independent of the temporality of the situation to which it relates, so *tse* (哉/者) does not indicate PAST in (9). In other words, the sentence-final particle itself does not directly express the temporality of the past, present or future, but serves more to signal the state of the event. Thus, by equating *current relevant state* with PRESENT and treating *tse* (哉/者) as a marker for PRESENT, Qian’s works are likely to cause misunderstanding on the usage of *tse* (哉/者). It should be pointed out that only when there is no other situation in the sentence can the sentence-final particle be relevant to *now* by default, leading to the PRESENT temporal interpretation. For instance, *tse* (哉/者) marks the state of *thi khe tse* 天開哉 ‘the sky opens’ and *zylesy lungdeu watheh* 自來水龍頭壞脫 ‘the water tap is broken’ that occur at the utterance time in (10) and (11) respectively.

(9)伊話上禮拜寫個哉。⁸⁶

yi	wo	zongliba	xia	keh	tse
3SG	say	last.week	write	PST	CUR

‘S/he said it had been written last week.’

⁸⁶ (9) is from Macgowan (1862) and quoted from Qian (2006, 2010); (10) is from Bourgeois (1939) and quoted from Qian (2016); (11) – (15) are from Obata (1908) and quoted Qian (2006, 2010).

(10)天开哉。

thi khe tse
sky open CUR
'The sky is open.'

(11)自來水龍頭壞脫者。

zylesy lungdeu wa-theh tse
running.water tap break-COMPL CUR
'The water tap is broken'

(12)儂是幾時搬到地頭來個？

nung zy jizy poe-toa diehdeu le keh
you be when move-to here come PST
'When did you move to here?'

(13)伊是幾時轉來個？

yi zy jizy tsoele keh
3SG be when return PST
'When did s/he come back?'

(14)我侬一直替那一家人家交易，勿到別人家去個。

nguni yehzeh dah na yeh-ka ningka jioani, vohtoa
1PL always with you one-CLF household trade not.go
biehningka qi keh
other.people go PST
'We always trade with your firm alone and never have dealings with other people.'

(15)公債股票咯甚賣買從前都做個, 現在勿做者。

kungtsa kuphio gesang mama zungzi ze tsu keh,
bonds shares like.that buy.sell before all do PST
yize vohtsu tse
now not.do CUR

‘We/I used to buy and sell government bonds and shares, among others. Now we don’t do it anymore.’

4.2.2 Issues on *tse* (哉/者) and *keh* (個)

Qian’s discussion of sentence-final particles raises the question of whether *tse* (哉/者) and *keh* (個) can be regarded as tense markers and what their functions are in sentences and discourse.

If *tse* (哉/者) and *keh* (個) are regarded as tense markers, whether they mark *absolute tense* or *relative tense* is not specified by Qian. According to Qian, when there is no temporal adverbial in a sentence, *tse* (哉/者) and *keh* (個) are treated as default PRESENT and PAST markers. On the surface, *tse* (哉/者) and *keh* (個) denote *absolute tense*, but the reason is that the topic time is the utterance time in the default case, normally in conversations or discourses. The fact is that *tse* (哉/者) and *keh* (個) do not locate the events in the sentence on the time axis, because they do not have a similar indexical function as temporal expressions do. When they are associated with PRESENT and PAST, the temporality of a situation in sentences is determined by the context or other components, not by sentence-final particles. Besides, if *tse* (哉/者) and *keh* (個) were *absolute tense* markers, their co-occurrence would give rise to conflicts between PRESENT and PAST, but they can appear in the same sentence as shown in (9) above. Here I am tentatively assuming that *tse* (哉/者) and *keh* (個) can be used in denoting time by connecting to a provided reference point in clauses which is the topic time. In this sense, they should be viewed as *relative tense* markers.

Additionally, if *tse* (哉/者) is seen as the counterpart as *le2* of Mandarin and *tse* (哉/者) of Suzhou Wu, then it should encode aspectual meaning, as both *le2* and *tse* (哉/者) (Suzhou Wu) encode a *perfect reading*. If so, it is not clear whether the tense-aspect compounds proposed by Qian is theoretically and empirically feasible. These questions need to be addressed by examining the database to draw a more comprehensive picture of the related time-encoding features.

4.3 *Tse* (哉/者)

A discussion of the usage of *tse* (哉/者) with examples drawn from missionary works will be given in this section. Unlike verb suffixes, sentence-final *tse* (哉/者) is not attached to predicates in single sentences. Therefore it is necessary to extend the study from single sentences to discourse to draw an overall picture of *tse* (哉/者) and to see the co-occurrence of *tse* (哉/者) and other particles in discourse, checking especially whether *tse* (哉/者) and *keh* (個) can co-occur in the same sentence.

Missionary Shanghainese publications have been consulted in order to obtain first-hand information on the use and distribution of *tse* (哉/者). The scripts consulted are listed in the following table, together with the findings.

Table 4-1: The number of occurrences of *tse* (哉) and *tse* (者)

	Publications	Sentence (S)	SFP tse 者	SFP tse 哉	tse/S Ratio	IN	END
1	Youlaba Guo (1849)	1437	55	0	0.039	21	34
2	Hengli Shilu (1856)	1351	72	0	0.053	45	24

3	Chenzao Yubei (1868)	158	0	4	0.025	4	0
4	Gangdandiushi (1868)	221	0	2	0.009	2	0
5	Shenpan Rijia (1868)	92	0	5	0.054	4	1
6	Lujia Chuan Fuyin Shu (1886)	4591	0	182	0.040	174	8
7	Matai Chuan Fuyin Shu (1895)	4292	0	168	0.039	156	12
8	Shengjing Shiji (Vol.1: 1886, Vol.2: 1892, Vol.3 -4: 1889, Vol.5: 1890)	6397	187	32	0.034	198	24
9	Shitu Yanxing Zhuan (1890)	1882	0	59	0.031	53	6
10	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	5248	0	222	0.042	207	15
11	Shitiaojie Zongyi Wenda (1899)	238	0	2	0.008	1	1

12	Ali Paipai Feng Dao Ji (1921)	2318	166	1	0.072	167	16
	total	22467	480	677	0.051	1032	141

4.3.1 Some general observations

Judging by the ratio between the number of *tse* occurring in a script and the number of sentences contained therein (the *tse*/S ratio), occurrence of *tse* in most scripts is conspicuous, even though it cannot be described as frequent. Although there are variations from script to script, the longer the script, the more similar the *tse*/S ratios become. This conspicuous use of *tse* in modern Shanghainese contrasts sharply with its zero return from a search for the sentence-final particle use of 哉 and 者 in a database containing contemporary Shanghainese writings, which I am collecting from the Shanghainese Page (上海閒話) published weekly by Xinmin Evening Paper (新民晚報) and Shanghainese blog writings in Douban Net (豆瓣網). This result conforms to the judgment of native speakers of contemporary Shanghainese, who tend to think that *tse* is not in use in the middle and new variants of contemporary Shanghainese, although it is still in use in the old variant in some areas. On the other hand, searching in the missionary Shanghainese database for *le* (了) only yielded one return, which is a verb suffix, not a sentence-final particle.⁸⁷ But searching for *le* (了) in our database of contemporary Shanghainese returns numerous occurrences, both as verb suffixes and as sentence-final particles. These findings provide support to the feeling shared by most language users of Shanghainese that contemporary Shanghainese has lost much of its linguistic uniqueness due to the infiltration of Mandarin as the standard Han language.

4.3.2 Two uses of the *tse*

⁸⁷ The example is ‘後首亞當又養了一个兒子’, from *Shengjing Shiji*.

The distribution of sentence-final *tse* (哉/者) in narrative discourse of the data has been given in (16), (17) and (18), taken from different works.⁸⁸

(16) a. 有一个小囡,

yeu yeh-geh xioanoe

there.be one-CLF child

‘There was a child.’

b. 名頭叫亨利,

mingdeu jioa Hengli

name call PN

‘His name is called Henry.’

c. 養拉亭南怕戶蕩,

yang la Dingnoepho wudong⁸⁹

be.born at Dinapore place

‘He was born at the town of Dinapore.’

d. 就是印度國裏。

zieuzy Yingdu koh li

that.is India country in

‘That is in the country of India.’

e. 伊个爺, 是一个英咭喇个武官,

yi-heh ya, zy yeh-geh Yingjili-heh wukuoe

⁸⁸ Cf. Appendix III for more samples from missionary works for reference.

⁸⁹ 戶蕩 wudong ‘place’ is no longer used in contemporary urban Shanghainese but is still widely used in the outskirts of Shanghai.

s/he-'s dad be one-CLF England-'s military.officer
'His dad was an English military officer.'

f.亨利養得勿多幾時,
Hengli yang teh voh-tu-jizy
PN born COMP not-much-time
'Not long after Henry's birth.'

g.伊个爺去攻打炮台畔,
yi-heh ya, qi kungtang phoade loa
s/he-'s dad go attack fort CEP
'As his father was sent to attack a fort,'

h.撥拉對敵殺脫个,
pehla tedieh sah-theh keh
PASS enemy kill-COMPL PST
'was killed by the enemy.'

i.亨利勿曾滿歲末,
Hengli vohzeng moe se meh
PN not.yet reach year PM
'When Henry was not yet one year's old,'

j.伊个娘又死者,
yi-heh niang yeu xi tse
his/her-'s mother also die CUR
'His mother also died,'

k. 蓋啐亨利拉小个辰光,
 kehloa Hengli la xioa-heh zengkuong
 that.is.why PN at little-'s time
 ‘That’s why when Henry was little,’

l. 就無得子爺娘啐,
 zieu meh-teh-tsy yaniang loa
 therefore not-have-PFV father.mother CEP
 ‘so he lost both his father and his mother.’

m. 最苦惱只那。
 tse khunoa tseh-na.⁹⁰
 most miserable CUR-SFP
 ‘He was very miserable.’

Tse in (16j) appears in the middle of a paragraph, presenting a situation or a state, which may be initiated earlier but has current relevance to the narration, followed by a cohesive word *kehloa* (蓋啐) ‘that’s why’, which introduces discourse continuity. So *current relevance* is found to be the temporal contribution *tse* makes. To be more specific, I propose that *tse* as a sentence-final particle not only presents a proposition as a situation or the beginning of a situation when involving an inchoative verb, but also introduces a reference time. This latter function is similar to a time adverbial or a subordinate clause, which can also introduce reference time,⁹¹ irrespective of whether there are expressions that introduce reference time in the same sentence or whether the reference time can be inferred from the context, as is common in Chinese.

⁹⁰ *Tseh-na* is an expression no longer in use in contemporary Shanghainese. According to Prof. Huan TAO [陶寰](p.c.), it is likely to be a merger of *tse* and *na*.

⁹¹ Cf. Hofmann (1993: Chapter 7).

Two other discourse segments are presented below as (17) and (18). The more complete paragraphs containing the segments are presented in Appendix II. In (17), there are three occurrences of *tse*: (17f), (17h), and (17j). (17f) with its use of *tse* introduces a new situation which leads to a consequence described by (17g) - (17h), while (17h) with its own use of *tse* serves to present the result. (17j) with the third *tse* is a further result in response to a situation introduced by (17i). (18f) serves the same function as (17f) and (18h) serves the same function as (17j).

(17)a. 亨利望進來,

Hengli mong jinle,
 PN look get.in
 ‘Henry looked in,’

b. 看見子畫啐要想走進去,

khoeji tsy hoa loa yoa xiang zoe jinqi
 see PFV painting PM will want walk get.in
 ‘and saw the painting and wanted to walk in,’

c. 但是勿搭蒲師一淘末,

dezy voh tah Busy yehdoa meh
 but not with PN together CDM
 ‘but not with Boosy together,’

d. 勿敢進去,

vohkoe jinqi
 not.dare get.in
 ‘(he) was afraid to walk in.’

e. 歇子一歇,

xieh-tsy yehxieh

wait-PFV a.short.moment

‘After a short while,’

f. 搭子姑娘兩個熟子點者,

tahtsy kuniang liang-geh zohtsy di tse

with lady two-CLF familiar bit SFP

‘getting to know the lady a little better,’

g. 就是蒲師拉門外頭,

zieuzy Busy la meng ngadeu

even.if PN at door outside

‘Even if Boosy is outside the door,’

h. 伊也敢進去白相者。

yi ha koe jinqu bahxiang tse

3SG also dare get.in play SFP

‘he dares to go in and play.’

i. 後首末一眼勿怕啐,

heuseu meh yehnge voh poa loa

later PM little not afraid SFP

‘later (he) is not afraid anymore,’

j. 常常走進去者。

cangcang zou jinqi tse

often walk get.in SFP

‘often walked in.’

(18)a.拉第個辰光,

la digeh zengkuong,

at this time,

‘At that time,’

b.自伊拉拉心裡向想啫話,

tsyyi lala xinlixiang xiang loa wo,

3SG at heart.inside think PM say

‘(Alibaba) thought to himself and said,’

c.等到人馬來個時候,

dengtoa ningma le keh zyheu,

wait.until people.horse come MOD time,

‘when they arrived,’

d.再暗地裡看看伊拉個行景看,

ze eudili khoekhoe yila-heh hongjin khoe

again stealthily see.see 3PL-’s situation ASP

‘see their situation stealthily.’

e.到底是強盜呢勿是強盜,

toadi zy jiangdoa neh vohzy jiangdao,

whether be robber MP not robber,

‘whether they are robbers or not,’

f.就勿煩難曉得者。

zieu voh fene xioateh tse
therefore not hard know SFP

‘It is not hard to know.’

g. 勿多一歇工夫,

voh-tu-yehxieh kungfu,

not-much-moment time,

‘In a few minutes,’

h. 騎馬個大家完全到者。

qima keh daka woedjyuae toa tse

ride.horse MOD everyone all arrive SFP

‘those who ride horses all arrived.’

I went through all the 1157 odd sentences containing *tse* from the twelve works listed in Table 4-1 and found that they basically fall into two types, as have been exemplified by the discourse segments (16), (17) and (18): those that present a situation with immediate follow-ups, and those that appear at the end of a concluding sentence.

4.3.3 Sentence cluster and the discourse function of *tse*

To sharpen the findings reported in 4.3.2, I propose to use a descriptive concept, *sentence cluster*, for our current analysis. Sentence cluster, as proposed by Wu and Tian (2000), is defined as ‘two or more sentences forming a group of sentences that are related to one other with cohesive devices and coherent content structure.’

A sentence cluster may contain complex and compound sentences as its members. In addition to using logical connectives and sentential adverbials as cohesive devices, it also makes use of sentence-final particles, discourse deixis and implicit reasoning to establish coherence. Within a sentence cluster, I can observe rhetorical relations as

expounded in Rhetorical Structure Theory (RST) (Mann & Thompson 1988). Structural properties that are often identified in Chinese discourse can also be observed, such as topic chain, paratactic construction, and multiple use of zero anaphora across discourse.⁹²

I propose that *tse* has two uses: first, it is used within a sentence cluster to bring out a situation, to be followed by some closely related consequential extension. Second, it is used at the end of a sentence cluster to present a conclusion, a summary remark, or an end to a stretch of description. But overall, both uses contribute to the discourse organization by introducing a current reference time point. In Table 4-1, the IN column records the occurrences of *tse* within a sentence cluster, while the END column records the occurrences of *tse* at the end of a cluster. It can be observed that the IN-cluster use far more exceeds the END-cluster use.

Li et al. (1982) lists five situations (S) where the SFP *le*, in Mandarin can be used to mark a currently relevant state:

- A. S is a changed state
- B. S corrects a wrong assumption
- C. S reports 'progress so far'
- D. S determines what will happen next
- E. S is the speaker's total contribution to the conversation at that point

The IN-cluster use of *tse* matches well with A, C and D, while the END-cluster use matches well with E. As to B, I think it can be collapsed with A. If taking statement to be expressing assumptions, then an assumption carried by the uttering of a statement either strengthens or corrects some existing assumptions entertained by the hearer, or it can be coupled with the hearer's assumptions to form a deductive schema, leading to some new assumption as a derived conclusion. So B does not seem to me to be a special

⁹² Cf. Chen (1987), Chu (1998), Wen (2001) and Zhang and Fang (2020a, b) for relevant studies.

use, as all other situations may also contradict and correct some existing assumptions of the hearer.⁹³

Although *tse* parallels *le*, in discourse function, the two expressions are by no means equivalent, as they are not used in the same language. A full understanding of the use of *tse* is dependent on the understanding of other sentence-final particles such as *keh*, which is an alleged marker of recent past in modern Shanghainese.

4.3.4 哉 and 者

Tse has been treated as one particle written as two characters 哉 or 者 in Qian (2004a, 2004b, 2006, 2009, 2010, 2011, 2014, 2016), but narrative coherence of *Shengjing Shiji* shows that two characters can be represented by two different characters: 哉 and 者 in the same script, as shown in (19). But this mixture can only be found in this particular script. Table 4-1 records 187 occurrences of 者 and 32 cases of 哉 in this script. However, both 者 and 哉 have IN-cluster use and END-cluster use. I still think that the two terms are interchangeable, as there is no clear division of labour between the two. As *Shengjing Shiji* has five volumes, it was likely that several authors contributed to the writing, whose choices of the character for *tse* were not uniform.

(19)a. 後首神又咁約拿到尼尼微去,

heuseu	seng	yeu	jioa	yahna	toa	ninimi	qi
later	God	again	ask	PN	to	PN	go

‘Later God also sent Jonah to Nineveh,’

b. 約拿奉神個吩咐，到尼尼微去喊啱話，

yahna	fung	seng-heh	fenfu,	toa	ninimi	qi	he	loa
PN	follow	God-'s	commands	arrive	PN	go	shout	PM

wo

⁹³ Cf. Sperber and Wilson (1995: chapter 2) for cognitive processing of assumptions in communication.

say

‘Jonah, being commanded by God, went to Nineveh and shouted,’

c.再等四十日，尼尼微個城必要坍塌。

ze deng syzehnyi, ninimi-heh seng bihyoa te tse
again wait forty.day PN-'s city must collapse CUR

‘Wait another forty days, and the city of Nineveh will collapse,’

d.尼尼微人相信神，從皇帝到百姓全着之麻衣裳，坐拉灰裡懊悔，

ninimi ning xiangxing seng, zung wongti toa
PN people believe God from emperor to
bahxing djyuae jah-tsy moayisong, zu-la
common.people all wear-PFV linen.clothes sit-PROG
we-li o'we
ashe-PREP repent

‘The people of Nineveh believed in God, and all the people from the emperor to the common people were clothed in linen, and sat in ashes and repented,’

e.耶和華看見尼尼微人懊悔末，就勿滅脫伊個城者。

yuwuhoa khoeji ninimi ning o'we meh, zieu voh
God see PN people repent MP therefore not
mih-theh yi-geh-seng tse
destroy-COMPL 3SG-that-city CUR

‘God saw that the people of Nineveh repented, so he did not destroy the city.’

4.4 *Keh* (個)

Chao (1926) proposes that the sentence-ending *keh* (個) in Suzhou Wu is similar to *laizhe* (來著) of Beijing Mandarin, expressing *recent past*, as shown in (20) and (21).⁹⁴

Beijing Mandarin

(20)我今天看見王先生來著。

wo jintian kanjian Wang xiansheng laizhe

I today see Wang mister PST

‘I saw Mr. Wang today.’

Suzhou Wu

(21)我今朝看見王先生格。

ngu jingtsoa khoeji Wong xisang keh

I today see Wang mister PST

‘I saw Mr. Wang today.’

Chao (1926) divides *laizhe* (來著) in Beijing Mandarin into two categories, one for *recent past*, as shown in (20), and the other for *recent extension* which is parallel to have been-ing/was-ing in English, as shown in (22). *Recent PAST* refers to the time of the situation closer to the time when the sentence is expressed, while *recent extension* is not that clear. It can be claimed that *laizhe* (來著) lasts at least until the time the sentence is uttered. For instance, the sleeping state of the respondent in (22) continues until the conversation begins. Whether *keh* (個) has a similar function to *laizhe* (來著) will be examined in the database in the next section.

(22)A: 你干嘛來著?⁹⁵

⁹⁴ From Chao (1926:45).

⁹⁵ From Chao (1926:44).

ni ganma laizhe
 2SG do.what PROG

‘What have you been doing?’

B: 我睡觉來著。

wo shuijiao laizhe
 1SG sleep PST

‘I have been sleeping.’

4.4.1 The usage of *keh* (個)

The occurrence of *keh* (個) in the database is listed in Table 4-2. In the data, 13161 occurrences of *keh* (個) are found, among which, 1717 are sentence-final.

Table 4-2: The number of occurrences of *keh* (個)

Members	Number of occurrences(total)	Number of occurrences (sentence-final)
<i>keh</i> (個)	13161	1717

From a descriptive point of view, it has been observed in the database that *keh* (個) has the usage of marking PAST, which is similar to the temporal usage of *keh* (個) in Suzhou Wu and *laizhe* (來著) of Beijing Mandarin. (23), (24) and (25) all describe events which happen in the past, but whether *keh* (個) marks *recent past* cannot be verified as it cannot be observed from the three sentences, nor can it be ascertained that it indicates *recent extension*. In order to get an overall picture of *keh* (個), following the observation on *tse* (哉/者), I will investigate the usage of *keh* (個) in narrative discourse, as shown in (26) and (27).

(23)伊個爺去攻打炮台啐，撥拉對敵殺脫個。

yi-heh ya qi kungtang phoade loa, pehla tedieh
 3SG-'s dad go attack fort CEP PASS enemy
 sah-theh keh
 kill-COMPL PST

‘His father was sent to attack a fort, when he was killed by the enemy.’

(24)到之三日，伊拉全照之約瑟個說話老應驗個。

toa-tsy sening, yila djyuae zoa-tsy yahseh-heh ewo
 arrive-PFV three.day 3PL all follow-PFV PN-'s word
 loa yingnyi keh
 PM fullfill PST

‘After three days, they all fulfilled what Joseph had said.’

(25)鄰舍人家末，完全拉話卡新因得生之急病老死個。

lingsoe ningka meh, woedjyuae-la wo kaxin yinteh
 neighbour household PM all-PROG say PN because
 sang-tsy jihbing loa xi keh
 get-PFV acute.illness CEP die PST

‘The neighbours all said that Kaxin died because of an acute illness.’

(26)a.當時還有一個便雅憫人，名頭叫示巴，

dongzy heyau yeh-geh biyamin ning, mingdeu jioa
 that time also.have one-CLF PN person name called
 Zyba,
 PN

‘At that time, there was a person came from Biyamin named Zyba,’

b.勿肯服大衛做王，領頭謀反，

kheng foh Dawe tsu wong, lingdeu meufe
 not.willing obey PN be King lead rebellion
 ‘Refusing to obey David as King and led a rebellion,’

c. 有多化人跟從伊，大衛發兵去攻打，

yeu duhuaning gengzung yi, Dawe fahbing qi
 have many.people follow 3SG PN send.army go
 kungtang
 attack

‘Many people followed him, and David sent an army attack him,’

d. 圍困拉亞伯城裏，城裏個人殺之伊啫，担伊個頭，甩拉城外頭，

wekhuen la Yabah sengli, sengli-heh ning sah-tsy yi
 besiege at PN city-inside cityinside-’s people kill-PFV 3SG
 loa, na yi-heh deu, huah-la seng ngadeu
 PM take he-’s head throw-PFV city outside

‘(Zyba) was besieged in the city, and the men of the city killed him and threw his head outside the city.’

e. 伊拉得勝之啫轉去個。

yila tehseng-tsy loa zeuqi keh
 3PL get.win-PFV PM leave PST

‘They left after winning.’

(27)a. 我等之長遠，勿聽見伊回轉來，

ngu deng-tsy zangyoe, vohthingji yi wezeu le
 1SG wait-PFV long.time not.hear 3SG back come

‘I waited for a long time and not heard him back,’

b.我料想起來，自伊一定從後牆裏跳出去咯，逃走者。

ngu lioaxiong qile, tsyyi yehding zung heuziang
1SG hink start himself must from back.wall
thio-cehqi loa, doazoe tse
jump-COMPL PM escape CUR

‘I think he must have jumped out the back wall and escaped.’

c.我又點之燈，到後天井去看看。

ngu yeu ti-tsy deng, toa heu thijin qi khoekhoe
1SG again light-PFV light arrive back patio go see.see

‘I lit the light again and checked the back patio.’

d.看見後門半開半闔拉，乃未曉得清爽強盜一定逃走拉者。

khoeji heumeng beukhe beuheh la, nemeh xioateh qingsong
see back.door half.open half.close PROG then know clearly
jiangdoa yehding doazoe-la tse
robber certainly escape-PFV CUR

‘Seeing the back door half-open, I knew clearly that the robber must have escaped.’

e.乃未我拿後門門好之，然後我起頭敢回到房間裏去睏個。

nemeh ngu na heumeng seu-hoa tsy, zoeheu ngu
so 1SG t ake back.door bolt-COMPL CUR then 1SG
qideu koe we.toa fongke-li qi khueng keh
start dare back.to room-PREP go sleep PST

‘So I bolted the back door before I dared to go back to my room to sleep.’

f. 東家呀，第個不過是昨夜個事體，

tungngka ya, digeh behku zy djohya keh zythi
master PM this just be yesterday.night MOD thing

‘Master, it is just what happened yesterday.’

g. 我丫頭還有幾句說話要稟明東家哩

ngu yadeu heyue ji-jieue ewo yoa bingming tungka
1SG servant stiil several-CLF word need report master

li

SFP

‘I have a few words to report to master.’

It can be observed from (26e) and (27e) that *keh* (個) functions as a marker of PAST in narrative discourse, and usages for marking *resent PAST* and *recent extension* are not found. The contribution of *keh* (個) to the narrative coherence is also shown in the above examples. For instance, (26e) is the last sentence of a chapter (Chapter 67 of *Shengjing Shiji* vol.4 1889)⁹⁶ following a series of consecutive events. It seems that *keh* (個) can contribute to present a conclusion as *tse* (哉/者) does. However, such discourse function is not seen in (27). (27a) - (27b), (27c) - (27d) are events with the sentence-final *tse* (者) bringing out a situation which follows consequential extension. (27e) with *keh* (個) follows the two events and states another event, which also supports the discourse functions of *tse* (哉/者) discussed before. But (27e) is neither the end of a paragraph nor a chapter end, so I do not treat the discourse function as the main usage of *keh* (個), but it can be seen as a by-product of the temporal usage when *keh* (個) occurs at the end of a paragraph or chapter. What has happened in the past, can sometimes be seen as an end point in the narrative discourse, as a way of distinguishing the following content in a narrative flow.

⁹⁶ Cf. Appendix III for the Chapter 67 extract.

Another usage of *keh* (個) found in the database is indicating assertion. (28b), (28c) and (28f) are content of a conversation in which the speaker states his opinion and persuades the listener to believe it, which shows assertion made by the speaker. *Keh* (個) co-occurs with a modal adverb *yehding* (一定, certainly) of a higher degree of certainty in (28b). And the verb context of *vohyoa niweh* 勿要疑惑 ‘does not suspect that ...’ in (28f), which should be followed by an irrealis complement, which is *ngu la ngadeu qiang-le* 我拉外頭搶來 ‘my stealing it from outside’. So the sentence-final *keh* (個) has no way to indicate PAST. It can only act as an assertion marker. Yet another case found in the database concerns events presented as common knowledge or as mutual knowledge, and *keh* (個) also works as a sentence-final assertion marker, as shown in (29c), (29d), (29f) and (29g).

(28)a. 阿里排排勿等伊個女人個說話話完, 就阻擋自伊啫話,

Alibaba	vohdeng	yi-heh	nyuning-heh	ewo	wo-woe,
PN	not.wait	3SG-'s	woman-'s	words	say-COMPL
zieu	zutong	tsyyi	loa wo		
then	interrupt	3SG	PM say		

‘Alibaba interrupted his wife before she finished talking and said,’

b. 自儂勿必緊嚇得, 我一定勿至於做盜賊個,

tysnung	vohbih	jinhah	teh,	ngu	yehding	vohtsyyu	tsu
2SG	not-have-to	nervous	CM	1SG	certainly	not.as.to	be
doazeh	keh						
burglar	AM						

‘You do not need to be nervous, and I am unlikely go so far as a burglar.’

c. 我不過拉強盜窠裡拿出來拉個,

ngu	behku	la	jiangdoa	wuli	na-cehle	la	keh
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1SG just at robber nest.inside take-COMPL PFV AM
'I just took from robbers' nest,'

d.等到自我拿第個放金子銀子個袋，完全抗攏好子後來，

dengtoa tsyngu na digeh fong jingtsy ningtsy keh de,
wait 1SG take this put gold silver MOD bag
woedjyuae khonglong-hoa tsy heule
complete hide-COMPL PFV after
'After I have completely hidden the bag of gold and silver,'

e.然後我要拿前情細細能告訴撥儂聽。

zoeheu ngu yoa na zizing xixineng koasu peh nung
then 1SG will take antecedent carefully tell to 2SG
thing
listen
'then I am going to tell you all the details.'

f.現在儂可以勿要疑惑，我拉外頭搶來個。

yize nung khuyi vohyoa niweh, ngu la ngadeu qiang-le
now 2SG can not.will suspect 1SG at outside rob-COMPL
keh
AM
'Now you can stop suspecting that I stole (it) from outside.'

(29)a.聖經上話，起初真神創造天地，

sengjing-xong wo, qicu zengseng congzoe thidi,
Bible-PREP say beginning real.God create sky.earth
'The Bible says that God created the world in the beginning,'

b. 第位神，也稱耶和華，是自然而然，無末起頭。

di-we seng, ha ceng yawuhoa, zy tsyzoe'e'zoe, mmeh
this-CLF God also called PN be naturally not.have
qideu
begining

‘This God, also called Jehovah, is naturally, without any beginning.’

c. 伊是無末形象，人看勿見個。

yi zy mmeh yingxiang, ning vohkhoeji keh
3SG is not.have image people not.see AM

‘God has no image, and people cannot see.’

d. 但是神各到落處拉，伊末看見人個，

dezy seng koh toa lohcy lala, yi meh khoeji
but God every arrive place at 3SG PM see
ning keh
people AM

‘But God came to everywhere and he saw people.’

e. 伊也有大聰明，能殼看見人個心腸。

yi ha yeu du cungming, nengkeu khoeji ning-heh xinzang
3SG also have big smart can see people-'s heart

‘He is very smart and can see people’s hearts.’

f. 伊也是樣樣能殼，勿論要做啥末，全成功個，

yi ha zy yangyang nengkeu, vohleng yoa tsu sa
3SG also is every.kind can no.matter will do what

meh, djyuoə zengkung keh
 PM all success AM

‘He can do anything. Whatever he did all successful.’

g.伊造天地末，勿用啥料作，不過用伊能幹個說話造成功個。

yi zoa thidi meh, vohyung sa liaozoh, behku
 3SG create sky.earth PM not.use what material just
 yung yi nengkeu keh ewo zoa zengkung keh
 use 3SG capable MOD words create success AM

‘He made the world not using any material but his words.’

4.4.2 The co-occurrence of *keh* (個) and *tse* (哉/者)

After discussing the usage of *tse* (哉/者) and *keh* (個) in narrative discourse respectively, I describe their co-occurrence in the database, which contains 24 occurrences of 個哉 and 54 occurrences of 個者, as listed in Table 4-3.

Table 4-3: The number of occurrences of 個哉 and 個者

Members	The number of occurrences
個哉	24
個者	54

The occurrences of 個哉 and 個者 are also observed in narrative discourse, as shown in (30) and (31) respectively.

(30)a.今朝聽見拉吃個物事當中，勿要放鹽，

jingtsoa thingji la qieh keh mehzy dongzung, vohyoa fong
 today listen at eat MOD thing among not.will put
 yi

salt

‘(she)heard that do not put salt in the food today,’

b.實在從來勿曾聽見歇個,

zehze zungle vohzeng thingji-xieh keh,

actually at.all.times not.yet hear-EXP AM

‘It has never been heard before,’

c.並且一眾小菜完全燒好拉者。

bingqi yehzung xiaoce woedjyuo soa-hoa la tse

and all small.dishes complete cook-COMPL PFV CUR

‘and all the food are ready.’

d.若使勿要放鹽,

zahsy vohyoa fong yi,

if not.will put salt

‘if do not put salt,’

e.勢必要另外燒個者。

sybih yoa lingnga soa keh tse

must will in.addition cook AM SFP

‘the meal needs to be cooked again,’

f.因此自伊勿快活啫話,

yintsy tsyyi voh khuaweh loa wo,

so 3SG not happy PM say

‘So she was not happy and said,’

g.第個客人個性情，為啥同別人又是一樣個呢。

digeh khahning-heh xingzing, wesa dung biehning yeu zy
this guest-'s personality why and other.people again be
yehyang keh neh
same EM-SFP MP

'why the personality of this guest is different from other people.'

h.豈有啥吃個物事當中，勿放鹽個道理個否。

qiyeu sa qieh keh mehzy dongzung, voh fong yi keh
how what eat MOD thing among not put salt MOD
doali feu
reason Q

'Do not put salt in food does not make sense.'

i.再者，若使要另外再燒，必定要大費周折，

zetse, zahsy yoa lingnga ze soa, bihdng yoa
besides if will in.addition again cook must will
dufi seuzeh,
big.cost troubles

'Besides, cooking again would take great efforts,'

j.今夜個夜飯，必定要脱卯個者。

jingya-heh yafe bihdng yoa thehmo keh tse
tonight-'s dinner must will fail AM CUR

'so the dinner cannot be served tonight'

The occurrence of 個者 in (30) shows the combination of the usages of *keh* (個) and *tse* (哉/者). In (30e), 者 bring out a situation in the narrative flow. 個 in (30e) co-

occurs with *sybih* (勢必, must), expressing the speaker's assertion about the event she stated. (30j) is a conclusion of the above content which is presented by 者, while *keh* (個) in (30j) still indicates the speaker's assertion about the content in the co-occurrence with *bihding* (必定, msut). And the modal verb *yao* (要, will) in both (30e) and (30j) excludes the function of PAST-marking by *keh* (個).

(31)a. 兩個人連忙起來,

liang-geh ning limong qile,
two-CLF person immediately get.up

'The two men got up immediately.'

b. 回到耶路撒冷,

wetoa yalusalang
back.to PN

'and went back to Jerusalem.'

c. 看見十一個使徒,

khoeji zehyeh-geh sydu,
see eleven-CLF apostle

'saw the eleven apostles.'

d. 搭之多化門徒聚集拉。

tahtsy duhua mengdu zyuzih-la
with many disciple assemble-PFV

'many disciples assembled.'

e. 話啱, 主果然復活,

wo loa, zyu kuzoe fohweh

say PM God as.expected resurrection
 ‘saying that the Lord is risen as expected,’

f.已經顯拉西門看見個哉。

yijing xi-la ximeng khoeji keh tse
 already show-PFV west.gate see PST SFP
 ‘and they have seen him at the westgate.’

The temporal function of 個 can be observed in another case, as shown in (31f). 個 marks the PAST and 哉 plays the role of presenting a conclusion at the end of a sentence cluster in (31f). Based on the observation, 個者 and 個哉 are used in the same way in narrative discourse, both being a combination of different uses of *keh* and *tse*.

The discussion of the occurrence of *keh* (個) and *tse* (哉/者) offers different explanations from Qian’s account. The fact that 個者 and 個哉 are found in the database also shows that *tse* (哉/者) is not marking PRESENT, as it occurs with the marker for PAST.

4.5 Data report

The distribution of *keh* (個), 個者 and 個哉 in Missionary Shanghainese publications is listed in Table 4-4.

Table 4-4: The distribution of sentence-final particles in texts

Members	Publications and distribution	Number of occurrences
<i>keh</i> (個)	Youlaba Guo (1849)	395
	Hengli Shilu (1856)	92

	Chenzao Yubei (1868)	4
	Gangdandiushi (1868)	5
	Shenpan Rijiao (1868)	2
	Lujia Chuan Fuyin Shu (1886)	278
	Matai Chuan Fuyin Shu (1895)	272
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3- 4:1889, Vol.5:1890)	156
	Shitu Yanxing Zhuan (1891)	86
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	273
	Shitiaojie Zongyi Wenda (1899)	5
	Ali Paipai Feng Dao Ji (1921)	149
個哉	Lujia Chuan Fuyin Shu (1886)	9
	Matai Chuan Fuyin Shu (1895)	3
	Shengjing Shiji (Vol.1:1886)	1

	Shitu Yanxing Zhuan (1891)	2
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	9
個者	Youlaba Guo (1849)	21
	Hengli Shilu (1856)	12
	Ali Paipai Feng Dao Ji (1921)	21

A re-examination of the distribution of *tse* (哉) and *tse* (者) across texts from the table above reveals that the texts containing only *tse* (哉) date from 1868-1899, while those containing only *tse* (者) are before or after this time period. *Shengjing Shiji*, which contains both *tse* (哉) and *tse* (者), was written in the period 1886-1890, and the combined form of 個哉 appears in *Shengjing Shiji* but not 個者. The fact that *Shengjing Shiji* contains *keh* (個) and the two written forms of *tse*, but only one form of their combination, also suggests that 哉 and 者 are interchangeable, in line with the interchangeability of the two mentioned in 4.3.4. For texts containing only one form of *tse*, both uses of *tse* also occur in these texts, so the interchangeability of 哉 and 者 is also demonstrated.

According to the examination in 4.4, sentence-final *keh* (個) carries the function of denoting PAST or assertion. The distribution of *keh* (個) in different texts shows that the usage indicating assertion is more common. For example, there are 92 occurrences of sentence-final *keh* (個) in *Hengli Shilu* (1856), of which 38 occur to mark PAST and the rest to indicate assertion. *Keh* (個) appears 86 times in *Shitu Yanxing Zhuan* (1891), of which the case indicating PAST appears 30 times. The use of marking PAST is usually more obvious when the sentence indicates a past event and there are no other

temporal adverbials of PAST in the sentence, as shown in (32). If other components of the sentence that indicate past events, the temporal expressions of PAST have already expressed the temporality of the sentence, and the temporal marking function of the *keh* (個) serves as a secondary temporal marker, as shown in (33).

(32)亨利出喪末，盤浪先生也送個。

Hengli cehsong meh, Boelong xisang ha sung
 PN funeral.procession PM PN mister also send
 keh
 PST

‘When Henry was in mourning, Mr. Panlang was there to see him off.’

(33)伊首詩，姑娘去子後首，亨利一路里拉念個。

yi-seu sy, kuniang qi-tsy heuseu, Hengli yehluli la
 this-CLF poem lady leave-PFV after PN all.the.way PROG
 nyi keh
 recite PST

‘The poem, which Henry was reciting all the way after the lady left.’

4.6 Summary

This chapter provides a new exploration of sentence-final particles, looking at their usage in narrative discourse, in order to present a comprehensive picture of the characteristics of sentence-final particles in modern Shanghainese. Describing the uses of *tse* (哉/者) and *keh* (個) also helps to examine their co-occurrence with other constituents in the sentence.

Chapter 5 Time expressions (III): temporal adverbs

In the present chapter, I will look at another essential way of expressing temporal relation in Shanghainese, temporal adverbs, reporting and discussing those that are found in the database.

The remainder of this chapter is organized as follows. A discussion of temporal adverbs in modern Shanghainese of previous studies is given in 5.1. Then a detailed report on adverbs drawn from the database will be presented in 5.2. 5.3 compares them with those in contemporary Shanghainese and Mandarin Chinese. The last two sections are dedicated to the data report and the summary.

5.1 Temporal adverbs in modern Shanghainese in Qian (2014)

Studies have been conducted to discuss the temporal adverbs that differ from Mandarin in Shanghainese. Qian (2014: 318-321) listed three categories of temporal adverbs drawn from works by missionaries, which belong to the same period as the data of the current study, as shown in Table 5-1.

Table 5-1: Temporal adverbs in Qian (2014: 318-321)

Classifications	Adverbs
Repetition	<i>tsehkuoe</i> (只管, always)
	<i>tse</i> (再, still)
	<i>cangzong</i> (常庄, often)
	<i>cangzy</i> (常時, often)
	<i>yeucangzy</i> (有常時, sometimes)
	<i>yehxiiian</i> (一向, always)
	<i>du</i> (多, every)
	<i>zoh</i> (逐, continuous)

	<i>nyizoh</i> (日逐, every day in a row)
Constant	<i>xiangle</i> (向來, always)
	<i>kuecang</i> (慣常, often)
Time spans	<i>yiyi</i> (鉛鉛, just now)
	<i>yiqisy</i> (鉛起始, just started)
	<i>zieu</i> (就, immediately)

The members of the temporal adverbs discussed in Qian (2014) are to be examined exhaustively in this dissertation to describe their distribution of them. The number of their occurrences and new members found in the database are listed in Table 5-2. I have adjusted their classification according to their occurrences in the database, which will be discussed in the next section.

Table 5-2: The number of occurrences of temporal adverbs

Types	Members	Number of occurrences
Past	<i>qideu</i> (起頭, at first)	61
	<i>benle</i> (本來, originally)	19
	<i>bentse</i> (本者, originally)	1
	<i>bentsele</i> (本者來, originally)	1
Future	<i>mehjiah</i> (末腳, in the end)	9
	<i>heuseu</i> (後首, later)	139
	<i>heule</i> (後來, later)	117
Recurrence Meaning	<i>cangzong</i> (常庄, often)	47
	<i>cangcang</i> (常常, often)	21
	<i>cangzy</i> (常時, often)	4
	<i>zycang</i> (時常, often)	5
	<i>kuecang</i> (慣常, often)	3

	<i>ze</i> (再, still more/again)	145
	<i>du</i> (多, every)	10
Duration	<i>tsehkuoe</i> (只管, always)	10
	<i>yehxiang</i> (一向, always)	17
	<i>xiangle</i> (向來, always)	18
	<i>yehzeh</i> (一直, always)	13
Short duration	<i>khehkheh</i> (刻刻, just)	6
	<i>yehxieh</i> (一歇, a short moment)	30

In 5.1.1, I will begin by discussing members that are classified slightly differently from those in Qian (2014), and the remaining members and those newly discovered in the data will be examined in 5.2.

5.1.1 Reclassification

According to the data, there are two groups of synonymous adverbs that can be regrouped into one category, one group for ‘always’, including *tsehkuoe* (只管, always), *yehxiang* (一向, always) and *xiangle* (向來, always), and the other group for ‘often’, including *cangzong* (常庄, often), *cangzy* (常時, often) and *kuecang* (慣常, often). The ‘always’ group has a relatively even number of occurrences of each member in the data, indicating the duration of the event. And the distinction made by Qian between *tsehkuoe* (只管, always) and *yehxiang* (一向, always) for ‘repetition’ and *xiangle* (向來, always) for ‘constant’ is not evident from sentences as shown in (1) – (6). So I put them in the category of duration.

(1) 所以對毛及亞乃話，自儂只管想法子救自佢一家門個性命，第個恩典如同再造之恩一樣。

suyi de moajihyane wo, tsynung tsehkuoe xiang fahtsy jieu

so to PN say 2SG always think method save
 tsyni yeh-kameng-heh xingming, digeh endi zyudung ze
 1PL one-CLF-'s life this grace like again
 zoa tsy en yehyang
 create MOD kindness same

‘So (Alibaba) says to Maojiyanai, you have been trying to save our family’s
 life, and this grace is like a gift of renewal.’

(2)第個國，常庄一淘相打個，響頭末，又只管要換個。

digeh kueh, cangzong yehdoa xiangtang keh, xiangdeu
 this country often together mutual.fight AM town
 meh, yeu tsehkuoe yoa woe keh
 PM again always will change AM

‘Countries often fight with each other, so the town will change frequently.’

(3)蒲師呀，我死子爺娘，儂一向待我蠻好，常庄抱我，我到板拿場好去，除
 子儂，無啥人恰等儂能待我個者。

Busy ya, ngu xi-tsy ya niang, nung yehxiang de
 PN PM 1SG die-PFV father mother 2SG always treat
 ngu mahoa, cangzong bau ngu, ngu toa bena
 1SG good often hold 1SG 1SG arrive PN
 zanghoa qi, zyutsy nung, m sa ning qiahdeng-nungneng
 place go except 2SG not what person like-2SG
 de ngu keh tse
 treat 1SG PST CUR

‘Boosy, you always treat me well since my parents died, and you often hold me.
 After I went to Banna, no one would treat me like this except you.’

(4)柯奇虎生謙辭啱話，令公郎少年老成，兄弟一向佩服之至個。

Khujihusang qizy loa wo, ling kuanglong
 PN modesty.refuse PM say your son
 soaniloazeng, xiungdi yehxiang bewoh tys tys keh
 young.but.experienced brother always admire to extremely AM
 ‘Keqihusheng said humbly, I have always admired your son who is young but
 experienced.’

(5)我已經拉各樣事體詳細查考，也可以拿來挨順寫之啱寄拉儂，使儂曉得向來學拉個，是確實個。

ngu yijing la kohyang zythi yangxi zoakho, ha
 1SG already AUX every thing detailed check also
 khuyi nale a'zeng xia-tsy loa ji la nung,
 can bring follow.order write-PFV PM send to 2SG
 sy nung xioateh xiangle hoh-la keh, zy qiahzeh keh
 make 2SG know always learn-PFV PST be fact AM
 ‘I have examined all the things in detail, and I can write them down and send to
 you. So you will know what you have learned so far is true.’

(6)並且儂個親着以利沙伯，年紀老之，也受之男胎，向來話伊勿生養個，現在已經六個月哉。

bingqi nung-heh qinjioe yilisabah, niji loa-tsy, ha zeu-
 and 2SG-'s relative PN age old-PFV also receive-
 tsy noete, xiangle wo yi vohsangyang keh, yize
 PFV male.baby always say 3SG not.pregant PST now
 yijing log-geh yueh tse
 already six-CLF month CUR

‘And your relative Elisabeth, who is old, is pregnant with a male child. She was

always said not to be able to bear children, is now six months pregnant.’

The number of occurrences of each member of the ‘often’ group in the data varies considerably, with *cangzong* (常庄, often) occurring most frequently, and *cangzy* (常時, often) and *kuecang* (慣常, often) with only four and three occurrences respectively. It can be observed from the data that they indicate repetition events, as shown in (7) - (12). Moreover, according to Qian's discussion, *cangzy* (常時, often) means ‘often’ and ‘sometimes’, but the occurrence of *cangzy* (常時, often) as ‘sometimes’ is not found in the data.

(7)亨利病重格辰光，蒲師常庄望伊啐，勿肯到牀上去睏，直奉承到病好子啐放心個。

hengli bing zung keh zengkuong, Busy cangzong mong
PN ill heavy MOD time PN often watch
yi loa, vohkheng toa zongxong qi khueng, zeh fungzeng
3SG PM not.willing arrive bed-PREP go sleep till take.care
toa bing hoa-tsy loa, fongxin keh
to ill good-PFV PM relieve PST

‘When Henry was very ill, Boosy often visited him and refused to go to bed.
Boosy took care of him and was relieved until he was well.’

(8)耶穌用比方來教訓人，應該常庄祈禱啱勿要懈怠。

yasu yung bifong le jioaxiun ning, yingke cangzong djito
PN use parable AUX educate person should often pray
loa vohyoa xiade
PM not slacken

‘Jesus used the parable to teach that one should always pray and not slacken.’

(9) 娘娘走開子末，先生就去坐拉伊身邊，常時撥點藥伊吃。

niangniang zoekhe-tsy meh, xisang zieu qi zu-la yi
lady walk.away-PFV CDM mister then go sit-PFV 3SG
sengbi, cangzy peh ti yah yi qieh
side often give bit medicine 3SG eat
'When the lady leaves, the mister goes and sits beside him and often gives
him some medicine.'

(10) 伊個兒子，不常設立筵席，請弟兄姊妹作樂，約伯常時為伊拉獻祭，恐怕伊拉得罪神。

yi-heh ngtsy, beh cang sehlih yixih, qing dixiung tysme
3SG-'s son not often set feast invite brother sister
tsu loh, Yahbah cangzy we yila xiji, khungpoa yila tehzoe
do fun PN often for 3PL worship afraid 3PL offend
seng
God
'His sons, did not always set up feasts and invite their brothers and
sisters to have fun. Job often worships God for them, lest they would
offend God.'

(11) 看見亨利坐拉蒲師個身上，好像是慣常拉個。

khoeji Hengli zu-la Busy-heh seng-xong, haoxiang zy kuecang
see PN sit-PFV PN-'s body-PREP like be habitual
la keh
MP AM
'Seeing Henry sitting on Boosy seems to be a habitual situation.'

(12) 查出來個辰光，本地人慣常去當養生個物事吃個。

zoa-cehle keh zengkuong, bendining kuecang qi dong
 find-COMPL MOD time local.person often go as
 yangsang keh mehzy qieh keh
 healthy MOD thing eat AM
 ‘When it was discovered, local people often went to eat it as healthy
 food.’

5.1.2 *Ze* (再)

In addition to synonymous adverbs, polysemous adverbs, such as *ze* (再), are also found in the database. Firstly, the sentences quoted by Qian (2014:319) will be discussed in detail, as shown in (13) – (15). Qian interprets *ze* (再) in the three sentences as expressing ‘still more’, but only the case in (13) falls into such interpretation. *Ze* (再) in (14) means ‘so that’, like *cai* (纔) in Mandarin,⁹⁷ and (15) means ‘again’, which is synonymous with *you* (又, again) in Mandarin. Additionally, Edkins (1868:148) mentions *ze* (再) for ‘again’ in his examination of temporal adverbs of modern Shanghainese.

(13) 花錢現在勿穀事，再要買兩圈。⁹⁸

hudji yize vohkeuzy, zeyoa ma liangqioe
 spend.money now not.enough.thing still.need buy two-CLF
 ‘Spending money is not enough, what needs is to buy two more rounds.’

(14) 醫生用 X 光照之後來，曉得鉛子容易拿得出咗再好救個。

yiseng yung Xkuong zoe-tsy heule, xioateh djitsy yungyih na-
 doctor use X-ray take-PFV later know forceps easy take-

⁹⁷ This use will not concern us here as it is not a temporal adverb. In fact, it is related to an implicit structure *xi...ze* (先……再) ‘first...then’, so it has evolved from a temporal use.

⁹⁸ (13) – (15) are from Bourgeois (1939:201;217;253) and re-quoted by Qian (2014:319).

tehceq loa ze hoa jieu keh
 COMPL PM so.that can save AM

‘After the doctor x-rayed it, he knew it would be easy to take out with forceps and then it could be saved.’

(15) 再有常時末，板着伙計個小錯頭佬賴脫一個月個工錢。

ze yue cangzy meh, be-zay hoji-heh xiaocudeu
 again have always PM catch-zah fellow-'s small.mistake
 loa la-theh yeh-geh-yueh-heh kungdji
 CEP refuse-COMPL one-CLF-month-'s wage

‘Moreover, sometimes, catching a fellow in a small mistake, and the (boss) would renege on a month's wages.’

Qian (2014:319) also points out that by the 1930s, *he* (還, still) was still represented by *ze* (再), which is synonymous with the ancient Chinese⁹⁹ word *zai* (再, second).¹⁰⁰ If this is the case, *ze* (再) has the meaning of ‘second’. In order to test this claim, I conducted an exhaustive examination in the database on works close to the 1930s, *Ali Paipai Feng Dao Ji* (1921). In the entire book, 55 occurrences of *ze* (再) are found, and the number of occurrences of each meaning is shown in Table 5-3. But no occurrence of *ze* (再) indicating ‘second’ is found in the data. In addition, I also counted the distribution of the usage of *ze* (再) in the whole data, as shown in Table 5-4. The case of *ze* (再) indicating ‘second’ is not found either. Therefore, I have grouped the usage of *ze* (再) as a temporal adverb into two categories, one for repetition for the

⁹⁹ In a broad sense, any language used by the Han Chinese people before the May 4th Movement (4th May 1919) can be regarded as ancient Chinese.

¹⁰⁰ *Yi gu zuoqi, zai er shuai, san er jie* (一鼓作气, 再而衰, 三而竭, The first beating of the drum lifts the morale of the soldiers, the second beating of the drum starts to demoralise them, and the third beating of the drum depletes their morale.) *Caogui lunzhan* (曹刿论战, *Cao Gui debate*) from *Zuozhuang* (左傳, Tradition of Zuo).

continuity state of a happened event, as shown in (16). The event ‘let the pigeon out’ is a repetition event in (16). The other usage is for expressing an event that has not happened but will take place again, as shown in (17) and (18). The co-occurrence of *ze* (再) and modal verb *yoa* (要, will) with future reading is also found in both (17) and (18).

Table 5-3: The distribution of *ze* (再) in *Ali Paipai Feng Dao Ji* (1921)

Meaning	Number of occurrences
Still more	10
Again	45
Second	0

Table 5-4: The number of occurrences of *ze* (再) in the data

Meaning	Number of occurrences
Still more	23
Again	121

(16)又隔七日，再放鴿子出去，鴿子嘴裡啣之橄欖葉歸來。

yeu kah qihnyi, ze fong kehtsy cehqi, kehtsy
 again separate seven.day again let pigeon go.out pigeon
 zu-li nge-tsy keleyih kuele
 mouth-inside hold-PFV olive.leave come.back

‘After another seven days, the pigeon was let out again, and it returned with olive leaves in its beak.’

(17)對伊個學生子話，我勿肯放佢無啥安慰個，佢場化我再要來個哩

de yi-heh hohsangtsy wo,ngu vohkheng fong na m sa
 to 3SG-'s student say 1SG not.willing put 2PL not what

oewe keh, na zanghua ngu ze yoa le keh li
 comfort AM 2PL place 1SG still.more will come AM SFP
 ‘He said to his disciples, I will not give you any comfort, but I will come again to
 your place.’

(18)從上一回自儂殺脫之三十七個強盜後來，我本來允許自儂過歇，後來
再要重重能報答儂個哩。

zung xong yeh-we tsynung sah-theh tsy sezehqih-geh
 from last one-CLF 2SG kill-COMPL PFV thirty.seven-CLF
 jiangdoa heule, ngu benle yunhu tsynung kuxieh, heule
 robber later 1SG original promise 2SG EXP later
 ze yoa zungzungneng botah ngu keh li
 again will heavily pay.back 2SG AM EM-SFP
 ‘Since you have killed thirty-seven robbers, I had promised you, I would pay
 you back heavily.’

5.2 Other temporal adverbs in the database

Members of the 5-2 table not discussed in 5.1 will be examined in this section,
 according to their occurrences in the database.

5.2.1 Past and future

Qideu (起頭, at first) appears 61 times in the data, expressing *inchoative past*, as shown
 in (19) and (20), and two derived members *yiqideu* (鉛起頭, just started) and *yiqisy* (鉛
 起始, just started), each with 2 occurrences in the data, as shown in (21) and (22).
 Among that, only *yiqisy* (鉛起始, just started) is also mentioned by Qian (2014).

(19)掃羅做以色列個王，起頭肯聽神個吩咐，神幫助伊，使伊得勝多化仇敵。

soalu tsu yisehlih-heh wong, qideu kheng thing seng-heh fenfu,
 PN do PN-'s king at.first willing listen God-'s order
 seng bongzu yi, sy yi the seng duhua djioedih
 God help 3SG make 3SG get win many enemy
 'Saul became the King of Israel and he listened to God at first, so God helped
 him to beat many enemies.'

(20)猶太王約沙法個十八年，約蘭起頭做以色列個王，約蘭也行惡事，不過勿像伊爺能個惡。

yeuta wong Yahsafah-heh zehpah ni, Yahle qideu tsu
 PN king PN-'s eighteen year PN start do
 yisehlih-heh wong, Yahle ha hang ohzy, behku vohxiang
 PN-'s king PN also do evil.thing but not.like
 yi ya neng keh oh
 3SG father so MOD evil

'In the eighth years of Jehoshaphat, Joram started to be the King of Israel, and he
 also did evil things but not like what his father did.'

(21)鉛起頭住個人，是東半片末，黑面孔個。

yiqideu zyu keh ning, zy tung boe pi meh, heh
 start live MOD person be east half piece PM black
 mikhung keh
 face PST

'Those who lived there are from eastern side and had black face in the beginning.'

(22)姑娘話，神鉛起始造個人，有善個性子否。

kuniang wo, seng yiqisy zoa keh ning, yeu zeu
 lady say God start build MOD person have kind

keh xingtsy feu

MOD personality Q

‘The lady asked, do the people made by God in the beginning are kind or not?’

Another adverb of time indicating PAST is *benle* (本來, originally), with 19 occurrences in the data. If *qideu* (起頭, at first) expresses PAST that is more distant from the time at which the sentence is expressed, then *benle* (本來, originally) expresses PAST that is more broadly positioned on the timeline, more in line with the specific past to which the speaker is referring, which may be more distant from the time at which the sentence is expressed, or may refer to an event or state of affairs that occurred shortly after. For instance, (23) can be interpreted in two ways, the event ‘I promised you’ may be far or near to the time when the sentence is stated. It also has two derived members, *bentse* (本者, originally) and *bentsele* (本者來, originally), which appear only once in the data, as shown in (24) and (25).

(23)從上一回自儂殺脫之三十七個強盜後來，我本來允許自儂過歇，後來再要重重能報答儂個哩。(same as 18)

zung xong yeh-we tsynung sah-theh tsy sezehqih-geh
from last one-CLF 2SG kill-COMPL PFV thirty.seven-CLF
jiangdoa heule, ngu benle yunhu tsynung kuxieh, heule
robber later 1SG original promise 2SG EXP later
ze yoa zungzungneng botah ngu keh li
again will heavily pay.back 2SG AM EM-SFP

‘Since you have killed thirty-seven robbers, I had promised you, I would pay you back heavily.’

(24)我死子末，儂終要到四美先生場化，本者要寫一封信撥儂，因為重病子啐，勿能殼寫。

ngu xi-tsy meh, nung zung yoa toa Syme xisang
 1SG die-PFV PM 2SG final will arrive PN mister
 cangghua, bentse yoa xia yeh-fung xing peh nung,
 place originally will write one-CLF letter give 2SG
 yinwe zung bing tsy loa, voh nengkeu xia
 because heavy illness CEP PM not can write
 ‘After my death, you will go to Mr. Simei’s place. I would write a letter originally,
 but I cannot write as I am seriously ill.’

(25) 四美先生話，我個小囡呀，儂不過是一個小囡，要歸正一個拜佛個人，
本者來是難個。

Syme xisang wo, ngu-heh xioanoe ya, nung behku sy
 PN mister say 1SG-'s child MP 2SG just be
 yeh-geh xioanoe, yoa kuezeng yeh-geh baveh keh
 one-CLF child will reform one-CLF worship.Buddhism MOD
 ning, bentsele zy ne keh
 person originally be hard AM
 ‘Mr Simei said, my son, you are only a child. It was hard originally to reform a
 person who worships Buddhism.’

Except for adverbs of the past, future adverbs are also found in the data, including *mehjiah* (末腳, in the end), *heuseu* (後首, later) and *heule* (後來, later), as shown in (26) – (28). *Mehjiah* (末腳, in the end) occurs in the data 9 times, while *heuseu* (後首, later) and *heule* (後來, later) has 139 and 117 occurrences respectively.

(26) 神話，末腳個時候，我要拿我個靈，倒拉攏總人身上。

sengwo, mehjiah keh zyheu, ngu yoa na ngu-heh ling,
 God say, end MOD moment 1SG will take 1SG-'s soul

toa-la longzong ning seng-xong
 pour-PFV all person body-PREP

‘God says, I will pour my spirit on all the people in the end.’

(27) 我叫盤浪娘娘對我剪一篷頭髮下來，儂後首去末，担子第個啐對伊話。

ngu jioa Boelong niangniang de ngu ji yeh-bung deufah-
 1SG ask PN lady to 1SG cut one-CLF hair-
 hoale, nung heuseu qi meh, na-tsy digeh loa te yi wo
 COMPL 2SG later go PM take-PFV this PM to 3SG say
 ‘I ask Mrs. Panlang to cut a lock of my hair, and you take it when you go to
 tell him later.’

(28) 耶穌禁食之四十日四十夜，後來餓哉。

yasu jingzy-tsy syzeh-ni syzeh-ya, houle ngu tse
 Jesus fast-PFV forty-CLF forty-CLF later hungry CUR
 ‘Jesus fasted for forty days and forty nights, and then became hungry.’

5.2.2 Recurrence meaning

In addition to *cangzong* (常庄, often), *cangzy* (常時, often) and *kuecang* (慣常, often), as mentioned above, *zycang* (時常, often) and *cangcang* (常常, often) are also found in the data, as shown in (29) and (30). *Cangzong* (常庄, often) and *cangcang* (常常, often) appear significantly more frequently in the data than the other three adverbs, with 47 and 21 occurrences respectively.

(29) 掃羅一家，同大衛一家，時常打仗，掃羅一家日日衰敗，大衛一家日日興旺。

Soalu yeh-ka, dung Dawa yeh-ka, zycang tangtsang, Soalu
 PN one-CLF and PN one-CLF often fight PN

yeh-ka nyinyi saba, Dawe yeh-ka nyinyi xingwong
 one-CLF day.day fail PN one-CLF day.day flourish

‘The family of Saul often fights with the David’s, and Saul was gradually decline while David was getting prosperous.’

(30)但願上天暗底裡保佑東家，常常破敗敵人個毒計。

denyoe xongthi oediil boayue tungka, cangcang puba dihning-heh
 hope up.sky stealthily bless master often break enemy-’s
 dohji
 conspiracy

‘May God bless the master stealthily and often see through the conspiracy of his enemies’

The other member indicating repetition is *du* (多, every), mentioned in Qian (2014), which means ‘every’ when it follows a temporal noun, such as *nyidu* (日多, every day), as shown in (31). 10 occurrences of *du* (多, every) are found in the data.

(31)雖是兩樣個，字末是一樣個，我担聖書翻明白子要儂日多讀拉伊聽。

soezy liangyang keh, zi meh zy yehyang keh,
 although different AM, character PM be same AM
 ngu na sengsyu fe mingbah tsy yoa nung
 1SG take holy.book translate clear PFV ask 2SG
 nyidu doh-la yi thing
 everyday read-PFV 3SG listen

‘Although they are different, the words are the same, and I have translated the holy book and asked you to read it to him every day.’

5.2.3 Duration

The group indicating ‘always’ which has been mentioned above includes *tsehkuoe* (只管, always), *yehxiang* (一向, always) and *xiangle* (向來, always). Another member *yehzeh* (一直, always) is also found in the data, as shown in (32) and (33). These four adverbs occur relatively evenly in the data. In contrast to the previous category of adverbs for recurrence meaning, this category describes a continuous state, which I classify as adverbs of duration.

(32) 對伊拉話，擲要一直朝前跑，保全性命，勿要旋轉頭來望，免脫滅亡。

de yila wo, na yoa yehzeh zoazi boa, boadjyuo
 to 3PL say 2PL have.to always forward run save
 xingming, vohyoa xizoe deu le mong, mi-theh
 life not turn head AUX look avoid-COMPL
 mihwong
 perish

‘Say to them, keep running forward to save your lives, and do not turn your head to see, lest you perish.’

(33) 祭司要吹號筒，吹個時候，眾百姓大之聲氣啱喊末，城牆會坍下來，百姓能一直進去。

jisy yoa qoe hodung, qoe keh zyheu, zungbahxing
 priest will blow trump blow MOD time numerous.people
 da-tsy sangqi loa he meh, snegziang we
 loud-PFV voice PM shout CEP city.wall will
 te-hoale, bahxing nengkeu yehzeh jinqi
 come.down-COMPL people can always enter

‘When the trump was blown by priests, the people shouted, and the walls would come down, so people could go all the way into the city.’

In addition, Edkins (1868:152) mentions another usage of *yehxiang* (一向, always) as ‘never’, such as in (34), but this usage is not found in the data.

(34) 一向勿會讀書。¹⁰¹

yehxiang vohwe dohsyu
 always not.can read.book
 ‘I have never gone to school.’

Another adverb indicating duration is *khehkkeh* (刻刻, just), similar to *yiyi* (鉛鉛, just) mentioned in the Qian (2014). *Yiyi* (鉛鉛, just) is not found in the data, but the occurrence of *yi* (鉛, just) is found, as shown in (36).

(35) 阿大拉話，自儂要用油，何必到街上向去買呢，今朝刻刻來個一位油客人，送來之幾十皮袋個油。

Adela wo, tsynung yoa yung yeu, wubih toa ka-xongxiang
 PN say 2SG will use oil why arrive street-PREP
 qi ma neh, jingtsoa khehkkeh le keh yeh-we yue
 go buy MP today just come MOD one-CLF oil
 khahning, sung le tsy ji zeh bihde keh yeu
 guest send come PFV several ten leather.bag MOD oil
 ‘Adala says, there is no need to go to the street to buy oil if you need it. The guest who sells oil just came today with dozens of bags of oil.’

(36) 到之日頭落山之，阿里排排刻刻回到屋裡向。

toa-tsy nyideu lohse tsy, Alibaba khehkkeh wetoa
 arrive-PFV sun fall.mountain PFV PN immediately back.to

¹⁰¹ From Edkins (1868:152).

woh-lixiang

room-PREP

‘When the sun went down, Alibaba immediately returned to home.’

(37) 四美先生鉛聽見末，倒有點疑心，就細細能聽，聽伊解釋來蠻好。

Syme xisang yi thingji meh, toa yeu ti nixin, zieu
PN mister just listen PM but have bit suspect hence
xixineng thing, thing yi kaseh le mahoa
carefully listen listen 3SG explain AUX good

‘Mr. Simei was a little bit suspicious when he just heard it, then he listened carefully and found out that he(Henry) explained very well.’

Another adverb *yehxieh* (一歇, a short moment) indicating duration is also found in the data, with 30 occurrences in the data, as shown in (38)

(38) 蒲師讀聖書末腳個一回，盤浪娘娘也拉拉，亨利叫蒲師停一歇。

Busy duh sengsyu mehjah keh yeh-we, Boelong
PN read holy.book final MOD one-CLF PN
niangniang ha lala, Hengli jioa Busy ding yehxieh
lady also present PN ask PN stop a.short.moment

‘At the last reading of the holy Book by Boosy, the Lady Panlang was also present and Henry asked Boosy to stop for a while.’

Unlike adverbs indicating ‘always’, *khehkheh* (刻刻, just) and *yehxieh* (一歇, a short moment) describe events of shorter duration. For example, the events themselves are of shorter duration, such as ‘stop for a short moment’ in (38), or because events are closer to the time at which they are stated, such as the event *yuekhahning le* 油客人來 ‘the guest who sells oil came’ is not far from the time of that (35) is stated. It is an event

that happened on the same day. And the event is closer to the time of reference within the sentence, such as the case in (36) where Alibaba returned home immediately after sunset.

5.2.4 Other relevant members and structures

This section will discuss members and structures found in the data which are related to the above adverbs. The temporal noun *nyijiah* (日腳, day), shared the same suffix with *mehjiah* (末腳, in the end), with 38 occurrences in the data, as shown in (39) and (40).

(39) 今朝早晨頭我有點肝氣痛，只怕日腳勿長遠者。

jingtsoa	tsoazengdeu	ngu	yeu	ti	keuqi	tung,	tseh	poa
today	morning	1SG	have	bit	liver.qi	hurt	only	afraid
nyijiah	voh	zangyeu	tse					
day	not	long.far	CUR					

‘This morning I had a bit of a liver ache and I’m afraid my days are numbered.’

(40) 毛及亞乃拉平素日腳上，東家命伊啥，自伊必定立刻就聽個。

Moajiyane	la	bingsu	nyijiah-xong,	tungka	ming	yi	sa,
PN	at	normal	day-PREP	master	order	3SG	what
tsyyi	bihding	lihkkeh	zieu	thing	keh		
3SG	must	at.once	then	listen	AM		

‘In normal days, Maojiyanai would have listened to anything the master ordered her to do.’

A relevant structure of *yehxieh* (一歇, a short moment) also appears in the data, which is *vohtuyehxieh* (勿多一歇, soon), occurring 6 times, as shown in (41).

(41) 大家到之飯廳上勿多一歇，就有相幫人拿夜飯送上來，阿里排排也陪之

伊一淘吃。

daka toa-tsy fethingxong voh-tu-yehxieh, zieu yeu
everybody arrive-PFV meal.hall-PREP not-much-a.while then there.is
xiangbongning na yafe sung-xongle, Alibaba ha
servant bring dinner give-COMPL PN also
be-tsy yi yehdoa qieh
accompany-PFV 3SG together eat

‘Not long after everyone arrived at the dining room, servants brought dinner and Alibaba joined him to eat.’

The above are the relevant members that appear in the database, and other derived structures will be further discussed when comparing with contemporary Shanghainese and Mandarin.

5.3 Comparison between contemporary Shanghainese and Mandarin

5.3.1 Contemporary Shanghainese

Before comparing the temporal adverbs of the data with contemporary Shanghainese, I first review the temporal adverbial members of contemporary Shanghainese that have been covered in previous studies. Qian (1997:159-162) and Zhu (2006:104) discuss the adverbs of time in contemporary Shanghainese that differ from Mandarin Chinese, as shown in Table 5-5 and Table 5-6.

Table 5-5: Temporal adverbs in Qian (1997: 159-162)

Types	Adverbs
Past	<i>nieuben</i> (原本, originally), <i>nieuben tahli</i> (原本塌里, originally),

	<i>bentsehle</i> (本則來, originally), <i>bensang</i> (本生, originally), <i>benditsy</i> (本底子, originally), <i>loaditsy</i> (老底子, originally), <i>bendong</i> (本當, originally), <i>khehkkeh</i> (刻刻, just), <i>jiangjiang</i> (將將, just), <i>khekhe</i> (開開, just), <i>fongze</i> (方才, just), <i>loatsoa</i> (老早, long ago), <i>loatsoazieu</i> (老早就, long ago), <i>xiqideu</i> (先起頭, long ago)
Present	<i>ne</i> (乃)
Future	<i>tsoadi</i> (早晏(點), sooner or later), <i>mehjiah</i> (末腳, in the end), <i>ahmehjiah</i> (壓末(腳), in the end), <i>lahmehjiah</i> (辣末(腳), in the end), <i>zahmehjiah</i> (着末(腳), in the end)
Short durations	<i>zeujih</i> (隨即, immediately), <i>lihzy</i> (立時, at once), <i>lihzysakkeh</i> (立時三刻, at once), <i>lingzyhuahjiah</i> (臨時豁腳, at once), <i>xiehxieh</i> (歇歇, a short time), <i>yehxieh</i> (一歇, a short time), <i>yehzydeuxong</i> (一時頭上, for a moment), <i>vohtuyehxieh</i> (勿多一歇, soon)
Repetition	<i>cangzong</i> (常庄, often), <i>tsoenmen</i> (專門, always), <i>tse</i> (再, again), <i>yi</i> (夷, again), <i>yiyoa</i> (夷要, again), <i>yehrtse</i> (一而再, once again) <i>zesezesy</i> (再三再四, time after time) <i>wang...zuy...</i> (橫...豎..., again and again)
Indefinite time	<i>jizy</i> (幾時, sometimes), <i>yeucangzy</i> (有常時, sometimes) <i>yeuzengkuong</i> (有辰光, sometimes), <i>naepae</i> (難板, seldom)
Constancy	<i>yehjing</i> (一徑, always), <i>yehjiah</i> (一腳, always), <i>vohdoe</i> (勿斷), <i>bingsu</i> (平素, always), <i>sucang</i> (素常, always)
Continuity	<i>a'hoale</i> (挨下來, the next), <i>nezoaheu</i> (乃朝后, then), <i>nemeh</i> (乃 末, then)

Table 5-6: Temporal adverbs in Zhu (2006: 104)

Types	Adverbs
Present	<i>ne</i> (乃)
Future	<i>tsaudi</i> (早晏, sooner or later), <i>mehjiah</i> (末腳, in the end), <i>ah/zak/lahmehjiah</i> (压/著/辣末腳, in the end)
Past	Remote past: <i>loaditsy</i> (老底子, long before), <i>lautsau</i> (老早, long before)
	Near past: <i>tsedjing</i> (最近, recently), <i>djingle</i> (近來, recently), <i>khekhe</i> (開開, just), <i>khehkheh</i> (刻刻, just), <i>gonggong</i> (刚刚, just), <i>fangze</i> (方才, just)
	Inchoative: <i>bensang</i> (本生, originally), <i>nieuben</i> (原本, originally), <i>benle</i> (本來, originally), <i>khedeu</i> (開頭, originally), <i>xiqideu</i> (先起頭, originally)
Repetition	<i>cangzong</i> (常庄, often), <i>yeu (yoa)</i> (又(要), again), <i>ze</i> (再, again), <i>yehrze</i> (一而再, once again)
Simultaneity	<i>yehdoa</i> (一道, together), <i>donzy</i> (同時, at the same time)
Short durations	<i>lijih</i> (立即, immediately), <i>xieh xieh</i> (歇歇, a short time), <i>yeh xieh</i> (一歇, a short time), <i>yehzydeuxong</i> (一時頭上, for a moment), <i>zeujih</i> (隨即, immediately)
Constancy	<i>yehzeh</i> (一直, always), <i>yehjing</i> (一徑, always), <i>yehjiah</i> (一腳, always), <i>bingsu</i> (平素, always)
Indefinite time	<i>yeuzengkuong</i> (有辰光, sometimes), <i>yeucangzy</i> (有常時, sometimes), <i>naepae</i> (难板, seldom), <i>ngeuzoe</i> (偶然, seldom)

Apart from the overlap of the members focused in the current paper, I have examined the other members of the two tables above in the data and found that the following members are also present in the database, as listed in Table 5-7. Examples are given in (42) – (51) respectively.

Table 5-7: Other identical adverbs to contemporary Shanghainese

Members that appear in the data	Number of occurrences
<i>loatsoa</i> (老早, long before)	2
<i>yehzydeuxong</i> (一時頭上, for a moment)	1
<i>zesezesy</i> (再三再四, time after time)	4
<i>a'hoale</i> (挨下來, the next)	8
<i>nemeh</i> (乃/難末, then)	232
<i>gonggong</i> (剛剛, just)	1
<i>yehdoa</i> (一道, together)	1
<i>bingsu</i> (平素, always)	6
<i>ngeuzoe</i> (偶然, seldom)	1

***Loatsoa* (老早, long before)**

(42)今夜頭若使勿是伊想法子救自佢爺兩個，格末自佢爺兩家頭，老早已經死拉柯奇虎生個手裡者。

jingyadeu zahsy voh sy yi xiang fahtsy jieu tsyni
 tonight if not be 3SG think method save 1PL
 ya liang-geh, kahmeh zynyi ya liang-kade, loatsoa yijing
 father two-CLF then 1PL father two-CLF early already
 xi-la khujihusang-heh seuli tse
 die-PFV PN-'s hand.inside CUR

‘If you did not save me and my son tonight, then the two of us, had already killed by Keqihusheng long before.’

***Yehzydeuxong* (一時頭上, for a moment)**

(43)亨利聽得子第句說話，一時頭上倒話勿出啥者。

Hengli thing-teh-tsy di-jieu ewo, yehzydeuxong toa wo
 PN listen-CM-PFV this-CLF words, for.a.moment but say

voh-ceh sa tse
not-COMPL what CUR

‘When Henry heard these words, he could not say anything else.’

Zesezesy (再三再四, time after time)

(44)等到阿里排排個兒子再三再四請之自伊，乃末自伊起頭應承個。

dengtao Alibaba-heh ngtsy zesezesy qing-tsy tsyyi, nemeh
wait.till PN-'s son time.after.time invite-PFV 3SG then
tsyyi qideu yingzeng keh
3SG begin respond PST

‘When Alibaba's son asked him again and again, then he began to respond.’

A'hoale (挨下來, the next)

(45)第頭就是因為監司頭腦住個啐，王個屋裡挨下來，第二大拉。

dideu zieuzy yinwe jisi deunoa zyu keh loa, wong-heh
this is because warden head live PST PM king-'s
wohli a'hoale di'e du la
house the.next second big SFP

‘This is because the head of the warden lives in a house next to the king's house, the second-largest.’

Nemeh (乃/難末, then)

(46)歇之幾年後來，伊個丈人生病啞死者，乃末家當完全歸撥拉伊個女婿。

xieh-tsy jinni heule, yi-heh zangning sangbing loa xi
wait-PFV several.year later 3SG-'s fater.in.law fall.sick PM die
tse, nemeh kadong woedjyuae kue peh-la yi-heh
CUR then property complete belong give-PFV 3SG-'s
nyuxiu

son.in.law

‘After a few years, his father-in-law fell ill and died, then the properties were given entirely to his son-in-law.’

(47)伊拉頂憂愁，為之伊話勿再見我面個一句啱，難末送伊上船。

yila ting yohzoe, wetsy yi wo voh ze ji ngu
3PL extremely worry because 3SG say not again meet 1SG
mi keh yeh-jieu loa, nameh sung yi xong zeu
face MOD one-CLF PM then send 3SG go boat

‘They were very sad because of what he said about not seeing us again and then sending him to the boat.’

Based on the distribution of the two writings of *nemeh* (乃/難末, then) in the data, it is found that *nemeh* (乃末, then) appears in *Ali Paipai Feng Dao Ji* (1921), while *nemeh* (難末, then) appears in writings from before 1900. In contemporary Shanghainese, Qian (1997) and Zhu (2006) record the latter as well, so the different writing styles may serve as a marker to determine the time of the writing, but a more comparable examination in contemporary Shanghainese is needed.

Gonggong (剛剛, just)

(48)箇個一日也算自伊倒運，剛剛要出洞末，貼巧撞拉自佢進洞個時候，撥拉自佢瞎七瞎八斬殺之。

digeh yeh nyi ha soe tsyyi doayun, gonggong yoa ceh
this one day also count 3SG unlucky just will out
dong meh, thihqioa zong-la tsyni jindong keh zyheu,
hole PM just run.into-PFV 1PL enter.hole MOD time
pehla tsyni hahqihhahpah zesha tsy
PASS 1PL in.a.mess kill PFV

‘He was unlucky that day, as he was just about to leave the cave when we came in and killed him blindly.’

***Yehdoa* (一道, together)**

(49)現在自佢要拉房子後面挖一個地洞，自儂未要相幫自我一道窩好。

yezi tsyni yoa la wongtsy heumi wah yeh-geh didong,
now 1SG will at house behind dig one-CLF hole
tysnung meh yoa xiangbong tsyngu yehdoa wu-hoa
2SG PM will help 1SG together hide-COMPL

‘Now I’m going to dig a hole in the ground behind the house, and you’re going to help me to hide it together.’

***Bingsu* (平素, always)**

(50)拉安息日上，照伊平素個規矩，到會堂裏立之要讀聖經。

la oexi nyi xong, zoe yi bingsu keh kehjyu, toa
at Sabbath day PREP follow 3SG always MOD rule arrive
wedong-li lih-tsy yoa doh sengjing
synagogue-PREP stand-PFV will read Bible

‘On the Sabbath, s/he went to the synagogue to stand and read the Bible, as s/he normally did.’

***Ngeuzoe* (偶然, seldom)**

(51)有一個人，偶然拉弓，射傷以色列王。

yeu yeh-geh ning, noezoe la gung, zoa-song yisehlih
have one-CLF person seldom draw bow shot-COMPL PN
wong
king

‘There was a man who drew his bow seldomly and shot the king of Israel.’

Modern and contemporary Shanghainese have some unique roots that differ from Mandarin temporal adverbs: body parts nouns, such as *jiah* (腳, foot) for *mehjiah* (末腳, in the end); substantives, such as *xieh* (歇) for *yehxieh* (一歇, a short moment), *kheh* (刻) for *khehkheh* (刻刻, just).

5.3.2 Mandarin

The temporal adverbs that appear in the data are also present in Mandarin, including *benlai*¹⁰² (本來, originally), *houlai* (後來, later), *changchang* (常常, often), *shichang* (時常, often), *yixiang* (一向, always) and *yizhi* (一直, always). Based on the distribution of these members in the data, it can be seen that *benlai* (本來, originally) and *houlai* (後來, later) occur most frequently in the writings with the closest time to the present, *Ali Paipai Feng Dao Ji* of 1921. Other members appear relatively evenly in the data and do not show an increase in the number of occurrences the closer they are to the present. It is possible that these members were already present in ancient Chinese and are not newly occurred members.

Some roots are shared with those in Mandarin as shown in the following Table 5-8.

Table 5-8: Identical adverbs to Mandarin Chinese

	Shanghainese (Modern and Contemporary)	Mandarin Chinese
<i>deu/dou</i> (頭, head)	<i>qideu</i> (起頭, at first) <i>kaitou</i> (開頭, at first)	<i>kaitou</i> (開頭, at first)
<i>le/lai</i> (來, come)	<i>benle</i> (本來, originally)	<i>benlai</i> (本來, originally)
<i>zy/shi</i> (時, time)	<i>zycang</i> (時常, often)	<i>shichang</i> (時常, often)

¹⁰² Words of Mandarin are marked with Hanyu Pinyin.

	<i>yehzy</i> (一時, for a short while)	<i>yishi</i> (一時, for a short while)
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5.4 Data report

The distribution of temporal adverbs in Missionary Shanghainese publications are listed in Table 5-9.

Table 5-9: The distribution of temporal adverbs in texts

Members	Publications and distribution	Number of occurrences
<i>qideu</i> (起頭, at first)	Youlaba Guo (1849)	10
	Hengli Shilu (1856)	2
	Lujia Chuan Fuyin Shu (1886)	2
	Matai Chuan Fuyin Shu (1895)	2
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.4:1889, Vol.5:1890)	25
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.3: 1887, Vol.4: 1887)	3
	Ali Paipai Feng Dao Ji (1921)	17
<i>benle</i> (本來, originally)	Youlaba Guo ((1849)	3
	Hengli Shilu (1856)	2
	Yesu Yanxing Zhuan (Vol.4: 1887)	1
	Ali Paipai Feng Dao Ji (1921)	13
<i>bentse</i> (本者, originally)	Hengli Shilu (1856)	1

<i>bentsele</i> (本者來, originally)	Hengli Shilu ((1856)	1
<i>mehjiah</i> (末腳, in the end)	Ali Paipai Feng Dao Ji (1921)	9
<i>heuseu</i> (後首, later)	Youlaba Guo ((1849)	10
	Hengli Shilu (1856)	22
	Chenzao Yubei (1868)	3
	Gangdandiushi (1868)	3
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	98
	Shitu Yanxing Zhuan (1891)	1
	Yesu Yanxing Zhuan (Vol.4: 1887)	1
	Ali Paipai Feng Dao Ji (1921)	1
<i>heule</i> (後來, later)	Gangdandiushi (1868)	1
	Lujia Chuan Fuyin Shu(1886)	11
	Matai Chuan Fuyin Shu (1895)	13
	Shitu Yanxing Zhuan (1891)	6
	Yesu Yanxing Zhuan(Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	17
	Ali Paipai Feng Dao Ji (1921)	69
	<i>cangzong</i> (常庄, often)	Hengli Shilu (1856)
Gangdandiushi (1868)		1
Lujia Chuan Fuyin Shu (1886)		8
Matai Chuan Fuyin Shu (1895)		4
Shitu Yanxing Zhuan (1891)		6
Yesu Yanxing Zhuan (Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)		11

<i>cangcang</i> (常常, often)	Hengli Shilu (1856)	3
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	11
	Ali Paipai Feng Dao Ji ((1921)	7
<i>cangzy</i> (常時, often)	Hengli Shilu (1856)	1
	Matai Chuan Fuyin Shu (1895)	2
	Shengjing Shiji (Vol.4:1889)	1
<i>zycang</i> (時常, often)	Lujia Chuan Fuyin Shu (1886)	2
	Matai Chuan Fuyin Shu (1895)	1
	Shengjing Shiji (Vol.3:1889)	1
	Yesu Yanxing Zhuan (Vol.2: 1892)	1
<i>kuecang</i> (慣常, often)	Youlaba Guo (1849)	3
<i>ze</i> (再, still more/again)	Hengli Shilu (1856)	4
	Chenzao Yubei (1868)	1
	Gangdandiushi (1868)	2
	Lujia Chuan Fuyin Shu (1886)	11
	Matai Chuan Fuyin Shu (1895)	5
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	35
	Shitu Yanxing Zhuan (1891)	8
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	24
	Ali Paipai Feng Dao Ji (1921)	55
<i>du</i> (多, every)	Youlaba Guo(1849)	2
	Hengli Shilu (1856)	5
	Chenzao Yubei (1868)	1
	Lujia Chuan Fuyin Shu (1886)	1

	Shengjing Shiji (Vol.1:1886)	1
<i>tsehkuae</i> (只管, always),	Youlaba Guo (1849)	1
	Hengli Shilu (1856)	5
	Ali Paipai Feng Dao Ji (1921)	4
<i>yehxiang</i> (一向, always)	Hengli Shilu (1856)	10
	Lujia Chuan Fuyin Shu (1886)	1
	Shengjing Shiji (Vol.2:1892, Vol.4:1889)	2
	Ali Paipai Feng Dao Ji (1921)	4
<i>xiangle</i> (向來, always)	Lujia Chuan Fuyin Shu (1886)	7
	Shengjing Shiji (Vol.1:1886)	1
	Shitu Yanxing Zhuan (1891)	4
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	6
<i>yehzeh</i> (一直, always)	Hengli Shilu (1856)	1
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	9
	Shitu Yanxing Zhuan (1891)	3
<i>khehkheh</i> (刻刻, just)	Ali Paipai Feng Dao Ji (1921)	6
<i>yehxieh</i> (一歇, a short moment)	Hengli Shilu (1856)	6
	Chenzao Yubei (1868)	2
	Gangdandiushi (1868)	2
	Lujia Chuan Fuyin Shu (1886)	2
	Matai Chuan Fuyin Shu (1895)	1
	Shengjing Shiji (Vol.2:1892)	1

	Shitu Yanxing Zhuan (1891)	2
	Yesu Yanxing Zhuan ((Vol.1: 1894, Vol.2: 1892, Vol.4: 1887)	3
	Ali Paipai Feng Dao Ji (1921)	11
<i>yehzy</i> (一時, for a short while)	Ali Paipai Feng Dao Ji (1921)	1
<i>loatsoa</i> (老早, long before)	Ali Paipai Feng Dao Ji (1921)	2
<i>yehzydeuxong</i> (一時頭上, for a moment)	Hengli Shilu (1856)	1
<i>zesezesy</i> (再三再四, time after time)	Ali Paipai Feng Dao Ji (1921)	4
<i>a'hoale</i> (挨下來, the following)	Youlaba Guo (1849)	8
<i>nemeh</i> (乃/難末, then)	Hengli Shilu ((1856)	8
	Gangdandiushi (1868)	1
	Shenpan Rijiao (1868)	1
	Lujia Chuan Fuyin Shu (1886)	17
	Matai Chuan Fuyin Shu (1895)	45
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	42
	Shitu Yanxing Zhuan (1891)	32
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	20

	Ali Paipai Feng Dao Ji ((1921)	82
<i>gonggong</i> (剛剛, just)	Ali Paipai Feng Dao Ji ((1921)	1
<i>yehdoa</i> (一道, together)	Ali Paipai Feng Dao Ji (1921)	1
<i>bingsu</i> (平素, always)	Ali Paipai Feng Dao Ji (1921)	1
<i>ngeuzoe</i> (偶然, seldom)	Shengjing Shiji (Vol.5:1890)	1
<i>nyijiah</i> (日腳, day)	Hengli Shilu (1856)	5
	Chenzao Yubei (1868)	2
	Shenpan Rijiao (1868)	3
	Lujia Chuan Fuyin Shu (1886)	7
	Shengjing Shiji (Vol.1:1886, Vol.2:1892)	5
	Shitu Yanxing Zhuan (1891)	6
	Yesu Yanxing Zhuan (Vol.2: 1892)	2
	Ali Paipai Feng Dao Ji (1921)	8
<i>vohtuyhexieh</i> (勿 多一歇, soon)	Shitu Yanxing Zhuan (1891)	1
	Ali Paipai Feng Dao Ji (1921)	5

Based on the classification of temporal adverbs and their distribution in different texts, it can be seen that some temporal adverbs have a common sememe, which is seen as the central sememe of such adverbs. For example, *benle* (本來, originally) is derived from *le* (來) with a prefix. Both *bentsele* (本者來, originally) and *bentse* (本者, originally) also appear in the data, but only one occurrence of each is found in *Hengli Shilu* (1856). This may be due to the choice of the translator as no occurrence is seen

in other texts and only *benle* (本來, originally) is found in the dictionary edited by Shanghai Vernacular Society et al. (1901; 2018: 593). Another category of shared sememe are *heuseu* (後首, later) and *heule* (後來, later), but only *heule* (後來, later) occurs in Shanghai Vernacular Society et al. (1901; 2018: 22). Unlike *bentsele* (本者來, originally) and *bentse* (本者, originally), *heuseu* (後首, later) appears several times in different texts in the database and can be seen as a common temporal adverb of future. The temporal adverbs of recurring meaning also share the same sememe *cang* (常), of which *cangzong* (常庄, often), *cangcang* (常常, often) and *zycang* (時常, often) are found in Shanghai Vernacular Society et al. (1901; 2018: 31). The group of duration shares the sememe *xiang* (向), including *yehxiang* (一向, always) and *xiangle* (向來, always), but only the latter is found in Shanghai Vernacular Society et al. (1901; 2018: 31). The different temporal adverbs presented in the database are a result of the translated texts, on the other hand, and reflect the lexical usage of that time.

The distribution of temporal adverbs in the different texts also reflects the characteristics of texts. Firstly, comparing the number of occurrences of the same temporal adverb in different texts shows that *benle* (本來, originally) and *heule* (後來, later) occur much more often in *Ali Paipai Feng Dao Ji* (1921) than they do in other texts. *Ali Paipai Feng Dao Ji* (1921) is the closest text in the database to the present, and the presence of *benle* (本來, originally) and *heule* (後來, later) in both contemporary Shanghainese and Mandarin could explain to some extent their highest number of occurrences in *Ali Paipai Feng Dao Ji* (1921). Secondly, a comparison of occurrences of the same category of adverbs in different texts reveals that one member may dominate in some texts. In other words, texts containing one member no longer contain other adverbs with the same meaning, or other members appear only once. Such a complementary relationship exists, for example, between *heuseu* (後首, later) and *heule* (後來, later). Texts containing *heuseu* (後首, later) do not contain *heule* (後來, later) any more, or appear only once, and vice versa. Unlike the case where two temporal adverbs of the same kind complement each other, it is more often the case that

a particular adverb in the same category occurs most frequently, or dominates in texts. For example, *cangzong* (常庄, often) of recurring meaning, occurs most frequently in *Hengli Shilu* (1856), *Lujia Chuan Fuyin Shu* (1886), *Matai Chuan Fuyin Shu* (1895), *Shitu Yanxing Zhuan* (1891) and *Yesu Yanxing Zhuan* (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887) compared to other temporal adverbs of the same category. *Yehxiang* (一向, always), *xiangle* (向來, always) and *yehzeh* (一直, always) of duration are most common in *Hengli Shilu* (1856), *Lujia Chuan Fuyin Shu* (1886) and *Shengjing Shiji* (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890) respectively.

5.5 Summary

This chapter provides detailed statistics and reports on the temporal adverbs in the data and presents a more complete picture of the temporal adverbs by comparing them with contemporary Shanghainese and Mandarin.

Chapter 6 The expressions of modality

This chapter focuses on the description of modality in modern Shanghainese, based on evidence drawn from the database.

The chapter is organized as follows. 6.1 briefly introduces the classification of modality. 6.2 focuses on the findings of modality gathered from previous studies of modern Shanghainese. The next section 6.3 is devoted to the expressions of modality drawn from the database. 6.4 gives a report of the distribution of modal expressions in the database. The last section is the summary.

6.1 Claims on modality

The degree of *subjectivity* has been treated as the criterion for the classification of modal concepts. Previous classifications have adopted subjectivity as the most important parameter in modality distinction through dividing two superordinate categories. For instance, *proposition modality* and *event modality* (Palmer 2001); *epistemic modality* and *non-epistemic modality* (van der Auwera et al. 1998); *epistemic modality* and *agent-oriented modality* (Bybee et al. 1994).

According to Palmer (2001:8), *proposition modality* refers to attitudes expressed by speakers toward the truth value or factual status of propositions while *event modality* is concerned with potential events that have not taken place, as shown in (1) and (2) respectively.

(1)a. A typhoon may hit the island.¹⁰³

b. Mary must have a good reason to be late.

¹⁰³ From Portner (2009: 135).

(2)a. Kate may come in now. ¹⁰⁴

b. Kate must come in now.

Speakers' judgement toward the proposition as shown in (1) is pertaining to the knowledge of the speaker (Portner 2009), indicating the different probability. Judgment on the probability of an event can be based on knowledge of the speaker rather than evidence, which is defined as *epistemic modality*, a subtype of propositional modality, (Palmer 2001; Traugott and Dasher 2002). The other subtype of propositional modality is *evidential modality* which expresses the factual status of propositions with evidence (Palmer 2001:8). For example, in Ngiyambaa, reported evidence or sensory evidence can be seen as an information source for propositions, as shown in (3). Although evidential modality and epistemic modality are interrelated in inference, such as evidence-driven epistemic inference, as shown in (4) in Kanakanavu, such interrelation and its discussion would go beyond the scope of the current chapter. Thus, I will mainly focus on the manifestation of epistemic modality.

(3) a. Indu-dhan girambiyi.¹⁰⁵ (Ngiyambaa)

2SG.NOM-SENS.EVID sick.PST

'You (are said to) have been sick.'

b. Indu-gara girambiyi.

2SG.NOM-LING.EVID sick.PST

'(One can see) you were sick.'

(4) Makai kasua sua Pani. ¹⁰⁶ (Kanakanavu)

¹⁰⁴ From Palmer (2001:7).

¹⁰⁵ From Donaldson (1980:275-276) and requoted from Cheng and Sung (2015:32).

¹⁰⁶ From Cheng and Sung (2015:32).

resemble 2SG.OBL NOM PN

‘Pani looks just like you.’

Event modality can also be divided into two types in terms of the relationship between conditioning factors and the participant. For example, the sentence in (2a) can be interpreted as it is possible for Kate to be at home because she is free at this moment or it is necessary for Kate to be at home because it is raining outside. The first interpretation is internal to Kate while the second is external to her, which are defined as *dynamic modality* and *deontic modality* respectively (Palmer 2001: 9). Dynamic modality relates to the participant’s ability or willingness and deontic modality refers to obligation or permission on the part of the participant (Palmer 2001: 9-10). Similarly, van der Auwera et al. (1998) term dynamic modality as *participant-internal modality* and deontic modality as *participant-external modality*. With reference to the basic categorisation of modality above, this chapter looks at expressions of these categories in the data.

6.2 Modal expressions in previous studies

In previous studies, modal expressions have been described in terms of modal auxiliaries and modal adverbs.

6.2.1 Modal auxiliaries

In modern Shanghainese, Edkins (1868:186) treats *yoa* (要, will), *we* (會, will) and *neng* (能, can) as future, imperative and potential auxiliaries respectively, as shown in (5) – (7). Some mood-indicating expressions have also been mentioned by Edkins (1868:129-130) as listed in Table 6-1 and exemplified in (8) – (18).

(5)總要去。¹⁰⁷

zong yoa qi
must will go
'∅ must go.'

(6)我會寫。

ngu we xia
1SG can write
'I can write.'

(7)勿能來。

voh neng le
not can come
'∅ cannot come.'

Table 6-1: Mood-indicating expressions in Edkins (1868: 129-130)

Types	Members
Potential mood	V <i>tehle/vohle</i> (V 得來/勿來, can/cannot V)
Limited potential mood	V <i>vohqi</i> (V 勿起, cannot V)
Permissive and prohibitive mood	<i>teh</i> (得, auxiliary), <i>hoa</i> (好, may), <i>khuyi</i> (可以, may)
Optative mood	<i>balhenvohteh</i> (巴/恨勿得, wish to)
Imperative mood	The affirmative form: <i>mehtsel/ba</i> (未者/罷) as sentence-final particles

¹⁰⁷ (5) – (7) are from Edkins (1868:186).

	The negative form: <i>vohyoa</i> (勿要, do not)
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(8)寫勿來。¹⁰⁸

xia voh-le

write not-CM

‘ø cannot write.’

(9)講究得來。

kongjioe tehle

discuss CM

‘ø can discuss it.’

(10)當勿起。

dong voh-qi

deserve not-CM

‘I do not deserve to receive it.’

(11)看得。

khoe teh

look CM

‘ø may look at it.’

(12)好進去否？

hoa jinqi feu

can enter Q

¹⁰⁸ (8) – (18) are from Edkins (1868: 128-129).

‘May I enter?’

(13) 可以吃得。

khuyi qieh teh
can eat CM
‘ø may eat it.’

(14) 我 巴勿得 快點到。

ngu ba-vohteh khuati toa
1SG wish-CM quick arrive
‘I wish I could arrive quickly.’

(15) 恨勿得 做好。

hen-vohteh tsu hoa
hate-CM do good
‘ø wish could do it well.’

(16) 走 末者。

zoe mehtse
go IM-SFP
‘Go.’
(IM-SFP = imperative sentence final particle)

(17) 去 罷。

qi ba
go IM-SFP
‘Go.’

(18) 勿要鬧。

vohyoa noa

do.not noisy

‘Do not be noisy.’

Modal verbs mentioned in Qian (2014: 294-297), which were also taken from missionary publications, are summarized in Table 6-2. Qian divides these modal auxiliaries into two categories, depending on their positions in sentences.

Table 6-2: Modal auxiliaries in Qian (2014: 294-297)

Types	Members
Pre-verbal	yoa (要, will),
	yoa.....la (要.....拉, will)
	zingnyoe (情願, be willing to)
	hoa (好, can)
	weteh (會得, can)
Post-verbal	teh (得)
	vohyoa Vteh (勿要 V 得, do not)
	tehle (得來, can)/vohle (勿來, cannot)
	tehceh (得出, can)/vohceh (勿出, cannot)
	tehqi (得起, can)/vohqi (勿起, cannot)

6.2.2 Modal adverbs

Modal adverbs and the classifications given by Qian (2014:326-328) are listed in Table 6-3. The distribution based on the data and whether members found in the data are different from those mentioned by Qian will be given in 6.3.2.

Table 6-3: Modal adverbs in Qian (2014: 326-328)

Types	Members
Coincidence	<i>thihzeng</i> (貼正, just in time)
Certainty	<i>dingji</i> (定見, certainly)
	<i>bihding</i> (必定, certainly)
	<i>beyoa</i> (板要, insist on)
	<i>bijingyao</i> (必竟要, have to)
	<i>bixiuyao</i> (必須要, have to)
	<i>vohbiyao</i> (勿必要, do not have to)
	<i>vohbijing</i> (勿必竟, do not have to)
	<i>behfong</i> (不妨, may as well)
	<i>kuzeng</i> (固真, really)
Continuity	<i>nieujiu</i> (原舊, still)
	<i>ha</i> (也, still)
	<i>ze</i> (再, still)

In the next section, I will examine these forms as they occur in the database, classifying them with other forms that may co-occur.

6.3 Findings from the database

An exhaustive study of the data will be made in this section to examine the distribution and usages of expressions mentioned in previous studies. I will examine them in three categories: modal verbs, modal adverbs and mood-indicating expressions. Each of these categories will be examined in turn in terms of expressing both non-epistemic modality and epistemic modality. Non-epistemic modality includes expressions that indicate ability and permission. The epistemic modality is concerned with expressing speakers' judgement toward propositions, in other words, the degree of possibilities of the

occurrence of a situation. In addition, polysemous members will be examined sequentially according to their different usages in the database.

6.3.1 Modal auxiliaries

Members of expressing the ability found in the data are *nengkeu* (能殼, can), *khuyi* (可以, can) and *we* (會, can), as shown in (19) – (24) respectively. *Nengkeu* (能殼, can), *khuyi* (可以, can) and *we* (會, can) occur 129, 170 and 67 times respectively in the database, which is the most frequent use compared to their other uses.

The usage of *nengkeu* (能殼, can) to indicate ability is not commonly used in contemporary Shanghainese, but is common in Mandarin Chinese, especially its variant *neng* (能, can).

Another common member in the data is *khuyi* (可以, can), which is also commonly used in contemporary Shanghainese and Mandarin Chinese. An examination of the data reveals a difference in usage between *nengkeu* (能殼, can) and *khuyi* (可以, can). This usage of *nengkeu* (能殼, can) occurs in large numbers in modern Shanghainese and Mandarin, but rarely in contemporary Shanghainese, and if it is used in contemporary Shanghainese, it is in turn likely to have been influenced by Mandarin. *Khuyi* (可以, can), on the other hand, is in use in modern Shanghainese, contemporary Shanghainese and Mandarin. An exhaustive analysis would require me to examine the occurrence and distribution of the two expressions in both contemporary Shanghainese and Mandarin thoroughly, but such an investigation would go beyond the scope of the present paper.

***Nengkeu* (能殼, can) : ability**

(19) 神能殼使第個石頭，做亞伯拉罕個子孫。

seng nengkeu sy digeh zahdeu, tsu Yabahlahhoe-heh

God can make this stone be Abraham-'s

tsyseng

descendant

‘God was able to make this stone a descendant of Abraham.’

(20) 因為耶穌個血，能淨脫我個罪啐也。

yinwe yasu-heh xyuh, nengkeu djing-theh ngu-heh
because Jesus-'s blood can clean-COMPL my
zoe loa ha
sins PM EM-SFP

‘As the blood of Jesus is able to cleanse me from my sins.’

Khuyi (可以, can): ability

(21) 小囡若肯聽爺娘個勸，相信耶穌，伊拉靈魂終可以得着救。

xioanoe zah kheng thing yaniang keh qioe,
child if willing.to listen father.mother MOD persuade
xiangxing yasu, yila lingweng zung khuyi teh-zah jieu
believe Jesus 3PL soul final can get-ASP save

‘If these children could listen to his parents and believe in Jesus, their soul will be saved.’

(22) 又要面孔好看啱才學通達個，可以教伊拉迦勒底個學問。

yeu yoa mikhung hoakhoe loa zehoh tungdah
also want face good-looking PM talent.knowledge nsightful
keh, khuyi jioa yila kalehdi-heh hohmeng
AM can teach 3PL Chaldean-'s study

‘Who has a good-looking face and talents with good knowledge may teach them the Chaldean studies.’

The 66 occurrences of *we* (會, can) in the data all indicate the physical or mental power of participants and are also commonly used in contemporary Shanghainese and

Mandarin Chinese. In addition, a variant *weteh* (會得, can) of *we* (會, can) appears in the data once, as shown in (25).

We (會, can): ability

(23)再話第個小囡會解釋聖書，我倒勿相信伊哪能會讀個。

ze wo digeh xioanoe we kaseh sengsyu, ngu toa
 again say this child can explain holy.book 1SG opposite
 voh xiangxing yi naneng we doh keh
 not believe 3SG how can read AM

‘Besides, even if this kid could explain the holy book, I do not believe that he could read it’

(24)感化一個有罪個人，終會救伊個靈魂啐，免脫個罪孽。

koehua yeh-geh yeu zoe keh ning, zungwe jieu
 influence one-CLF have sins MOD person finally.will save
 yi-heh lingweng loa, mi-theh keh zoenih
 3SG-'s soul PM free-COMPL MOD sins

‘If you convert a sinful person, his/her soul will be saved and s/he will be get rid of sins.’

Weteh (會得, can): ability

(25)對姆司港個地闊，車子會得穿出來個，也有五條蠻好個橋，垃拉對姆司港個上頭。

demsy gong-heh di khueh, cotsy weteh coe-cehle keh,
 PN harbour-'s land wide car can drive-COMPL AM
 hayeu ng-dioa mahoa keh jioa, lala demsy gong keh
 also.have five-CLF good MOD bridge at PN harbour MOD
 xongdeu

above

‘Thames Harbour is open and can be used by vehicles, and there are also five good bridges over the harbour.’

Another similar member found in the data is *hoa* (好, can), with 5 occurrences, but it is arguably not a verb, but a higher-order predicate, often used to lead a clause and predicate on the content that follows it. This usage of *hoa* (好, can) is specific to Shanghainese and is not common in Mandarin Chinese. All occurrences of *hoa* (好, can) in the data are to indicate ability under objective conditions, not the ability of the participants themselves, as shown in (26) – (29).

***Hoa* (好, can): ability**

(26) 垃拉幾好個城裡，有第個教場啐，顯出第個白相來，一淘個男啐女末，好去看個。

lala ji hoa keh sengli, yeu digeh jioazang
at several good MOD city.inside there.be this church.square
loa, xiceh digeh bahxiang le, yehdoa keh noe
PM show this fun PM together MOD man
loa nyu meh, hoa qi khoe keh
PM woman PM, can go watch AM

‘In several towns, there are church squares where this fun is shown and where both men and women can go to see it.’

(27) 對伊拉話，俾去仔細尋訪小囡，尋着之末，來回覆我，等我也好去拜伊。

de yila wo, na qi tsyxi xingfong xioanoe, xingzah-tys meh,
to 3PL say 2PL go careful find child find-PFV PM
le wefo ngu, deng ngu ha hoa qi ba yi

come reply 1SG wati 1SG also can go visit 3SG

‘(Herod) told them, go and look carefully for the child, and when you find him, come back and tell me, then I can go and see him too.’

(28)但是第個一眼，也勿好算報答儂個大恩典拉哩。

dezy digeh yehnge, ha vohhoa soe botah nung-heh du
but this little also not.can count repay 2SG-'s big
endi li
grace EM-SFP

‘But this cannot repay you for your great grace.’

(29)江裡個船，勿好出遠個。

kongli keh zeu, vohhoa ceh yoe keh
river.inside MOD boat not.can out far AM

‘Boats in this river cannot sail far.’

The second subtype of non-epistemic modality found in the database is modal verbs of permission. Unlike ability, permission concerns the *acceptability* of events that are expressed by modal verb *khuyi* (可以, permit/allow), *nengkeu* (能殼, permit/allow) and *hoa* (好, permit/allow), as shown in (30) – (37). 123 occurrences of *khuyi* (可以, permit/allow) are found in the database, which is the most common member of indicating permissions, and this usage is also the most common one of *khuyi* (可以), compared with its other usages. The second most frequently occurring member is *nengkeu* (能殼, permit/allow), which indicates permission significantly less often in the data, occurring 23 times compared to the usage of indicating ability. Another member is *hoa* (好, permit/allow), which occurs only 6 times in the data and this usage is also acceptable and in contemporary Shanghainese.

Khuyi (可以, permit/allow): permission

(30)現在只望儂相信伊，儂個罪就可以饒赦。

yize tseh mong nung xiangxing yi, nung-heh zoe
now only hope 2SG believe 3SG 2SG-'s sins
zieu khuyi nyoasoa
then permit forgive

‘Now if you believe in him (Jesus), your sins are allowed to be forgiven.’

(31)倘然有人問儂，為啥解驢子，可以回頭話，主要用啫。

thongzoe yeu ning meng na, wesa ka lyutsy, khuyi
if have person ask 2PL why lose donkey allow
wedeu wo, zyu yoa yung loa
back.head say God will use SFP

‘If someone asks about why you lose the donkey, and you can look back and say, God asks for it.’

The other member, *hoa* (好, permit/allow), occurs the least often, only six times, and only in the negative and interrogative clauses in the data. When *hoa* (好, permit/allow) co-occurs with the negative form or appears in the interrogative clause, *hoa* (好) no longer denotes the ability mentioned above, but rather permission. In addition to context, other forms of co-occurrence and sentence types can also be used to distinguish the different meanings of modal verbs.

Hoa (好, permit/allow): permission

(32)自儂也勿必緊打碎沙鍋問到底，因為第件事體，本來該當隱瞞啦啫，勿好話出來個。

tsynung ha vohbih jin tangse saku meng taodi, yinwe
yourself also not.need close break pot ask till.end because

di-dji zythi, benle kedong yinmeng la loa, vohhoa
 this-CLF thing, original should hide MP PM not.allow
 wo-cehle keh
 say-COMPL AM

‘You do not have to insist on knowing everything by asking, because this is something that should be hidden and not said.’

(33) 蓋啐現在是勿好望啥天上個福氣。

kehloa yize zy vohhoa mong sa thi-xong keh fohqi
 therefore now be not.allow hope what sky-PREP MOD blessing
 ‘Therefore the blessings from heaven cannot be counted.’

(34) 又有聲氣第二回對伊話，神所乾淨拉個，儂勿好算俗個。

yeu yeu sangqi di'e-we de yi wo, seng su keudjing
 again have voice second-CLF to 3SG say, God AUX clean
 la keh, nung voh-hoa soe zoh keh
 PM AM, 2SG not.allow count vulgar AM

‘And a voice spoken to him a second time, saying that what God considers clean, you shall not consider it vulgar.’

The use of *nengkeu* (能殼, permit/allow) for permission is much less common in the data than its use for ability, occurring 23 times, 22 of which are in *Shengjing Shiji*. *Nengkeu* (能殼, permit/allow) appears alone, in contexts where it is a statement concerning the individual's permission for an action, as shown in (35). When *nengkeu* (能殼, permit/allow) occurs in conjunction with the negator *voh* (勿, not), similar to *khuyi* (可以, permit/allow), and *hoa* (好, permit/allow), it is also commonly interpreted as indicating permission, as shown in (36). Besides, there is one case that occurs in interrogative sentences, as shown in (37).

Nengkeu (能殼, permit/allow) : permission

(35) 儂領伊拉到河灘上去吃水，拉伊塊，我要試驗伊拉，我話要個末，能殼跟儂。

nung ling yila toa wuthe-xong qi qiehsy, la
2SG lead 3PL arrive riverside-PREP go drink.water, at
yikhue, ngu yoa syni yila, ngu wo yoa keh meh,
that.place 1SG will test 3PL 1SG say want AM PM
nengkeu geng nung
permit follow 2SG

‘You will lead them to the riverside to drink. There I will test them, and those who I say I want are allowed to follow you.’

(36) 大衛話，勿能殼殺神抹油個人。

Dawe wo, vohngengkeu sah seng meh yue keh ning
PN say not.allow kill God wipe oil MOD person

‘David said, you are not allowed to kill a man who is anointed by God.’

(37) 到底我豈是啥能殼讓伊謀害東家個。

toadi ngu qi zy sa nengkeu nyang yi meuhe
on.earth 1SG how be what allow let 3SG murder
tunga keh
master AM

‘How on earth could I allow him to murder the master.’

Epistemic modality indicators found in the data are the same as those members mentioned above, including *yoa* (要, will) and *we* (會, will).

The usage of *yoa* (要, will) for possibility is the most frequent in the data, with 1,752 occurrences, which shows how often *yoa* (要, will) is used. The usage of *yoa* (要, will) to indicate a higher degree of possibility according to the speakers' judgement on propositions, as shown in (38), is also common in contemporary Shanghainese and Mandarin. Additionally, a particular usage in Shanghainese is also found in the data, with *yoa* (要, will) co-occurring in clauses with the event-completion particle *theh* (脱) and sentence-final particles, as shown (40) - (42), which is not found in Mandarin with the same expressions. In (40) - (42), where verbs are followed by *theh* (脱), which indicates the completion of the action at the level of lexical, but the verb is preceded by a modal verb with a sense of future meaning, so the whole sentence remains incomplete. A detailed discussion will be given in 6.3.4.

Epistemic *Yoa* (要, will)

(38) 儂要有身孕啫養兒子, 要題伊個名頭叫耶穌。

nung	yao	yeu	shengyun	loa	yang	ngtsy,	yoa	di
2SG	will	have	pregnancy	PM	raise	son	will	name
yi-heh	mingdeu	jioa	yasu					
3SG-'s	name	call	PN					

'You will be pregnant and have a son, and name him Jesus.'

(39) 伊塊用個洋錢, 是個租田錢, 倘然有嗰欠戶未, 要抄家個。

yikhue	yung	keh	yangdji,	zy	geh	zudi	di,
this.place	use	MOD	money	be	CLF	rent.field	money
thongzoe	yeusa	qiwu	meh,	yoa	coaka		keh
if	have.what	debtor	CDM	will	search.family		AM

'The money used here is the rent for fields, and if someone fails to pay the rent, will suffer confiscation.'

(40)有時船搭子鯨魚， 棚着子個大風， 要壞脫子個。

yeuzy zeu tahtsy djingng, pangzah-tsy keh dufung, yoa
sometimes ship and whale meet-PFV MOD big.wind will
wa- theh tsy keh
break-COMPL PFV AM

‘Sometimes both the boat and the whale will be destroyed when heavy wind occurs.’

(41)勿消一個月， 我一定要弄脫第個對頭個。

voh xioa yeh-geh yueh, ngu yehding yoa lung-theh
not need one-CLF month 1SG certainly will take-COMPL
digh dedeu keh
this enemy AM

‘In less than a month, I am going to kill this enemy.’

(42)看見燈迷啫迷， 將要隱脫快者。

khoeji deng mi loa mi, jiangyao ying-theh khua tse
see light lost PM lost will hidden-COMPL quick SFP

‘Seeing the light is getting weaker and weaker, it will go out soon.’

Another modal adverb indicating possibilities is *we* (會, will). Compared to *yoa* (要, will), *we* (會, will) indicates a lower degree of possibilities of the event as perceived by the speaker than *yoa* (要, will). This usage of *we* (會, will) does not occur as often as its use to indicate ability, with 46 occurrences in the data.

Epistemic *we* (會, will)

(43)郎中看之伊個病啱話， 第個是勞病， 醫是醫勿好個， 要末居去， 或者水土對啱會好點。

longzung khoe-tsy yi-heh bing loa wo, digeh zy loabing,
 doctor see-PFV he-'s illness PM say this is eparsalgia
 yi zy yi voh-hoa keh, yoameh jyuqi, wehze
 cure is cure not-COMPL AM or leave or
 sythu de loa we hoa ti
 water.soil right CDM will good bit

‘The doctor saw him and said it was eparsalgia which cannot be cured. It is better to go to other places where the climate is right, so his illness may be better.’

(44)我話聖書上個說話，也是實蓋能啐，無啥空話脫個，要成功末，是會成功個。

ngu wo sengsyu-xong keh ewo, hazy zehkeh neng
 1SG say holy.book-PREP MOD word also this like
 loa, msa khungwo theh keh, yoa zengkung meh,
 PM not empty.word PM AM will succeed CDM
 zy we zengkung keh
 be will succeed AM

‘I say that the words of the holy book are just words of truth, no empty talk. It says it will succeed, it will.’

We (會, will) can co-occur with future temporal adverbials, showing that it carries a sense of futurity, as shown in (45). There is no clear-cut line between modal meaning and temporal meaning, as *we* (會, will) can indicate futurity even without explicit temporal forms in sentences, as shown in (43) and (44) where the described event will happen in the future.

(45)王話，我明朝會曉得到底是呢勿是，不過要當心點，話罷之，伊就離開

伊塊到皇宮裡去哉。

wong wo, ngu mingtsoa we xioateh toadi zy neh voh zy,
king say, 1SG tomorrow will know on.earth be MP NEG be
behku yoa dongxinti, wo ba tsy, yi zieu likhe
but will careful say finish PFV 3SG hence leave
yi-khue toa wongkung-li qi tse
this.place arrive palace-PREP go CUR

‘King says, I will know whether it is true or not tomorrow, but I need to be careful. He left here and went to palace after these words.’

In addition, a variant *weteh* (會得, will) of *we* (會, will) indicating possibilities also found in the database, as shown in (46).

Epistemic *weteh* (會得, will)

(46)我現在已經打聽著實，對頭人住個房子，並且我記好房子個樣子，斷斷乎勿會得弄錯個者。

ngu yize yijing tangthing zahzeh, dedeuning zyu
1SG now already ask.about ascertain opposite.head.person live
keh wongtsy, bingqi ngu ji-hoa wongtsy keh
MOD house and 1SG remember-COMPL house MOD
yangtsy, doedoehu vohweteh lungcu keh tse
appearance definitely not.will have.mistake AM SFP

‘I have now enquired to ascertain the house where the enemy lived, and I have memorised the house so that I must not be mistaken.’

In addition to polysemous modal verbs mentioned above, modal verbs expressing willingness were also found in the database, including *zingnyoe* (情願, be willing to), *nyoeyi* (願意, be willing to), *koaxing* (高興, be willing to) and *yingke* (應該, should).

Zingnyoe (情願, be willing to) and *nyoeyi* (願意, be willing to) are semantically close, but the number of occurrences in the data differs, with the former occurring 37 times and the latter only 8 times. *Nyoeyi* (願意, be willing to) is only found in *Ali Paipai Feng Dao Ji* (1921), and not in any of the earlier works. *Zingnyoe* (情願, be willing to) occurs once in *Ali Paipai Feng Dao Ji* (1921), but the rest appear in works published before 1921.

Zingnyoe (情願, be willing to) found in the database not only indicates willingness but also hope, while *nyoeyi* (願意, be willing to) only indicates ones' own free will, as shown in (47) – (51).

***Zingnyoe* (情願, be willing to): wishes**

(47) 俾到人家屋裏去末, 先要話, 情願第家平安。

na toa ningka wohli qi meh, xi yoa wo, zingnyoe
 2PL arrive others house go CDM first need say wish
 di-ka bingoe
 this-CLF safe

'If you go to someone's house, you should say 'may the family be safe' at first.'

(48) 彼得話, 主, 我情願陪儂收監, 並且死。

Biteh wo, zyu, ngu zingnyoe be nung seuji,
 PN say God 1SG willing.to accompany 2SG take.into.prison
 bingqi xi
 and die

'Peter says, Lord, I would rather go to prison with you and die.'

***Nyoeyi* (願意, be willing to): wishes**

(49) 乃末勿得勿然拿實情完完全全告訴出來, 並且願意拿一半金子分撥拉阿哥。

nameh vohtehvohzoe na zehzing woewoedjyuoedjyuo
 then have.to take truth complete
 koasu-chele, bingqi nyoe yi na yehbeu jingtsy feng.pehla
 tell-COMPL and willing.to take half gold give.to
 aku
 elder brother

‘Then he had to tell the whole truth and was willing to give half of the gold to his elder brother.’

(50)我必須要用手巾來遮沒自儂兩隻眼睛個，自儂願意照否。

ngu bihxyu yoa yung seujing le zoameh tsynung-heh
 1SG must will use handkerchief to cover 2SG-'s
 liang-tseh ngejing keh, tsynung nyoe yi zoa feu
 two-CLF eye AM 2SG willing.to follow Q

‘I have to cover both your eyes with a handkerchief, are you willing to do it?’

The usage of *koaxing* (高興, be willing to) for willingness, although it appears only twice in the data and in the same work *Hengli Shilu* (1856), is no longer used in contemporary Shanghainese but is only used in very colloquial Mandarin.

***Koaxing* (高興, be willing to): wishes**

(51)還有多化實蓋個差處是姑娘日逐教伊，撥伊曉得人個心腸那能歪邪子
 啐，高興犯罪個。

heyeu duhua zehkeh keh coacy zy kuniang
 still.have many actual MOD disadvantage is lady
 nyizoh jioa yi, peh yi xioateh ning-heh xindjang
 everyday teach 3SG make 3SG know person-'s heart
 naneng wazia tsy loa, koaxing fezoe keh

how wicked PFV PM willing.to commit.crime AM

‘There is also the disadvantage that the lady teaches him every day, so that he will know how wicked the human heart is and be willing to commit crimes.’

(52)現在我自家覺着有望者，心裏一眼一眼感動起來，高興担雜食撥拉苦惱人。

yize ngu tsyka jiohzah yeu mong tse, xinli
now 1SG self feel have hope CUR heart.inside
yehngeyehnge koedung- qile, koaxing na zahzy peh-la
little.by.little move- COMPL willing.to take food give-PFV
kunoaning
suffering.person

‘Now I feel a sense of hope in myself, and my heart is moved little by little. I am willing to give food to those who are suffering.’

The most frequent modal verb indicating willingness in the data is *yingke* (應該, should), which occurs 218 times and differs from the three modal verbs previously mentioned in that *yingke* (應該, should) indicates a higher degree of willingness and carries a sense of obligation, as shown in (53) and (54).

***Yingke* (應該, should): wishes**

(53)又造個可怕個地獄，勿肯懊悔罪孽個人，應該住拉化個。

yeu zoa geh khupoa keh dinyoh, vohkheng o’we zoenih
again bulid CLF horrible MOD hell not.willing regret sins
keh ning, yingke zyu-la hua keh
MOD person should live.ASP AUX AM

‘∅ also builds horrible hell, and who do not regret about sins should live there.’

(54)耶穌話完之，大之聲氣咗話，凡係有耳朵聽個末，應該聽個。

yasu wo-woe tsy, da tsy sangqi loa wo, fecih yeu
 Jesus say-COMPL PM big MOD voice PM say every have
 nitu thing keh meh, yingke thing keh
 ear listen AMCDM should listen AM

‘When Jesus had finished speaking, he said with a loud voice that anyone who has ears should listen to (this).’

The number of occurrences of modal verbs discussed above are listed in the table below.

Table 6-4: The distribution of modal verbs in the data

Types	Members	Number of occurrences
Ability	<i>nengkeu</i> (能殼, can)	129
	<i>khuyi</i> (可以, can)	170
	<i>we</i> (會, can)	67
Permissions	<i>khuyi</i> (可以, permit/allow)	123
	<i>nengkeu</i> (能殼, permit/allow)	23
Possibilities	<i>we</i> (會, will)	46
	<i>yoa</i> (要, will),	1752
Wishes	<i>zingnyoe</i> (情願, be willing to)	37
	<i>nyoeyi</i> (願意, be willing to)	8
	<i>koaxing</i> (高興, be willing to)	2
	<i>yingke</i> (應該, should)	218
Higher-order predicate	<i>hoa</i> (好, can)	5
	<i>hoa</i> (好, permit/allow)	8

6.3.2 Modal adverbs

The modal adverbs mentioned by Qian (2014) are examined in the data and some members are found to overlap, as well as those specific to the data in this dissertation, and their distribution in the data is shown in Table 6-5. New members found in the data are *zehze* (實在, honestly), *dahwe* (特為, especially), as shown in (55) and (56) respectively. Members which are specific in Shanghainese and are not used in Mandarin are *dingji* (定見, certainly), *beyoa* (板要, insist on), *thihzeng* (貼正/準, just in time), and *dahwe* (特為, especially), as shown in (57) – (60) respectively.

Table 6-5: New modal adverbs found in the data

Members	Number of occurrences
<i>zehze</i> (實在, honestly)	86
<i>dingji</i> (定見, certainly)	3
<i>bihding</i> (必定, certainly)	135
<i>beyoa</i> (板要, insist on)	7
<i>thihzeng</i> (貼正, just in time)	29
<i>thihzeng</i> (貼準, just in time)	18
<i>ningjieu</i> (仍舊, still)	42
<i>dahwe</i> (特為, especially)	10

***Zehze* (實在, honestly)**

(55) 儂老人家既然是遠鄉個客人，我也何必隱瞞自儂呢，但是我實在勿曉得清爽。

nung loaningka jizoe zy yoexiang keh khahning, ngu
 2SG old.person since as far.country MOD guest 1SG
 ha wubih yinmeng tsynung neh, dezy ngu zehze
 also no.need hide 2SG MP but 1SG honestly

vohxioateh qingsong

not.know clearly

‘Since you are a guest from a faraway land, why should I hide anything from you? But I really don't know.’

Dahwe (特為, especially)

(56) 伊拉歡喜拉會堂裏啱轉角上，立之啱祈禱，特為要人看見。

yila huoexi la wedongli loa zoekoh-xong, li-tsy
3PL like at synagogue.inside PM corner-PREP stand-PFV
loa djito, dahwe yoa ning khoeji
PM pray especially want person see

‘They like to stand and pray on the corner of the synagogue, specifically to be seen by others.’

Dingji (定見, certainly)

(57) 亨利養個時候已經日日夜夜拉當心個，若是無得第個轎夫，亨利定見勿能殼活個。

Hengli yang keh zyheu yijing nyinyiyaya la dongxin
PN raise MOD time already day.and.night PROG worry
keh, zahsy mteh digeh djioafu, Hengli dingji
PST if not.have this bearer PN certainly
vohnengkeu weh keh
not.can live AM

‘Before Henry was born, the bearer was already worried about him day and night, and without him Henry would never have lived.’

Beyoa (板要, insist on)

(58) 我心裡急來死，板要去尋着伊拉。

ngu xinli jih-lexi, beyoa qi xingzah yila
 1SG heart.inside desperate-COMPL insist.on go find 3PL
 ‘I was desperate and insist on finding them.’

A variant *be* (板) of *beyoa* (板要, insist on) is found in the database, as shown in (59), but with only one occurrence.

***Be* (板, insist on)**

(59)現在我要謝個神，因為聽子我求伊個說話，撥我曉得我死子後首睍，儂板做耶穌個學生子。

yezi ngu yoa xia keh seng, yinwe ting-tsy ngu
 now 1SG want thank MOD God because listen-PFV 1SG
 djioe yi keh ewo, peh ngu xioateh ngu xi-tsy
 ask 3SG MOD word let 1SG know 1SG die-PFV
 heuseu, nung be tsu yasu-heh hohsangtsy
 later 2SG insist.on be Jesus-'s student

‘Now I thank God for listening to me and letting me know that after my death, you insist on being a student of Jesus.’

***Thihzeng* (貼正/準, just in time)**

(60)自儂拉挖地洞個時候末，我貼正好量一量，什价能末可以曉得一個大數目者。

tsynung la wah didong keh zyheu meh, ngu
 2SG PROG dig ground.hole MOD time PM 1SG
 thihzeng hoa liangyehliang, zehgehngeng meh khuyi xioateh
 just can measure in.this.way CDM can know
 yeh-geh du sumoh tse
 one-CLF approximate figure CUR

‘While you are digging the hole, I just measure it so that I can get an approximate figure.’

(61)一日子，亨利走到姑娘個房裏去，貼準拉開書箱。

yeh nyitsy, Hengli zoe toa kuniang-heh fong-li qi, thihzeng
one day PN walk to lady-'s room-PREP go just
la khe syusiang
PROG open book.case

‘One day, Henry walked up to the lady's room and she happened to be opening a book case.’

6.3.3 Other mood-indicating expressions

In addition to modal auxiliary verbs and adverbs, other mood-indicating expressions are also found in the database, some being structures that are commonly used in Shanghainese but are not common in Mandarin Chinese. A potential resultative verb construction (PVC) is often used in Shanghainese to express ability, as shown in (62) – (65) previously. The most commonly used structure is V + *teh* (得)/ *voh* (勿) + *le* (来), and when it used in Mandarin, it always occurs in negation. Another structure that appears in negative form in both Shanghainese and Mandarin is V + *teh* (得)/*voh* (勿) + *qi* (起). Its negative form occurs 4 times in the database, but no positive form has been found, as shown in (65).

PVC

(62)卡新倒弄得來氣末吭來，力量一眼無不個者。

kaxin toa lung-tehle qi meh kong le, lihliang yehnge
PN opposite do-CM air PM pant PM strength a.little
mbeh keh tse
not PST CUR

‘Kaxin was panting and had no strength.’

(63) 姑娘未又担一個泥做拉個菩薩，叫亨利看清爽子朝地上一甩，直甩得
來粉粉碎。

kuning meh yeu na yeh-geh ni tsu la keh
lady PM again take one-CLF clay make PFV MOD
busah, jioa Hengli khoe qingsongzy zoa di-xong yeh
Bodhisattva ask PN see clear toward floor-PREP one
huah, zeh huah-tehle fenfense
throw till throw-CM pieces

‘The lady took a Bodhisattva made of clay, and asked Henry to look at it
clearly, and threw it towards the ground, and it fell to pieces.’

(64) 前頭個事體，埃及行邪法個人也會做個，但是第樣，伊拉做勿來。

zideu keh zythi, eji ying yafah keh ning
previous MOD thing Egypt do evil.magic MOD person
ha we tsu keh, dezy diyang, yila tsuvoh-le
also can do AM but this 3PL do.not-CM

‘The preceding things are also can by done by who practice evil in Egypt,
but this, they cannot do.’

(65) 第個眾百姓個重擔，我一個人擔當勿起個。

digeh zungbahxing keh zungde, ngu yeh-geh ning
this numerous.people MOD burden 1SG one-CLF person
dedong voh-qi keh
bear not-CM AM

‘I cannot bear the burden of the people alone.’

Another usage is that sentence-final *mehtse* (末者/哉) and *ba* (罷), indicating imperative (Edkins 1868). 47 occurrences of *mehtse* (末者/哉) and 4 occurrences of *ba* (罷) are found in the data, as shown in (66) – (69).

***Mehtse* (末者/哉)**

(66)以利話，儂可以安安樂樂去末者。

Yili wo, nung khuyi oeoelohloh qi mehtse
 PN say 2SG can peaceful go IM-SFP
 ‘Eli said, you can leave in peace.’

(67)伊個娘對用人話，伊吩咐個，個就做末哉。

yi-heh niang de yungning wo, yi fenfu na keh, na
 3SG-’s mother to servant say 3SG ask 2PL PST 2PL
 zieu tsu mehtse
 then do IM-SFP
 ‘His mother said to his servants, do what he commanded you.’

***Ba* (罷)**

(68)並且照之爺吩咐我個啉做個，起來，佢從此去罷。

bingqi zoa-tsy ya fenfu ngu keh loa tsu keh,
 and follow-PFV father command 1SG AM PM do PST
 qile, ni zungtsy qi ba
 get.up 1SG since.then go IM-SFP
 ‘And (I) did as my father commanded me, and stood up, and went away from there.’

(69)佢作惡人個，全離開我啉去罷。

na tsu wu ning keh, djuoe likhe ngu loa qi ba

2PL do evil person AM all leave 1SG PM go IM-SFP
 ‘Leave me, all you evil-doers.’

The occurrences of the above mood-indicating expressions are listed in Table 6-6.

Table 6-6: The number of occurrences of other mood-indicating expressions

Members	Number of occurrences
V <i>tehle</i> (V 得來, can V)	6
V <i>vohle</i> (V 勿來, cannot V)	24
V <i>vohqi</i> (V 勿起, cannot V)	4
<i>mehtse</i> (未者/哉) as sentence-final particles	47
<i>ba</i> (罷) as sentence-final particles	4

6.3.4 Usages of modal expressions

This section will focus on the relationship between the modal components that occur in the database and other components in the sentence, and in particular, a usage that exists in modern Shanghainese which is different from Mandarin Chinese

As mentioned above in the discussion of *yoa* (要, will), this expression contributes to making a completed event at the lexical level into an uncompleted one when the related verb following *yoa* (要, will) co-occurs with the event-completion particle *theh* (脫). The co-occurrence of *yoa* (要, will) with other event-completion particle *tsy* (之/子) and *la* (拉) is also found in the data, as shown in (70) and (71). 28 occurrence of the co-occurrence of *yoa* (要, will) and event-completion markers are found in the database. Another case found in the database is that the co-occurrence of the sentence-

final *keh* (個) and *yoa* (要, will) can also contribute to changing the completed state of an event to the incomplete state, as shown in (72).

(70) 恭敬爺娘禮上設立拉個啐，若然人罵爺娘，要打殺子個。

kungjing yaniang li xong sehlih lah keh loa,
 respect father.mother rite at establish ASP PST PM
 zahzoe ning ma yaniang, yoa tangsah tsy keh
 if person scold father.mother will fight.kill PFV AM
 ‘Respect what parents have established on the ceremony, if someone scolds his
 or her parents, s/he will be killed.’

(71) 今朝所做拉個事體，終要隱瞞拉啱，勿可以話出去個。

jingtso su tsu-la keh zythi, zung yoa yinmeng-la loa,
 today AUX do-PFV MOD thing finally will hide-PFV PM
 vohkhuyi wo-cehqi keh
 not.allow say-COMPL AM
 ‘What we have done today must be hidden and not allowed to be told.’

(72) 亨利到兩歲個辰光，生起一場重病來，直是利害得極個，大概人看起來，好像要死個者。

Hengli toa liang seu keh zengkuong, sangqi yeh-zang
 PN arrive two years MOD moment, get one-CLF
 zungbing le, zeh zy lihe teh djih keh,
 heavy.illness AUX straight be serious CM extreme AM
 dake ning khoe-chile, hoaxiang yoa xi keh tse.
 approximate person see-COMPL, like will die PST SFP
 ‘When Henry was two years old, he had a serious illness. People may see him
 as a dying person.’

In addition, the above three sentences all contain sentence-final particles such as *keh* (個) in (69), *loa* (咯) in (70) and *tse* (者) in (71). The combination of modal verbs, event-completion particles and sentence-final particles is not common in Mandarin Chinese.

To sum up, epistemic auxiliary verbs in Shanghainese can override the meaning of verb-ending particles by changing realis situations to irrealis ones or through enhancing the possibility of irrealis situations.

6.4 Data report

The distribution of modal auxiliary verbs and adverbs in Missionary Shanghainese publications are listed in Table 6-7 and Table 6-8.

Table 6-7: The distribution of modal verbs in the texts

Types	Members	Publications and distribution	Number of occurrences
Ability	<i>nengkeu</i> (能殼, can)	Hengli Shilu (1856)	27
		Lujia Chuan Fuyin Shu (1886)	13
		Matai Chuan Fuyin Shu (1895)	17
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	50
		Shitu Yanxing Zhuan (1891)	5
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892)	15
		Shitiaojie Zongyi Wenda (1899)	2
		Ali Paipai Feng Dao Ji (1921)	14
	<i>khuyi</i> (可以, can)	Youlaba Guo (1849)	3

		Hengli Shilu (1856)	24
		Chenzao Yubei (1868)	2
		Shenpan Rijiao (1868)	3
		Lujia Chuan Fuyin Shu (1886)	33
		Matai Chuan Fuyin Shu (1895)	20
		Shengjing Shiji (Vol.4:1889, Vol.5:1890)	5
		Shitu Yanxing Zhuan (1891)	13
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	29
		Ali Paipai Feng Dao Ji (1921)	38
	<i>we</i> (會, can)	Youlaba Guo (1849)	22
		Hengli Shilu (1856)	13
		Shenpan Rijiao (1868)	1
		Lujia Chuan Fuyin Shu (1886)	7
		Matai Chuan Fuyin Shu (1895)	7
		Shengjing Shiji (Vol.2:1892, Vol.4:1889)	9
		Shitu Yanxing Zhuan (1891)	1
		Yesu Yanxing Zhuan (Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	5
		Ali Paipai Feng Dao Ji (1921)	2
Possibilities	<i>we</i> (會, will)	Hengli Shilu (1856)	8
		Chenzao Yubei (1868)	1
		Gangdandiushi (1868)	1
		Matai Chuan Fuyin Shu (1895)	7
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	17
		Shitu Yanxing Zhuan (1891)	3

		Yesu Yanxing Zhuan (Vol.2: 1892)	2
		Ali Paipai Feng Dao Ji (1921)	7
	<i>yoa</i> (要, will)	Youlaba Guo (1849)	30
		Hengli Shilu (1856)	108
		Chenzao Yubei (1868)	8
		Gangdandiushi (1868)	18
		Shenpan Rijiao (1868)	4
		Lujia Chuan Fuyin Shu (1886)	350
		Matai Chuan Fuyin Shu (1895)	332
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	412
		Shitu Yanxing Zhuan (1891)	106
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	264
		Ali Paipai Feng Dao Ji (1921)	120
Permissions	<i>nengkeu</i> (能設, allow/permit)	Shengjing Shiji ((Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	22
		Ali Paipai Feng Dao Ji (1921)	1
	<i>khuyi</i> (可以, allow/permit)	Youlaba Guo (1849)	6
		Hengli Shilu (1856)	3
		Chenzao Yubei (1868)	2
		Gangdandiushi (1868)	2
		Shenpan Rijiao (1868)	2
		Lujia Chuan Fuyin Shu (1886)	13
		Matai Chuan Fuyin Shu (1895)	22
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	21

		Shitu Yanxing Zhuan (1891)	11
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	23
		Ali Paipai Feng Dao Ji (1921)	18
Wishes	<i>zingnyoe</i> (情願, be willing to)	Hengli Shilu (1856)	2
		Gangdandiushi (1868)	1
		Lujia Chuan Fuyin Shu (1886)	5
		Matai Chuan Fuyin Shu (1895)	4
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	21
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.4: 1887)	3
	Ali Paipai Feng Dao Ji (1921)	1	
	<i>nyoeyi</i> (願意, be willing to)	Ali Paipai Feng Dao Ji (1921)	8
Wishes	<i>koaxing</i> (高興, be willing to)	Hengli Shilu (1856)	2
Wishes	<i>yingke</i> (應該, should)	Hengli Shilu (1856)	11
		Chenzao Yubei (1868)	2
		Shenpan Rijiao (1868)	1
		Lujia Chuan Fuyin Shu (1886)	62
		Matai Chuan Fuyin Shu (1895)	46
		Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	28
		Shitu Yanxing Zhuan (1891)	19
		Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	46
		Ali Paipai Feng Dao Ji (1921)	3

Higher-order predicate	<i>hoa</i> (好, can)	Youlaba Guo (1849)	2
		Matai Chuan Fuyin Shu (1895)	1
		Ali Paipai Feng Dao Ji (1921)	2
Higher-order predicate	<i>hoa</i> (好, allow/permit)	Youlaba Guo (1849)	1
		Chenzao Yubei (1868)	1
		Matai Chuan Fuyin Shu (1895)	1
		Shitu Yanxing Zhuan (1891)	1
		Ali Paipai Feng Dao Ji (1921)	2

Table 6-8: The distribution of modal adverbs in texts

Members	Publications and distributions	Number of occurrences
<i>V tehle</i> (V 得來, can V)	Gangdandiushi (1868)	1
	Lujia Chuan Fuyin Shu (1886)	5
<i>V vohle</i> (V 勿來, cannot V)	Matai Chuan Fuyin Shu (1895)	4
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	20
<i>V vohqi</i> (V 勿起, cannot V)	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.4: 1887)	3
	Ali Paipai Feng Dao Ji (1921)	1
<i>ba</i> (罷)	Lujia Chuan Fuyin Shu (1886)	1
	Yesu Yanxing Zhuan (Vol.4: 1887)	1
	Ali Paipai Feng Dao Ji (1921)	2
<i>mehrtse</i> (未者/哉)	Hengli Shilu (1856)	2
	Lujia Chuan Fuyin Shu (1886)	8
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	11

	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	19
	Ali Paipai Feng Dao Ji (1921)	7
<i>zehze</i> (實在, honestly)	Youlaba Guo (1849)	1
	Hengli Shilu (1856)	2
	Shenpan Rijiao (1868)	1
	Lujia Chuan Fuyin Shu (1886)	17
	Matai Chuan Fuyin Shu (1895)	32
	Shengjing Shiji (Vol.1:1886)	1
	Shitu Yanxing Zhuan (1891)	3
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	21
	Ali Paipai Feng Dao Ji (1921)	8
<i>dingji</i> (定見, certainly)	Hengli Shilu (1856)	2
	Lujia Chuan Fuyin Shu (1886)	1
<i>bihding</i> (必定, certainly)	Hengli Shilu (1856)	5
	Lujia Chuan Fuyin Shu (1886)	18
	Matai Chuan Fuyin Shu (1895)	19
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3- 4:1889, Vol.5:1890)	18
	Shitu Yanxing Zhuan(1891)	2
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	25
	Ali Paipai Feng Dao Ji (1921)	48
<i>beyoa</i> (板要, insist on)	Hengli Shilu (1856)	4
	Gangdandiushi (1868)	2
	Shenpan Rijiao (1868)	1
	Lujia Chuan Fuyin Shu (1886)	1

<i>thihzeng</i> (貼正, just in time)	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	13
	Ali Paipai Feng Dao Ji (1921)	15
<i>thihzeng</i> (貼準, just in time)	Hengli Shilu (1856)	5
	Gangdandiushi (1868)	1
	Matai Chuan Fuyin Shu (1895)	2
	Shengjing Shiji (Vol.1:1886, Vol.3:1889)	2
	Shitu Yanxing Zhuan (1891)	8
<i>ningjieu</i> (仍舊, still)	Youlaba Guo (1849)	1
	Hengli Shilu (1856)	1
	Matai Chuan Fuyin Shu (1895)	2
	Shengjing Shiji (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890)	20
	Shitu Yanxing Zhuan (1891)	2
	Yesu Yanxing Zhuan (Vol.1: 1894, Vol.4: 1887)	2
	Ali Paipai Feng Dao Ji (1921)	14
<i>dahwe</i> (特為, especially)	Youlaba Guo (1849)	1
	Matai Chuan Fuyin Shu (1895)	3
	Shengjing Shiji (Vol.3:1889)	1
	Shitu Yanxing Zhuan (1891)	2
	Yesu Yanxing Zhuan (Vol.2: 1892, Vol.3: 1887)	3

The distribution of polysemous modal verbs in the text shows how commonly modal verbs are used, and that texts with one use of a modal verb also contain other uses of it. For example, texts containing *nengkeu* (能殼) for ability and *nengkeu* (能殼) for permission largely overlap, same for *khuyi* (可以), *we* (會) and *hoa* (好). The distribution of the different usages across the texts also shows which usage is more common in the database. For instance, the occurrence of *nengkeu* (能殼) expressing

ability is found in eight texts, while *nengkeu* (能殼) of permission appears in only two texts.

The occurrence of similar modal auxiliaries or adverbs is found in the same text as shown in the above table. For example, *zingnyoe* (情願) and *nyoeyi* (願意) are found in the database, but *nyoeyi* (願意) only appears in *Ali Paipai Feng Dao Ji* (1921) and not in other texts. A comparison of the occurrences of *zingnyoe* (情願) and *nyoeyi* (願意) in *Ali Paipai Feng Dao Ji* (1921) reveals the difference between them, as mentioned in 6.3.1. Since *zingnyoe* (情願) appears in the text including *Ali Paipai Feng Dao Ji* (1921) and before it, and *nyoeyi* (願意) does not appear in any other text, so *nyoeyi* (願意) can be regarded as a way of determining the timing of the text. The fact that *nyoeyi* (願意) is also found in the dictionary edited by Shanghai Vernacular Society et al. (1901; 2018: 1025) suggests that *nyoeyi* (願意) was in use at least by 1901. The dictionary also has a slightly different interpretation of *zingnyoe* (情願) and *nyoeyi* (願意), with *zingnyoe* (情願) being interpreted as ‘willing’ and *nyoeyi* (願意) as ‘willingly’. The absence of *nyoeyi* (願意) in texts prior to this date may be due to translation or to the fact that the semantics of the two are not delineated in greater details. The other group is a comparison of *dingji* (定見) and *bihding* (必定), which also occur together in the same text and are closer in semantics than *zingnyoe* (情願) and *nyoeyi* (願意). In terms of their distribution across the database, *bihding* (必定) appears much more frequently and in a much higher number of texts than *dingji* (定見), and *dingji* (定見) is not found in Shanghai Vernacular Society et al. (1901; 2018). Thus, it can be seen that *dingji* (定見) is unique to the database in this dissertation.

In addition, the distribution of modal adverbs in the text can also inform the timing of their occurrence. For example, *beyoa* (板要, insist on) is found in texts before 1868 and 1868, but not in those after; one written form of *thihzeng* (貼正) occurs in 1886 and in texts after while the other one 貼準 also occurs texts before 1886. Except for *Shengjing Shiji* (Vol.1:1886, Vol.2:1892, Vol.3-4:1889, Vol.5:1890), which contains both written form of *thihzeng*, the rest of the text contain one written form, similar to

the distribution of the two written forms of *tse* (哉/者) in the text. In addition, 貼正, which appears in relatively few texts, is not mentioned in Shanghai Vernacular Society et al. (1901; 2018) and only 貼準 appears in it (Shanghai Vernacular Society et al. (1901; 2018: 483).

6.5 Summary

This chapter provides a detailed report on the modal auxiliary verbs and modal adverbs in the database. The modal expressions in modern Shanghainese are compared with contemporary Shanghainese and Mandarin, and particular usage of epistemic modal verbs is also identified.

Chapter 7 The realisation of subjunctive meaning

This chapter aims to explore the manifestation of subjunctive meaning in modern Shanghainese through temporal and modal expressions, based on the discussion in previous chapters.

7.1 gives the theoretical background for investigating the realisation of subjunctive meaning. 7.2 provides an overview of the features of subjunctive. A further discussion of the subjunctive expressions presented in the previous study is given in 7.3. 7.4 is devoted to the description of how subjunctive is presented in the database. 7.5 concludes the whole chapter.

7.1 Theoretical background

As a subtype of moods, *subjunctive* has been discussed with *indicative*, where indicative indicates actuality and makes reference only to the actual world, but subjunctive expresses alternative scenarios of a fact in a set of possible worlds.

Conditional relations are a common way of expressing alternative of actuality and material implication has been employed to explain conditional relations. Both the protasis and the apodosis can be taken as conditions in conditionals, where the relation between the two conditions can be sufficient, or necessary, or necessary & sufficient. For example, the ‘so long as’ construction and ‘only if’ construction in English indicate sufficient and necessary condition respectively, as shown in (1) and (2).

Sufficient condition

(1) **So long as** she stayed silent she had a secret weapon. ¹⁰⁹

Necessary condition

¹⁰⁹ (1) and (2) are from British National Corpus, at <http://www.natcorp.ox.ac.uk/>.

(2) The above applies **only if** you have given us prior notification of each period of foreign travel and the countries you are visiting.

Using P to represent the protasis and Q for the apodosis, the ‘so long as’ construction and ‘only if’ construction shown above can be translated as (3) and (4).

(3) So long as P, Q ➡ $P \rightarrow Q$

(4) Q only if P ➡ $Q \rightarrow P$

Sufficient and necessary conditionals can be expressed by lexical markers, such as connectives in English, and grammatical encoding which is not as explicit as connectives, such as tense and aspect features carried by indicative and subjunctive conditionals, as shown in (5) and (6) respectively. In (5), the tense and aspect carried by both the protasis and the apodosis are the same, PAST, while the tense and aspect are mismatched shown in the subjunctive conditional (6), where PAST is used for expressing counterfactual situation with current reference.

(5) If Oswald didn't kill Kennedy, someone else did. ¹¹⁰

(6) Whatever may have been said in the 1930s -- even if it reflected current views then -- cannot be correct today. If mere contact **were** always enough then manifest injustice **would be** done in many cases. ¹¹¹

For counterfactual as shown in the above (6), the material implication is inadequate to characterize it as (3) or (4), as the truth value of the whole condition depends on not only the value of the apodosis and some other factors that also contribute

¹¹⁰ From Bennett (1974: 395).

¹¹¹ From British National Corpus, at <http://www.natcorp.ox.ac.uk/>.

to express subjunctive meaning that will be discussed in this chapter. To better explain counterfactuals theoretically, a different logical system of ‘possible worlds and accessibility relations’ is introduced (Stalnaker 1968; Lewis 1973, 1979). The actual world is one possible world that the universe could possibly evolve and there could be many others. Alternatives of actuality, such as counterfactuals or imagined situations, can be accessed in possible worlds projected by speakers. Moreover, possible worlds which are accessible from the actual world need to be similar enough to the actual world, so comparisons can be made between actuality and alternatives (Abbott 2006; Starr 2021).

The manifestation of counterfactual conditionals in many languages are related to the morphology of past tense, as shown in (7). For example, the role of past morphology in English counterfactuals is to express a distance from the actual present, which allows the access to inaccessible worlds historically by shifting the perspective to the past (Iatridou 2000; Ippolito 2013). Such tense features are seen as denoting fake tense in the actual world, as the temporal feature does not coincide with that of the actual world (Iatridou 1991, 2000).

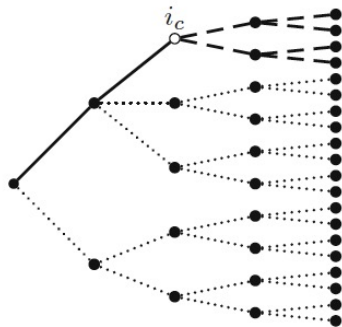
- (7)a. Erica sat down and drank a glass of water.¹¹²
- b. If Erica drank more water (in the present/future), she would be healthier.
- c. If Erica had drunk a glass of water (in the relevant past), she would not be this dehydrated.

The future event is undefined and uncertain. Looking at the future from the past, there may always be more than one possible events in the future, including the actual event drawn from the actual past, and other possible events. Using the fake tense is to open up all the possible continuation drawn from the past, but there is only one line of development that leads to the specific current or future situation (von Prince 2019).

¹¹² From von Prince (2019: 577).

There is an ordering relation between factuality, possible future and counterfactuality, as shown in Figure 7-1. Factual is indicated by solid line, the counterfactual is indicated by dotted lines and possible future is indicated by dashed lines.

Figure 7-1: A tree structure of factual, counterfactual and possible future (von Prince 2019: 591)¹¹³



Additionally, not all subjunctive meaning expresses counterfactuals, even if in conditionals. Sentences express speculative reasoning, as shown in (8), also carry subjunctive meaning.

(8) If Jones had taken arsenic, he would have shown just exactly those symptoms which he does in fact show.¹¹⁴

Based on the theoretical claims above, I will investigate how subjunctive meaning is encoded in modern Shanghainese in this chapter.

7.2 Features of subjunctive

¹¹³ *i* is an indice of a branching-time frame about the asymmetry between the past and the future. Cf. Rumberg (2016) and von Prince (2019).

¹¹⁴ From Anderson (1951:37).

Fábregas (2014:66) has proposed that ‘subjunctive covers a set of values that cannot be unified from a semantic perspective.’ Subjunctive does not carry unitary semantic meanings by itself and it is a way of grammaticalising specific beliefs that speakers hold (Quer 1998). In this sense, subjunctive is considered as the marker of a general semantic context, which has been advocated by many researchers (Giorgi and Pianesi 1997; Quer 1998; Gianakidou 1998 etc.).

7.2.1 Irrealis

Irrealis is considered to be the most common characteristic of subjunctivity, as sentences containing subjunctive expressions present situations which are normally not factual in the actual world. From this perspective, subjunctivity ties closely to irrealis in terms of the truth value of propositions. However, a factual situation can be expressed by subjunctive forms in Spanish, as shown in (9), where *Maria is sick* is factual in the actual world, and what the speaker expresses is the attitude towards the existing situation. It is an idiosyncratic case that *factive* verbs, such as regret, select the subjunctive in Spanish. If subjunctive expressions should only be related to irrealis meaning, the verbal selection in (9) would be unexpected. Nevertheless, this unique case cannot obviate the general tendency that irrealis meaning constitutes a major feature of subjective expressions. Additionally, this case is not cross-linguistic, as its equivalent in English shows no overt subjunctive form.

- (9) Lamento que María esté enferma.¹¹⁵ (Spanish)
 1SG regret that María SBJV sick
 ‘I am sorry that Maria is sick.’

Irrealis has been described from a more semantic perspective with respect to the states of situations in the actual world. Therefore, subjunctive form is selected when

¹¹⁵ From Fábregas (2014:21).

indicating unrealised, imagined situations which are different from the actual states at the time of the utterance. Subjunctive forms express some possible status of the situation where irrealis is one of them.

7.2.2 Subjectivity

As subjectivity indicates beliefs held by speakers, it has been related to *subjectivity* as expressing ideas from the perspective of the speaker. For example, indicative predicates are chosen in expressing the belief of the speaker in (10), but the subjunctive form is not acceptable.

- (10) Me parece que María {está / *esté} enferma.¹¹⁶ (Spanish)
 me seems that María is.IND / is.SBJV sick
 ‘It seems to me that Maria is sick.’

For Chinese, the expression of subjectivity can be context-dependent. Taking an example in Shanghainese, as shown in (11), the subjective reading is indicated by the meaning of *lala ngu khoe le* 辣辣我看來 ‘for me’.

- (11) 辣辣我看來，瑪麗生毛病了。
 lala ngu khoe le, mali sangmoabing le
 for 1SG see AUX PN get.sick SFP
 ‘It seems to me that Mary is sick.’

7.2.3 Uncertainty

Another term related to subjunctive is *uncertainty*, as speakers will choose subjunctive forms when expressing situations that they cannot confirm in view of the factual status of situations. For example, (12) expresses the wishes of the speaker and the speaker is

¹¹⁶ From Fábregas (2014:22).

not certain about whether the listener will come or not. However, expressions with certainty meaning can also be embedded under subjunctive forms. Taking counterfactuals as an example, as shown in (13) where the speaker is certain about the fact that ‘you did not come’, the protasis should be false in the actual world according to the speaker. Similar to the above discussion, uncertainty covers some subjunctive expressions but subjunctivity is not a shared feature for all expressions of uncertain meaning.

(12) *Espero que vengas.*¹¹⁷ (Spanish)

1SG.hope that you.come.SBJV

‘I hope that you (would) come.’

(13) If you came, we could go to the park.

7.2.4 Non-assertiveness

The most common characteristics of subjunctivity is *non-assertiveness*, which corresponds to non-assertive predicates used by speakers to doubt the truth value of propositions in the actual world. This comes from the opposite of assertion which is defined as an illocutionary speech act that speakers make a commitment about the truth value of propositions (Searle 1975). In other words, when speakers do not make a commitment about the truth value, they can choose the subjunctive. Hopper and Thompson (1973:473-474) classify five types of predicates of main clauses that operate on the embedded predicates of subordinate clauses to show the distinction between assertion and non-assertion, as listed in Table 7-1. Among that, non-assertive predicates are regarded as typical members of expressing the subjunctive in inflectional languages, as shown in (14).

¹¹⁷ From Fábregas (2014:15).

Table 7-1: Types of predicates in Hopper and Thompson (1973: 473-474)

Predicates	Examples
Strongly assertive predicates	say, report, assert, claim, vow, etc.
Weakly assertive predicates	suppose, believe, think, guess, expect, etc.
Semifactive predicates	remember, see, discover, forget, etc.
Non-assertive predicates	doubt, wish, to be possible, etc.
Factive predicates	regret, resent, bother, be sorry, be surprised, etc.

(14) Dudo de que estés harto de mí.¹¹⁸ (Spanish)

1SG doubt of that you are SBJV fed up with me

‘I doubt that you are fed up with me.’

If non-assertive predicates normally decide on the choice of subjunctive forms in subordinate clauses, the negation of assertive predicates might create a similar operation. For instance, weakly assertive predicate *believe* is negated in (15) and the subjunctive form has been selected.

(15) No creo que estés harto de mí.¹¹⁹ (Spanish)

not believe that you are SBJV fed.up with me

‘I do not believe that you are fed up with me.’

With non-assertiveness, several modifications are made in terms of the contents of propositions. First, wishes and orders are considered as non-assertive as speakers intend to express something they hope. For example, if *wish* or *order* is the main predicate,

¹¹⁸ From Fábregas (2014:12).

¹¹⁹ From Fábregas (2014:13).

subjunctive-forms can be used in subordinate clauses, as shown in (16) and (17) respectively.

(16) Deseo que vengas.¹²⁰ (Spanish)
I.wish that you.come.SBJV
'I wish you to come.'

(17) Te ordeno que vengas. (Spanish)
you I.order that you.come.SBJV
'I order you to come.'

Another modification is futurity, with respect to whether non-factual situations will realise in the future. For non-assertions, such as wishes or orders, the described situations are oriented towards the future, but whether they will be realised is not certain by the time of the utterance. The difference between situations that are located in the future and those expressed by subjunctive terms is that the latter is not taken to be happening in the actual world, which is labelled as *prospectivity* (Fábregas 2014:16). Irrealis situations include those that will happen after the time of utterance, which is not simply covered by situations expressed by subjunctive terms. However, the distinction between *futurity* and *prospectivity* is not apparent in languages, which can involve many factors at the syntactical, semantic and pragmatic levels.

Additionally, sentences encoding situations that are oriented towards the future can also appear in subjunctive forms, as shown in (18). In Spanish, the subjunctive is used when subordinate clauses are located in the future or the time after the situation is expressed. In this sense, *futurity* and *prospectivity* are not clear-cut in some cases, which need to be discussed on a case by case basis. How *futurity* and *prospectivity* are distinguished in modern Shanghainese will be discussed in 7.4.

¹²⁰ From Fábregas (2014:15).

(18) Cuando venga, nos iremos.¹²¹ (Spanish)
 when 3SG comes SBJV us will leave
 ‘When he comes, we will leave.’

Presupposition is another notion that comes with non-assertiveness. Sentences will be assertive when new information is added to the common ground according to the definition by Stalnaker (1978). Roughly speaking, sentences will be non-assertive when no new information is given to the common ground. Presuppositions are in many cases implicit and non-assertive. But non-assertions are not always presuppositions; they can also be speech acts in many cases. Back to the typical structure of subjunctive expressions, presupposed information can be expressed by subjunctive terms under the evaluation of the situation in the subordinate clause by the main predicate, as shown in (19) and the equivalents of Shanghainese in (20). In this case, non-assertiveness can be presented in subjunctive form, but is not required.

(19) Lamento que María esté enferma.¹²² (Spanish)
 1SG.regret that María SBJV sick
 ‘I am sorry that Maria is sick.’

(20) 我很遺憾瑪麗生毛病了。
 ngu hen yihoe mali sangmoabing le
 1SG very sorry PN get.sick SFP
 ‘I am sorry that Maria is sick.’

However, non-assertiveness faces a problem. In some cases, there is not a very clear-cut distinction between assertiveness and non-assertiveness. For example, a

¹²¹ From Fábregas (2014:17).

¹²² From Fábregas (2014:21).

situation can be weakly assertive in the actual world and non-assertive in other possible worlds according to the speaker. In (21), both indicative and subjunctive forms are acceptable. To solve this problem, Lunn (1989: 691) adds another parameter, newness/oldness to distinguish the subjunctive from the indicative. The reason lies in that the selection of the subjunctive forms under the operation of the main predicate in main clauses are made due to the lack of new information to help with the selection, while when indicative is chosen, some new information has been added to affect the truth value of the proposition. Thus, the truth value and newness/oldness are used to differentiate the subjunctive and the indicative, as shown in Table 7-2.

(21)a. Posiblemente Juan está enfermo. ¹²³ (Spanish)

possibly Juan is.IND sick

‘It is possible that Juan is ill.’

b. Posiblemente Juan esté enfermo.

possibly Juan is.SBJV sick

‘It is possible that Juan is ill.’

Table 7-2: Newness/oldness to distinguish subjunctive and indicative in Lunn (1989: 691)

Untrue/ less assertable	Both true and new	True but old
Subjunctive	Indicative	Subjunctive

This classification is compatible with the discussion on the irrealis value previously. In this sense, subjunctive can be seen as being used when indicative lacks certain features, such as the proposition is not true in the actual world or there is no new information. From this perspective, the relation between the subjunctive and the

¹²³ From Fábregas (2014:13).

indicative is not a simple dichotomy. If the conditions are not qualified for indicative to be employed, subjunctive will be used. In this way, the subjunctive seems to be an alternative form when ingredients of indicative conditionals are missing. However, this classification is not adequate enough to cover futurity, as new information is added but the subjunctive is still selected, as shown in (22).

(22) Sacaré las notas cuando me lleguen las actas.¹²⁴ (Spanish)
 1SG will.release the grades when me arrive.SBJV the minutes
 ‘I will release the exam grades when I get the minutes’

The analysis of the features so far has not reached a unified result, at least for Spanish. Compared with other notions, non-assertiveness is the most comprehensive one that covers several usages. From the above discussion, the challenge is not to put all the subjunctive usages under one umbrella, but rather to explain the features presented in different languages.

7.2.5 Varieties of manifestation

The manifestation of the subjunctive category of one language can well be different from other languages. For example, the use of the subjunctive does not all depend on the main predicate. In Latin, the volitional subjunctive is selected by the complementizer *ut*(that), as shown in (23).

(23) Cura **ut** venias.¹²⁵ (Latin)
 make.sure that you.come.SBJV
 ‘Make sure that you come’

¹²⁴ From Fábregas (2014:24).

¹²⁵ From Fábregas (2014:27).

Even for a single language, there is not a unified way to present subjunctive and different usages might not tie together. Quer (2006) treats subjunctive not as a category with coherent forms typologically, but a category in which languages use various forms to present the modal meanings of subjunctive and these forms might also be used in other contexts. This point is compatible with the case of Chinese, in which inflectional terms of subjunctive usages are replaced by other forms of different categories. Quer (2006) summarises other ways of subjunctive realisation in languages, including the combination of a separate finite verbal paradigm and specific inflectional morphemes, inflectional particles and complementizers, as shown in (24), (25) and (23) respectively. The verb *dimite* (resign) appears with a verbal ending *xi* in (24), while in (25), the particle *na* contributes to the choice of the subjunctive form.

(24) Volen que dimiteixi.¹²⁶ (Catalan)

want.3PL that resign.SBJV.3SG

‘They want her/him to resign.’

(25) θέλουν **na** παρетиθί (Greek)

want.3PL SUBJ resign.3SG

‘They want her/him to resign.’

The following questions will be investigated in the remaining parts of this chapter: firstly, the subjunctive expressions of modern Shanghainese identified in previous studies are revisited with reference to the discussion of temporal and modal expressions in the previous chapters. Secondly, the modes of expressions of subjunctive in the database and how they relate to each other. Thirdly, the temporal-modal interaction presented by the manifestation of the subjunctive.

¹²⁶ (24) and (25) are from Quer (2006:660-661).

7.3 Revisiting the subjunctive in modern Shanghainese

Before giving a discussion of the subjunctive manifestation found in the database, how subjunctive is presented in modern Shanghainese in previous studies are first revisited based on the investigation in Chapter 3 to Chapter 6.

7.3.1 A brief review of Qian's account

Previous studies on the subjunctive in Shanghainese have focused on two main aspects: verb-ending/sentence-final particles and modal particles, which have been mentioned in 2.3.

Qian (1999, 2004a) first defines sentences expressing what might be comprehended as subjunctive sentences, in which the components contained in the sentence are examined. According to him, some particles are the same as the form that occurs in indicative sentences, but with different meanings. Verb-ending particles which occur in subjunctive sentences indicating the occurrence of future events or emphasize future events, including *tsy* (之/子) and *ku* (過), but *tsy* (之/子) and *ku* (過) discussed in Chapter 3 express aspectual meaning and their aspectual function does not change depending on whether the sentence they are in expresses indicative or subjunctive. Another verb-ending particle is *theh* (脫), which is considered by Qian as constituting a special construction when co-occurring with a verb, such as *v theh tsy* (V 脫仔/子), but *theh* (脫) is seen as an event-completion particle in my account.

Sentence-final particles are also seen as indicating different meanings in subjunctive sentences in Qian's account. *Tse* (者/哉) is considered as indicating future events as a modal particle, which is different from the two uses of *tse* (者/哉) that I have mentioned in Chapter 4. The sentence-final particle *keh* (個), considered in chapter 4 to indicate PAST and assertion, is also seen in Qian's work as expressing the end of a concession or co-occurring with a modal verb to indicate presupposition.

7.3.2 Findings from missionary texts – particles

In addition to the above particles discussed in Chapter 4, Qian mentions a number of different uses of sentence-final particles as mood-indicators in subjunctive sentences which are different from their uses in indicative sentences, including *tsy* (之/子), *la* (拉), *laqi* (拉去), *chile* (起來), *li* (哩) and *xieh* (歇).

I have divided the above sentence-final particles into two categories for the examination in the database: those as aspectual markers discussed in Chapter 3: *tsy* (之/子), *la* (拉) and *xieh* (歇), but they are seen as sentence-final particles here; and those that have not been discussed in the previous chapters: *laqi* (拉去), *chile* (起來), and *li* (哩). Their number of occurrences in the database is listed in Table 7-3.

Table 7-3: The distribution of subjunctive expressions in Qian (2004a)

Members	Number of occurrences
<i>tsy</i> (之/子)	27
<i>la</i> (拉)	162
<i>xieh</i> (歇)	None
<i>laqi</i> (拉去)	5
<i>chile</i> (起來)	28
<i>li</i> (哩)	59

The cases of *tsy* (之/子) and *la* (拉) being at the end of the sentence are found 27 times and 162 times respectively, while the case of *xieh* (歇) being at the end of the sentence does not occur in the data.

Tsy (之/子) and *la* (拉) are seen as indicating future actions or imperative according to Qian (2004a). The examples he gives of *tsy* (之/子) at the end of a sentence are all imperative sentences.

According to the sentences in the data, when *tsy* (之/子) and *la* (拉) appear at the end of sentences, there are two cases, one in which they still follow the verb, which is the same as when they have the aspectual-marking function, as shown in (26) and (27)

respectively. The aspectual-marking function of *tsy* (之/子) and *la* (拉) which have been discussed in Chapter 3 will not be discussed here. The other case is where *tsy* (之/子) and *la* (拉) no longer follow the verb but appear at the end of a phrase that expresses a complete event at the lexical level, as shown in (28) and (29) respectively.

(26) 有弟兄七個，頭一個討之娘子，無沒兒子啉死之。

yeu dixiung qih-geh, deu yeh-geh thoa-tsy niangtsy,
 have brother seven-CLF first one-CLF take-PFV wife
 mmeh ngtsy loa xi-tsy
 not.have son PM die-PFV

‘Seven brothers, the first of whom took a wife and died without a son.’

(27) 伊個辰光，王坐拉高個戶蕩，冷眼看拉。

yigeh zengkuang, wong zu-la koa keh wudong, langnge
 that time King sit-PROG tall MOD place cold.eyes
 khoe-la
 watch-PFV

‘At that time, the King sat on a high place and watched with cold eyes’

(28) 伊三個驢子未，嚇來跑開之。

yi se-geh lyutsy meh, hah le boakhe tsy
 3SG three-CLF donkey PM scared AUX run.away SFP

‘His three donkeys got scared and ran away.’

(29) 我個性子也是驕傲啐暴躁個，有嗰人拉我面前唱啱啐，稱我小先生未，我最快活拉。

ngu-heh xingtsy hazy jioango loa boazoa keh, yeu
 1SG-'s personality also.be proud PM irritable AM, have

sa ning la ngu mizi tsong nohloa, ceng ngu xioa
 what person at 1SG face.front sing PM call 1SG little
 xisang meh, ngu tse khuaweh la
 mister CEP 1SG most happy SFP

‘I am also a proud and irritable person, and I am the happiest when anyone
 sings in front of me and calls me little mister.’

Tsy (之/子) and *la* (拉) in the above examples are similar to the sentence-final particle *le* (了) of Mandarin. The sentence-final *le* (了) is seen as indicating relevance to some particular situation in sentences of conversations, termed as *current relevant state* (Li and Thompson 1981:240). Li et al. (1982) found out that the sentence-final *le* (了) brings up a state of affairs in written narrative, which is analogous to its use in conversations, but with the reference time being the narrative time rather than the speech time. I will observe the use of *tsy* (之/子) and *la* (拉) in written discourse to see if they function as a marker for past eventuality, as shown in (30) – (33).¹²⁷

(30)a. 有弟兄七個,

yeu dixiung qih-geh,
 have brother seven-CLF

‘There are seven brothers,’

b. 頭一個討之娘子,

deu yeh-geh thoa-tsy niangtsy,
 first one-CLF take-PFV wife

‘the first one took a wife,’

c. 無沒兒子啉死之。

¹²⁷ Cf. Appendix III for more samples from missionary works for reference.

mmeh ngtsy loa xi-tsy
not.have son PM die-PFV
'did not have a son and died.'

d.第二個討伊,

di'e-geh thoa yi
the.second-CLF take 3SG
'The second one took her,'

e.也無沒兒子啉死之。

ha mmeh ngtsy loa xi-tsy
also not.have son PM die-PFV
'also did not have a son and died.'

f.第三個又討之,

dise-geh yeu thoa-tsy
the.third-CLF again take-PFV
'The third also took her,'

g.直到第七個,

zehtoa diqih-geh,
until the.seventh-CLF
'till the seventh,'

h.全實蓋,

djyuoeh zehkeh
all like.this
'all of them,'

i. 無沒兒子啉死個。

mmeh ngtsy loa xi keh

not.have son PM die PST

‘did not have a son and died.’

(31)a. 有一班主意拿勿定個，

yeu yeh-be zyuyi na vohding keh,

have one-CLF idea take not.decide PST

‘A group of people who cannot decide,’

b. 看來看去

khoe le khoe qi

look AUX look AUX

‘looked around,’

c. 要想討好個王，

yoa xiang thoahao keh wong

will want please MOD King

‘want to please the King,’

d. 又怕棄脫教門，

yeu poa qi-theh koameng,

also afraid abandon-COMPL church

‘also are afraid of being abandoned by the Church,’

e. 別人明明看出伊是遮沒之良心啉，

biehning mingming khoech yi zy zoameh-tsy liangxin

other.people obvious figure.out 3SG is cover-PFV conscience
loa,

PM

‘It was obvious to other people that he had no conscience,’

f.拉想好處。

la xiang hoacy

PROG think benefit

‘was thinking of the benefits.’

g.伊個辰光,

yigeh zengkuang,

that time

‘At that time,’

h.王坐拉高個戶蕩,

wong zu-la koa keh wudong,

King sit-PROG tall MOD place

‘the King sat on a high place’

i.冷眼看拉。

langnge khoe-la

cold.eyes watch-PFV

‘and watched with cold eyes.’

(32)a.勿多一歇工夫,

voh-du-yehxieh kungfu,

not-much-a.short.moment time

‘In a few minutes,’

b. 騎馬個大家完全到者。

qima keh daka woediyuoe toa tse
ride.horse MOD everyone complete arrive CUR

‘Those who ride horses all arrived,’

c. 伊三個驢子末，

yi se-geh lyutsy meh,
3SG three-CLF donkey PM

‘His three donkeys,’

d. 嚇來跑開之。

hah le boakhe tsy
scared AUX run-away SFP

‘got scared and ran away.’

e. 阿里排排末拉樹上向，

Alibaba meh lala zyu-xongxiang,
PN PM at tree-PREP

‘Alibaba was in the tree,’

f. 暗底裡算算伊拉個人數，

oedili soesoe yila-heh ningsu
stealthily count 3PL-’s number

‘and counted them stealthily,’

g. 一共有四十個。

yehgung yeu syzeh-geh
total have forty-CLF
'total forty.'

(33)a.我個性子也是驕傲睚暴躁個,

ngu-heh xingtsy hazy jioango loa boazoa keh,
1SG-'s personality also.be proud PM irritable AM,
'I am also a proud and irritable person.'

b.有啥人拉我面前唱喺啱,

yeu sa ning la ngu mizi tsong nohloa,
have what person at 1SG f ace.front sing PM
'anyone sings in front of me.'

c.稱我小先生末,

ceng ngu xioa xisang meh,
call 1SG little mister CEP
'and calls me little mister.'

d.我最快活拉。

ngu tse khuaweh la
1SG most happy SFP
'I am the happiest.'

e.我個性子也兇,

ngu-heh xingtsy ha xiung,
1SG-'s personality also fierce
'I have a fierce personality.'

f. 常庄要弄殺虫豸啐啥,

cangzong yoa lungsha zungzy loa sa
often will kill insect PM what
'and often kills insects,'

g. 算好白相。

soe hoa bahxiang
count good fun
'for fun.'

The contribution of *tsy* (之/子) and *la* (拉) to the narrative discourse above seems to correspond to highlighting the time at which the narrative is taking place. They emphasize current relevance of events that are set in the past. *Tsy* (之/子) in (30c), (30e) and (30f), where it has both aspectual-marking and *current relevant state* marking function. For example, (30a) - (30i) are a series of connected events, with the narrative of the first son followed by the narrative of the second son and up to the seventh son. The sentence-final *tsy* (之/子) links the narrative events to the 'marry a wife' event in the narrative flow. But if *tsy* (之/子) only occurs once in the narrative flow, such as (32d), the discourse function is hard to be observed in the texts. Similarly, a case also can be seen in (33d), where *la* (拉) functions to highlight the speaker's emotion, not to indicate CUR. For *la* (拉) in (31i), I treat it as a particle of perfective as discussed in chapter 3.

To summarise, sentence-final *tsy* (之/子) can play the role of marking *current relevant state* of events in written discourse but only when it is to occur consecutively in a particular discourse. The sentence-final *la* (拉), on the other hand, is still seen as an aspect-marker. An examination of these words as verb endings shows that *tsy* (之/子) and *la* (拉) do not highlight future events. Although *tsy* (之/子) and *la* (拉) may

carry the highlighting function of future events when contained in a particular sentence, such as an imperative sentence, their presence in such sentence types does not constitute sufficient reason to relate them to temporal future. In this connection, sentence-final *tsy* (之/子) and *la* (拉) are not seen as expressions to realise the subjunctive meaning.

The last sentence-final particle to be considered is *xieh* (歇). Unlike the use of indicating experience after verbs, Qian (2004a) proposes that *xieh* (歇) is used at the end of a sentence to emphasize doing something, and takes it as containing the implication that ‘it can be done in any way’. However, this usage is not found in the database.

7.3.3 Findings from missionary texts – other expressions

Expressions mentioned in the Qian (1999, 2004a) but not discussed in previous chapters will be examined in this section.

Five cases containing *laqi* (拉去) are found in the database and all appear in *Ali Paipai Feng Dao Ji* (1921), as shown in (34) and (35). Qian considers that *laqi* (拉去) expresses a desire and urge, or emphasising the need to do something. However, neither of these uses is found in the data of this dissertation. According to the examples drawn from the data, *laqi* (拉去) occurs after events that have been confirmed by the speaker. *La* (拉) still functions as a event-completion marker. *Qi* (去) in these examples can be seen as a functional word and I regard it as a sentence-final particle in this case.

(34)完全是一樣個，不過第三十八隻袋末，有真個油拉去。

woedjyuae zy yehyang keh, behku di-sezehpah-tseh de meh,
 complete is same AM but thirty.eight-CLF bag PM
 yeu zeng keh yeu la qi
 have real MOD oil PFV SFP

‘Exactly the same, but the thirty-eighth one has oil in the bag.’

(35)阿里排排心裡拉想，其中必定有金銀寶貝拉去。

Alibaba xinling la xiang, djizung bihding yeu
PN heart.in PROG think among must have
jingyin bobo la qi
gold.sliver treasure PFV SFP

‘Alibaba thought to himself that there must be gold and silver among them.’

Chile (起來) is interpreted as expressing ‘if’ or ‘urging’ by Qian (2004a). In the data, *chile* (起來) appears 28 times as a marker for the antecedent of conditional sentences and no usage is found to indicate urging, as shown in (36) and (37) respectively. If I follow Qian's discussion and consider *chile* (起來) as an element expressing subjunctive, I am contrasting the use of *chile* (起來) as a conditional marker with its other uses. However, *chile* (起來) itself does have other uses, such as using as a directional verb with inchoative meaning. The different uses of *chile* (起來) in sentences may be its multiple uses and are not necessarily determined by the type of event expressed in the sentence in which they are found.

(36)可容城個百姓個數目，算起來第二個多。

khuyung seng-heh bahxing-heh sumoh, soe-qile di'e-keh
PN city-'s people-'s number count-CDM second-CLF
du
many

‘The number of people in the Cork is the second-highest.’

(37)只管拉問個姑娘伊樣第樣個事體，是正網呢勿是正網，做起來，神動氣呢勿動氣。

tshkuoe la meng kuniang yiyangdiyong keh zythi, zy
always PROG ask lady kinds.of MOD thing be

zenggong neh vohzy zenggong, tsu qile, seng dungqi neh
 right MP not right do CDM GOD get.angry MP
 voh dungqi
 not get.angry

‘(Henry) has been asking the lady whether it is right or wrong to do such things,
 and whether God is angry if he does it.’

Another sentence-final, *li* (哩), appears 59 times in the data, including 23 of which followed *keh* (個) and 26 followed *la* (拉). According to Qian (2004a), *li* (哩) and *kehli* (個哩) indicate confirmation or emphasis of future actions, but this usage is not found in the data. Similar to *qi* (去), *li* (哩) plays the role of sentence-final when follows *keh* (個) and *la* (拉).

(38)第個假神，照儂個話頭，比子邱啐，噫啐，呆笨個人，更加勿好哩。

digeh kaseng, zoa nung-heh wodeu, bitsy chieu loa,
 this fake.GOD follow 2SG-’s words compare bad PM
 oh loa, debeng keh ning, kengka vohhoa li
 evil PM stupid MOD person even not.good SFP

‘The false god, according to you, is even worse than a bad, evil, stupid
 person.’

(39)對伊個學生子話，我勿肯放儂無啥安慰個，儂場化我再要來個哩。

de yi-heh hohsangtsy wo, ngu vohkheng fong na m sa
 to 3SG-’s student say 1SG not.willing put 2PL not what
 oewe keh, na zanghua ngu ze yoa le keh li
 comfort AM 2PL place 1SG still.more will come AM SFP

‘He said to his disciples, I will not give you any comfort, but I will come again to
 your place.’

(40)伊個鞋帶，我還勿配解拉哩。

yi-heh hata, ngu he vohpe jia la li
3SG-'s shoelace 1SG even not.deserve untie PFV SFP
'His shoelaces, I'm not even worthy to untie.'

To sum up, according to the data, the above forms do not indicate subjunctive when they appear at the end of the sentence, nor do their own meanings change with the semantic content of the sentence.

In addition, the 11 occurrences of *mahoa* (蠻好) are found in the data, but all indicating 'good' rather than functioning as a subjunctive marker as mentioned by Qiang (2011) and Jiang and Wang (2016). Other structures as subjunctive markers in contemporary Shanghainese mentioned in 2.3.4, including *mahoa* (蠻好, much-preferred) +S, *tsoaxioateh* (早晓得)+ (S1) + *zieu* (就) S2, S+ *a yoa hoa* (埃要好) and S+ *toa hoa le* (倒好唻), *loa tsoa zieu hoa V le* (老早就好 V 唻) and *yoa meh* (要么) + S (Jiang and Wang 2016), are not found in the data.

7.4 Subjunctive in the database

Based on the descriptions of temporal and modal expressions in modern Shanghainese discussed in previous chapters, I will synthesize the manifestation of subjunctivity in the language in this section. As mentioned before, the subjunctive category discussed in the thesis is larger than that in English and covers a wider range of cases. Here I am concerned with situations that are expressed through temporal and modal expressions and that are different from actuality, or other alternatives of actuality, including unrealistics, impracticals, counterfactuality, but not all irrealis events are treated as cases of the subjunctive category.

7.4.1 The realising model

From what has been discussed so far, it is hard to find a single feature to explain the usages of the subjunctive. Thus, the route of realisation of subjunctivity is more than one. As the manifestation and classification of different usages of subjunctive are not very clear, to help reach a more comprehensive understanding, I propose to use a common core to define the use of subjunctive. Subjunctive utterances will be used when speakers choose to express alternative scenarios of a fact in a set of possible worlds. In other words, it is used to express the speaker' evaluation of the truth-value of the proposition, but with no strong commitment about its happening in the actual world.

In this section, I will approach the realisation process of subjunctivity by viewing factors that contribute to alternatives of actualities. There are two main factors, according to the common features proposed above: the temporal location and the realisation state of an alternative situation. Temporal location can be seen as situations oriented at temporal coordinates. For subjunctive meaning, the temporal features are achieved by mismatching tense and aspect. For instance, using past for present. Apparent anachronism is created in this way. For the realisation state, situations can be realised or unrealised either in the actual world or other possible worlds.

Alternative situations can be classified into two subtypes with respect to the two factors: (A) the state of situations in the actual world and other possible worlds; (B) the relation with the actuality. The two factors are shown in Table 7-4. Contributors to subjunctive expressions with subjunctive meaning are classified into factual ingredients and temporal ingredients. This section focuses only on the temporal and modal ingredients discussed in the previous chapters.

Table 7-4: Realisation of the subjunctive meaning

State of situations	Relation with actuality
Unrealised in the actual world but realised in some possible worlds	Alternatives of actuality, including unrealistics, impracticals, counterfactuality.

7.4.2 State of situations

Situations which carry subjunctive meaning have happened in some imagined worlds but not in reality and the state of the situation is different in the actual and other possible worlds. The realisation state of the situation can be divided into two, and the interpretation of the two states depend on hypothetical conditions assumed by speakers. In the imagined world, the situation is portrayed as realised, which means the realis feature needs to be achieved. The most common way to do this is by embedding the verb with aspectual particles to present predicates with a temporal feature. For example, event-completion particle *theh* (脫) and perfective particle *la* (拉) are shown in (41) and (42) respectively.

(41) 天使拍彼得個脇肋，叫覺伊話，快點起來，伊手上個鏈條，就落脫哉。

thizy pah biteh-heh yahleh, jioajioh yi wo, khuati qile, yi
 angel tap PN-'s rib wake.up 3SG say hurry get.up 3SG
 seuxong-heh lidioa zieu loh-theh tse
 hand-'s chain then fall-COMPL CUR

'The angel tapped Peter on the ribs and woke him up, saying, get up, and the chain in his hand fell off.'

(42) 直行到小囡拉個地方嘍，停拉上頭。

zeh ying toa xioanoe lala keh difong loa, ding-la xongdeu
 straight move to child at MOD place PM stop-PFV above

‘(The stars) keep moving to where the child is and stop in the sky above.’

In addition, the realised state also can be achieved by temporal adverbs and sentence-final particles. Past temporal adverbs set a temporal point in the past, which locates the situation before the reference time, as shown in (43). Another way to indicate past temporal feature is to the sentence-final *keh* (個) that I have discussed in Chapter 4, as shown in (44). Unlike temporal adverbs which express more precise temporal features, the temporal function of *keh* (個) is not that overt. When there are no other salient temporal ingredients in the clause, the use *keh* (個) marking PAST is more visible.

(43)拉第個地方，本來一向無不強盜個。

la digeh difong, benle yehxiang mbeh jiangdoa keh
at this place originally always not robber AM

‘There have never been any robbers in this place.’

(44)眾人冷笑伊，因為曉得女囡是死個哉。

zungning langxioa yi, yinwe xioateh nyunoe zy xi keh
everybody cold.laugh 3SG because know girl is die PST
tse

CUR

‘The crowd sneered at him because they knew the girl was dead.’

Situations containing the above aspectual markers or PAST particles are situations that have already occurred, so they carry past reading. In the actual world, as the situation is not realised, so the realis feature of the situation is mock-realis. The mock-realis situation represented by the *theh* (脫) and *la* (拉) becomes unrealised when *yoa* (要, will), which expresses possibility, adds a sense of future reading. In this way, the

consequence in (45) and (46) are speculative situations which have current reference. However, when a specific time point in the future of the actual world is given, for example, *likhe yi geh seng keh zyheu* 離開伊個城個時候 ‘by the time you left the city’ in (47), the sentence can be interpreted as indicative, as a deictic point in time is given to achieve the realis feature towards a later point after the utterance time. Thus, the subjunctive reading is weakened in this case. Therefore, I identify modal auxiliaries of epistemic as a modal operator of subjunctive when the temporal location is not specific or there is not a strong commitment that a situation will happen in the actual world at some point.

(45)因為凡係要保全性命個未，倒要失脫個，凡係為之我啱失脫性命個未，必要保全個。

yinwe fecih yoa boadjyuae xingming keh meh, doayoa
 because any want save life AM PM will
 seh-theh keh, fecih wetsy ngu loa seh-theh xingming
 lose-COMPL AM any for 1SG PM lose-COMPL life
 keh meh, bihyoa boadjyuae keh
 AM PM must save AM

‘For whoever wants to save his life will lose it, and whoever loses his life for my sake will save it definitely.’

(46)伊自家料起來，必定要死拉強盜手裡個者。

yi tsyka lia qile, bihding yoa xi-la jiangdoa
 3SG self expect CDM must will die-PFV robber
 seuli keh tse
 hand.inside AM CUR

‘He thought to himself that he would have to die in the hands of the robbers.’

(47)凡係勿接待俾末，離開伊個城個時候，要拍脫脚上個灰塵，對伊拉做干證。

fecih voh jihde na meh, likhe yi-geh-seng keh zyheu,
 all NEG receive 2PL CDM leave 3SG-that-town MOD moment
 yoa pah-theh jiah-xong keh wezeng, de yila tsu
 will pad- COMPL feet-PREP MOD dust to 3PL do
 koezeng
 evidence

‘Anyone who shall not accept you, when you leave the city, you need to smack off the dust and provide evidence against them.’

Other modal expressions can also contribute to achieving mock-realis situations as *yoa* (要, will) does, for example, modal auxiliary verbs of wishes, as shown in (48) – (51). The realised situation expressed by aspectual markers at the lexical level becomes an imagined situation of the speaker by modal auxiliary verbs of wishes. For instance, giving half of the gold to his brother does not happen in the real world, but is imagined by Alibaba in (48).

(48)乃末勿得勿然拿實情完完全全告訴出來，並且願意拿一半金子分撥拉阿哥。

nameh vohtehvohzoe na zehzing woewoedjyuoedjyuo koasu-chele,
 then have.to take truth complete tell-COMPL
 bingqi nyoe yi na yehbeu jingtsy feng.pehla aku
 and willing.to take half gold give.to elder brother

‘Then he had to tell the whole truth and was willing to give half of the gold to his elder brother.’

(49)兩個媳婦放聲大哭，我佢情願一淘歸拉儂個百姓裡去。

liang-geh xihfu fongsang da khoh, nguni zingnyoe
 two-CLF daughter-in-law Brust.into big cry 1PL willing.to
 yehdoa kue-la nung-heh bahxing-li qi
 together return-PFV 2SG-'s people-PREP go

‘The two daughters-in-law cried out: we would like to join your people together.’

(50) 伊班虔心相信個人，為之耶穌情願棄脫一切事體。

yiba djixin xiangxing keh ning, wetsy yasu zingnyoe
 this faithful believe MOD person for Jesus willing.to
 qi-theh yehqih zythi
 abandon-COMPL all thing

‘The group of faithful people who were willing to leave everything behind for the sake of Jesus’

(51) 現在我自家覺着有望者，心裏一眼一眼感動起來，高興担雜食撥拉苦惱人。

yize ngu tsyka jiohzah yeu mong tse, xinli
 now 1SG self feel have hope CUR heart.inside
 yehngyehnge koedung-qile, koaxing na zahzy peh-la
 little.by.little move- COMPL willing.to take food give-PFV
 kunoaning
 suffering.person

‘Now I feel a sense of hope in myself, and my heart is moved little by little. I am willing to give food to those who are suffering.’

As has been mentioned in 7.2, it is necessary to distinguish *prospectivity* from *futurity*, as not all situations which are oriented towards the future contain subjunctive reading. Previous studies of subjunctivity in Shanghainese mix future states of

situations with strong commitment about their realisation and those without any strong commitment. For sentences with specific temporal adverbials of futurity, whether the situation has the two readings depends on whether the proposition is the belief or wishes of the speaker. The subjunctive meaning can be produced when the proposition is the wishes of the speaker, as shown in (52) and (53). For instance, the situation ‘leave and take the lock hair’ in (52) can be seen as an imagined situation by the speaker. But if more specific temporal adverbials appear in sentences, the subjunctive meaning will be weakened or even not exist. The reason is temporal terms as nouns or adverbs have a specific location in the time axis, which indicates that the state of modified situations will be realised at a point in the future.

(52)我咁盤浪娘娘對我剪一篷頭髮下來，儂後首去末，担子第個睇對伊話。

ngu jioa belong niangniang de ngu ji yeh-bung
 1SG ask PN lady to 1SG cut one-CLF
 deufah-hoale, nung heuseu qi meh, na-tsy digeh loa te yi
 hair-COMPL 2SG later go PM take-PFV this PM to 3SG
 wo
 word

‘I ask Mrs Panlang to cut a lock of my hair, and you take it when you go to tell him later.’

(53)神話，末腳個時候，我要拿我個靈，倒拉攏總人身上。

sengwo, mehjah keh zyheu, ngu yoa na ngu-heh ling,
 God say, end MOD moment 1SG will take 1SG-'s soul
 toa la longzong ning seng-xong
 pour ASP all people body-PREP

‘God says, I will pour my spirit on all the people in the end.’

To sum up, situations containing subjunctive meaning are realised by temporal and modal expressions to achieve different realisation states in the actual world and in other possible worlds. And modal expressions of epistemic possibility, indicating the unrealised state when they function as a modifier of a situation.

7.4.3 Counterfactuality

The other common case carrying subjunctive meaning is counterfactuals. The reasoning of counterfactuality is to surmise about what could happen based on what is not available in the past, present or even in the future, drawing a different consequence from the known consequence on a past situation or a consequence which is unlikely to be available in the actual world. For instance, the ‘have died’ situation in (54) is a consequence of the opposite of an actual situation, where the verb-ending particle *la* (拉) and temporal adverb *loatsoa* (老早) and *yijing* (已經) indicate a completed situation which is realised in past in some imagined worlds projected by the speaker, but not in the actual world. In (54), the protasis is present while the apodosis is past, which creates anachronism by mismatched temporal features. The temporal coordinate shifts back from the situation time given by the situation in protasis and the counterfactual condition adds mock-realis features to the sentence. Another case of mismatching temporal features is shown in (55). The protasis is present while the apodosis is a past consequence drawn from the condition contrary to the actuality. The consequence is unlike to be available in the actual world but can be a speculative situation in some imagined worlds projected by the speaker.

(54) 今夜頭若使勿是伊想法子救自佢爺兩個，格末自佢爺兩家頭，老早已經死拉柯奇虎生個手裡者。

jingyadeu	zahsy	voh	sy	yi	xiang	fahtsy	jieu	tsyni
tonight	if	not	be	3SG	think	method	save	1PL
ya	liang-geh,	kahmeh	zynyi	ya	liang-kade,	loatsoa	yijing	

father two-CLF then 1PL father two-CLF early already
 xi-la khujihusang-heh seuli tse
 die-PFV PN-'s hand.inside CUR

'If you did not save me and my son tonight, then the two of us, had already killed
 by Keqihusheng long before.'

(55) 若使勿是上天保佑自佢，自佢一家門個性命，一定要拉倒個者。

zahsy vohzy xongthi boayeu tsyni, tsyni yehkameng-heh xingming,
 if not up.sky bless 1PL 1PL one-CLF-'s life
 yehding yoa ladoa keh tse
 certainly will over AM CUR

'If God had not blessed us, we would have lost our family's lives.'

The comparison with indicative conditionals provides a clear view of how the temporal components express subjunctive meaning. In (56), for example, the protasis is an available alternative of the present and the consequent drawn from it has a future reading. The two situations follow the timeline with no temporal mismatching between them.

(56) 自佢若使勿要早點想法子來補救末，自佢歷年積蓄拉個產業，將要完全無不個者。

tsyni zahsy vohyoha tsoadi xiang fahtsy le bujieu meh,
 1SG if not.will early think method AUX remedy CDM
 tsyni lihni jihxioh la keh tsenyh, jiangyoha woedjyuoeh
 1SG over.years save PFV MOD property will all
 mbeh keh tse
 NEG AM CUR

'If we don't find a way to remedy the situation sooner, we will lose all the

property we have saved over the years.’

Modal operators discussed above are forms that encode modal meaning directly, somewhat similar to adverbial licensing. When there are no overt modal operators or counterfactual conditional marker, the subjunctive reading can be drawn from the context, as shown in (57). (57) is a desiderative sentence without modal or temporal forms, and there is no commitment that the situation will realise either in the actual world and the imagined world.

(57) 願儂平安。

nyoe nung bingoe

wish 2SG safe

‘May you be safe.’

To wrap up, the manifestation of the subjunctive in modern Shanghainese can be achieved by temporal and modal expressions. The subjunctive itself does not have any dedicated grammatical markers, but temporal and modal expressions combine to produce the subjunctive meaning. Although dedicated counterfactual lexical makers are not found in the database, markers similar to those found in contemporary Shanghainese may also exist in modern Shanghainese, such as *mahoa* (蠻好).

7.4.4 Other variable ingredients

It was mentioned above that subjunctive meaning of sentences is weakened when there is an explicit temporal component occurs. I identify ingredients that affect the strength of subjunctive meaning as variable ingredients, and two categories found in the data are temporal ingredients with explicit temporal locations in the timeline, which has been discussed in 7.3.2, and adverbs that indicate the likelihood of a situation occurring.

The co-occurrence of *yoa* (要, will) and modal adverbs of a high degree of certainty are found 44 times in the data. As mentioned above, there is no clear distinction between an event occurring at some point in the future and an event not necessarily occurring, and this is illustrated by the co-occurrence of *yoa* (要, will) and modal adverbs. *Yoa* (要, will) indicates that the event may occur without giving a specific situation time of the event, while modal adverbs raise or lower the possibility that the event will occur at some point in the future. For example, *yehding* (一定, certainly) and *bihding* (必定, must) in (58) and (59) indicate a high probability of the event occurring. Such expressions can be seen as a commitment made by the speaker commenting about the situation, and the veridicality of the proposition is increased, which reduces the tendency to express subjunctive meaning. The absence of the co-occurrence of epistemic auxiliaries and modal adverbs of a lower degree of certainty in the database does not mean that their co-occurrence does not exist. For example, *yoa* (要, will) can co-occur with *dake* (大概, presumably), and since neither of them provides a deictic point in time, they tend to lead to a more possible subjunctive meaning by weakening the veridicality of the proposition, in the absence of other temporal adverbials and contextual information.

(58) 勿消一個月，我一定要弄脫第個對頭個。

voh xioa yeh-geh yueh, nug yehding yoa
 not need one-CLF month 1SG certainly will
 lung-theh digeh dedeu keh
 take-COMPL this enemy AM

‘In less than a month, I am going to kill this enemy.’

(59) 再者，若使要另外再燒，必定要大費周折，今夜個夜飯，必定要脫卵個者。

etse, zahsy yoa lingnga ze soa, bihding yoa

besides, if will in.addition again cook, must will
dufit seuzeh, jingya-heh yafe, bihdng yoa thehmo
big.cost troubles, tonight-'s dinner must will fai
keh tse
AM CUR

'Besides, cooking again would take great efforts, so the dinner cannot be served tonight'

To sum up, variable ingredients may influence the presentation of subjunctive meaning, and an examination of their relationship with other ingredients reveals that temporal and modal expressions are not wholly deterministic of subjunctive meaning.

7.5 Summary

This chapter investigates how subjunctive meaning is expressed in modern Shanghainese through interaction among temporal, aspectual and modal features. A hybrid of several kinds of ingredients contributes to reaching subjunctive meaning. The investigations in this chapter also suggest that the subjunctive category in modern Shanghainese is realised in a much broader way and includes a wider range of cases, and that temporal and modal expressions may be only one of these means, and that other expressions may exist, which deserve further research in the future. First-hand data makes it possible to explore the manifestation of the subjunctive with evidence. By describing and analysing the linguistic phenomena presented in the data, an examination of the grammatical features of modern Shanghainese is given in terms of linguistic facts.

Chapter 8 Conclusion

8.1 Summary of the previous chapters

This study presents a description of tense, aspect and modality in modern Shanghainese, based on a database of linguistic and translation works by missionaries, with special reference to the reach of subjunctive meaning.

The thesis provides a description of modern Shanghainese based on data drawn from missionary works, which has not been done previously. A self-compiled database makes it possible for me to conduct an exhaustive data scrutiny. The study is also a first attempt to convert scanned scripts into a searchable database to facilitate the linguistic study of modern Shanghainese. There has not been much research into the grammar of dialects, mainly because linguists in the past believed that the differences between dialects and Mandarin were mainly phonological and that there was little difference in grammar. In addition, studies of dialects require sufficient linguistic data, and there are currently few specific studies, giving the impression that there is little difference between dialects and Mandarin. At the same time, dialects are also influenced by Mandarin, and the differences between dialects and Mandarin may not be identified until sufficient linguistic data is available for research. Dialects can be studied in comparison with Mandarin, but firstly the linguistic data needs to be viewed objectively and an objective description of the dialects is primary before a comparative study can be made with Mandarin.

A detailed description of the linguistic facts in the works of the missionaries is provided. The distribution of temporal, aspectual and modal forms is recorded and analysed. The study identifies many unique forms and expressions in modern Shanghainese, some of which have not been mentioned in previous studies.

The findings of the dissertation are the following:

The particle *tse* (哉/者) is used within a sentence cluster to bring out a situation and is used at the end of a sentence to present a conclusion, a summary remark, or an

end to a stretch of description. Both uses contribute to the discourse organization by introducing a current reference time point. *Keh* (侬) encodes a congruence of two usages: past time or assertion. Epistemic auxiliary verbs in Shanghainese can override the meaning of verb-ending particles by changing realis situations to irrealis ones or enhancing the possibility of irrealis situations. The subjunctive meaning in Modern Shanghainese can be achieved through a mixture of temporal and modal categories, with temporal and modal expressions being one way of achieving the subjunctive meaning, suggesting that the subjunctive in Shanghainese involves multiple categories, which is broader than that in English.

8.2 Contributions

Studying tense, aspect, modality and the encoding of the subjunctive constitutes a part of Shanghainese and dialectal linguistics. The current study is an enrichment to the study of Shanghainese by looking at the linguistic facts, examining temporal and modal expressions and observing their relationship in sentences. It is also one of the first attempts in studying the realisation of subjunctive meaning in Shanghainese. Attention has been paid to the expressions found in the database, which are different from contemporary Shanghainese and Mandarin Chinese, thus avoiding the use of the Mandarin grammatical system to analyse Shanghainese. In addition, it also complements the study of subjunctive expressions in Chinese.

The thesis also makes a contribution to the study of Chinese dialects. Dialects are a record of local history and culture. The records by western missionaries have helped to preserve the local Shanghainese language and culture in a particular historical period. In order to obtain more comprehensive and detailed first-hand linguistic material, the database could later be expanded to include more modern Shanghainese works. In addition, a database of works written in contemporary Shanghainese could also be created for contemporary Shanghainese. For example, novels in contemporary

Shanghainese, such as *Nongtang* (弄堂, Alleys) by Hu (2011), *Fanhua* (繁花, Flowers) by Jin (2016), the Shanghainese column in *Xinmin Evening Paper* (新民晚報), a local newspaper, etc. Creating searchable databases for different periods of language can provide direct evidence for language studies.

This study also comes with some limitations. Firstly, the data collected in this dissertation does not cover all modern Shanghainese publications, many pamphlets written in Shanghainese have not been collected and it is unclear as to how many there are. Also the thesis is limited in scale as it mainly describes the linguistic data and does not provide a comprehensive examination of the grammatical system. In addition, the selection of linguistic data, the Romanization of Shanghainese and the newly created Shanghai vernacular script have not been included in the database. All of these could continue to be examined in future studies.

8.3 Future research

The first is an extension of the current research. For example, the discussion on aorist of modern Shanghainese, the association of temporality and subjunctivity, and the function of *keh* (個) can be further investigated. The difference between *keh* (個) and *tse* (哉/者), and the circumstances under which they indicate the past, could also be the subject of future research.

The linguistic data examined could also be more comprehensive. For example, a comprehensive examination of the different versions of the Bible. From a stylistic perspective, translations of the Bible are divided into literary translations, semi-literary translations, and vernacular translations. From a textual perspective, in addition to the Chinese translation works, there are also Roman characters and newly created pinyin. The different versions and types of translated works can also reflect the linguistic characteristics of Shanghainese and serve as material for future research. In addition,

English dictionaries of the Shanghai dialect also contain a wealth of linguistic material that deserves detailed examination.

For this study, the object of investigation is Shanghainese from 1840 to 1950, which differs from the Shanghainese used today, but also has a number of similarities. For example, some temporal and mood expressions discussed in this dissertation are common to both modern and contemporary Shanghainese. In future research, it would be interesting to study the development and changes in Shanghainese and to explore the reasons behind them. The grammatical changes in the contemporary Shanghainese and the lack of research in many areas of contemporary Shanghainese deserve further exploration in the future.

In addition to the more obvious phonetic differences between Shanghainese and Mandarin Chinese, there are in fact more grammatical and lexical differences that deserve more attention. As the mandatory use of Mandarin Chinese inevitably has an impact on local dialects, how Mandarin Chinese has influenced Shanghainese, and the relationship between the two needs more investigation and research.

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Appendix I

Example sentences quoted in the paper from missionary works

Works	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7
Youlaba Guo (1849)	(46), (61)		(2), (12), (21), (24), (25), (45)	(25), (26), (29), (39), (40), (70)	(36)
Hengli Shilu (1856)	(42), (45), (47), (48), (49), (54)	(16), (17) (23), (32) (33)	(3), (7), (9), (11), (17), (22), (27), (31), (36), (37), (38), (39), (43)	(20), (23), (24), (44), (51), (52), (53), (57), (59), (61), (63), (72)	(29), (33), (37), (38), (39), (51), (52)
Chenzao Yubei (1868)	(41)	(19)		(30), (43)	
Gangdandiushi (1868)	(58)			(45)	(27), (31), (50)
Shenpan Rijiao (1868)	(51), (56)	(18)		(21), (58)	
Lujia Chuan Fuyin Shu (1886)	(59)	(32)	(5), (6), (8), (50)	(19), (31), (38), (47), (48), (54), (69)	(26), (30), (40), (44), (45), (47)
Matai Chuan Fuyin Shu (1895)	(44)		(28)	(27)	
Shengjing Shiji (Vol.1:1886,		(19), (24), (26), (29)	(10), (16), (19), (20), (29), (32),	(22), (35), (64), (65), (66), (68)	(42),(49)

Vol.2:1892, Vol.3-4:1889, Vol.5:1890)			(33), (51)		
Shitu Yanxing Zhuan (1891)			(26), (47)	(34), (36)	(41)
Yesu Yanxing Zhuan (Vol.1: 1894, Vol.2: 1892, Vol.3: 1887, Vol.4: 1887)	(50), (60)	(31)		(56), (67)	(53)
Ali Paipai Feng Dao Ji (1921)	(43), (52), (53), (55), (58)	(18), (25), (27), (28) (30)	(1), (4), (18), (23), (30), (35), (36), (40), (41), (42), (44), (46), (48), (49)	(28), (33), (37), (41), (42), (46), (49), (50), (55), (62), (71)	(28), (32) (34), (35) (43), (46) (48), (54) (55), (56) (58), (59)

Appendix II

Shanghainese alphabetic symbols and its correspondence with the IPA phonemes (cited from Tang 2000)

(1) Consonants (27)

Shanghainese Pinyin	IPA	Example
p	[p]	爸爸 papa 5 21 ‘father’
ph	[pʰ]	泡泡 poapoa 5 21 ‘bubble’
b	[b]	婆婆 bubu 13 ‘grandma’
m	[m]	媽媽 mama 5 21 ‘mother’
f	[f]	發福 fah foh 3 4 ‘stout’
v	[v]	俯伏 vuvoh 1 3 ‘prostrate’
t	[t]	爹爹 tiatia 5 21 ‘dad’
th	[tʰ]	太太 thatha 3 4/5 21 ‘wife’
d	[d]	洞洞 dungdung 1 3 ‘hole’
n	[n]	囡囡 noenoe 5 21 ‘baby’
l	[l]	玲瓏 linglung 1 3 ‘dainty’
ts	[t͡s]	珠珠 tsytsy 5 21 ‘bead’
c	[t͡sʰ]	拆穿 cahcoe 3 4 ‘expose’
s	[s]	伸縮 sengsoh 5 21 ‘flexible’
z	[z]	暫時 zezy 1 3 ‘tentative’
j	[t͡ɕ]	姐姐 jiajia 3 4 ‘sister’
q	[t͡ɕʰ]	親戚 qingqieh 5 2 ‘relatives’
dj	[d͡ʒ]	齊全 djidjyuo 1 3 ‘complete’
ni	[n̩]	肉牛 niohnieu 1 3 ‘meat cattle’
ny	[n̩ʰ]	女人 nyuning 1 3 ‘woman’

x	[ɕ]	休息 xieuxieh 5 2 ‘rest’
zi	[z]	謝謝 ziazia 1 3 ‘thank
k	[k]	哥哥 kuku 5 21 ‘brother
kh	[kʰ]	刻苦 khehkhu 3 4 ‘diligent’
g	[g]	共用 gungyung 1 3 ‘shared’
ng	[ŋ]	硬臥 ngangngu 1 3 ‘hard berth’
h	[h]	好貨 hoahu 3 4 ‘good stuff’
h	[ɦ]	鞋盒 hahah 1 3 ‘shoebox’

(2) Vowels (43)

Shanghainese pinyin	IPA	Example
y	[ɿ]	支持 tsyzy 5 21 ‘support’
a	[A]	買賣 mama 1 3 ‘buying and selling’
o	[o]	火車 hoco 3 4 ‘train’
oa	[ɔ]	報告 poakoa 3 4 ‘report’
eu	[ɤ]	後頭 heudeu 1 3 ‘behind’
e	[E]	来三 lese 1 4 ‘workable’
oe	[ø]	乾旱 koehoe 5 21 ‘drought’
i	[i]	飛機 fiji 5 21 ‘plane’
ia	[ia]	爺爺 yaya 1 3 ‘grandfather’
ioa	[io]	小巧 xioaqioa 3 4 ‘small and exquisite’
ieu	[iɤ]	優秀 yeuxieu 5 21 ‘excellent’
ie	[iE]	機械 jiye 5 21 ‘machine’
u	[u]	姑父 kufu 5 21 ‘uncle’

ua	[ua]	娃娃 <u>wawa</u> 1 3 ‘doll’
ue	[ue]	關懷 <u>kuewe</u> 5 21 ‘caring’
uoe	[uø]	歡喜 <u>huoexi</u> 3 4 ‘like’
yu	[y]	語句 <u>nyujyu</u> 1 4 ‘sentences’
yuoe	[yø]	圓圈 <u>yuoeqyuoe</u> 1 4 ‘circle’
el	[əl]	反而 <u>fe’el</u> 3 4 ‘on the contrary’
m	[m]	姆媽 <u>mma</u> 5 12 ‘mother’
n	[n]	奶 <u>ngna</u> 5 21 ‘grandma’
ng	[ŋ]	五十 <u>ngzeh</u> 1 3 ‘fifty’
ang	[ã]	打仗 <u>tangtsang</u> 1 4 ‘fight’
ong	[õ]	剛剛 <u>gonggong</u> 5 21 ‘just’
eng	[əŋ]	餛飩 <u>wengdeng</u> 1 3 ‘wonton’
ung	[oŋ]	通風 <u>thungfung</u> 1 4 ‘ventilate’
ah	[aʔ]	八十 <u>pahzeh</u> 3 4 ‘eighty’
oh	[oʔ]	北角 <u>pohkoh</u> 3 4 ‘north point’
eh	[əʔ]	勒勒 <u>lehleh</u> 1 3 ‘at’
iang	[iã]	想像 <u>xiangxiang</u> 3 4 ‘imagine’
iong	[iõ]	火旺 <u>huyong</u> 3 13 ‘fire blazing’
ing	[iŋ]	精靈 <u>jingling</u> 5 21 ‘elf’
iung	[ioŋ]	洶湧 <u>xiungyung</u> 5 21 ‘surge’
iah	[iaʔ]	吃藥 <u>qiehyah</u> 5 12 ‘take medicine’
ioh	[ioʔ]	牛肉 <u>nieonioh</u> 1 3 ‘beef’
ieh	[iəʔ]	業績 <u>niehjieh</u> 1 4 ‘achievements’
uang	[uã]	光火 <u>kuanghu</u> 5 21 ‘provoked to anger’
uong	[uõ]	狂妄 <u>guongwong</u> 1 3 ‘conceit’
ueng	[uəŋ]	困難 <u>khuengne</u> 3 4 ‘difficulties’

uah	[uaʔ]	挖苦 <u>wah</u> khu 3 4 ‘sarcasm’
ueh	[uəʔ]	骨頭 <u>kueh</u> deu 3 4 ‘bone’
yun	[yn]	均勻 <u>jyun</u> yun 5 21 ‘even’
yueh	[yəʔ]	月亮 <u>yueh</u> liang 1 13 ‘moon’

Appendix III

Sample paragraphs from *Hengli Shilu* (1856) for 4.3.2, the discourse usage of tse (哉/者).

第九章 (Chapter 9)

姑娘蹀子起來，就替亨利兩個親嘴，有點眼淚出啐話，我要離開子儂啐去快者。亨利聽得子第句說話，一時頭上倒話勿出啥者，歇子一歇，也哭起來啐話，咳，儂去子末，我那能呢，我無沒別人搭我白話，不過一個蒲師，因為我個娘也勿愛我，勿有別人告訴我神個道理，格啐我怕自家變壞。

Sample paragraphs from *Ali Paipai Feng Dao Ji* (1921) for 4.3.2, the discourse usage of tse (哉/者).

強盜頭末先出來，立拉石洞旁邊，等一眾強盜完全出來之，乃末又高聲响喊啐話，芝麻呀，快點開。第扇石門立刻跟之第個聲音啐，自家就開者。歇之一歇末，又自家就關者。一種強盜到之洞外頭，各人拿馬解之啐，騎拉馬身上之，然後強盜頭朝前領路，一眾強盜末完全快來死向之來路啐去。

Sample paragraphs from *Shengjing Shiji* (Vol.1:1886, Vol.2:1892) for 4.3.2, the issue to distinguish 哉 and 者.

第十五章 (Chapter 15)

雅各話，拿儂長子各名分，今朝賣拉我，以掃話，我已經要死快哉，第個長子個名分，有啥益處。雅各話，儂要對我立誓，以掃就對之雅各立誓，拿長子個名分，賣拉雅各。雅各就拿餅啐紅荳湯，撥拉以掃吃。實蓋末，以掃拿長子個名分看輕哉。

第三十章 (Chapter 30)

法老搭之臣子，懊悔啐話，我佢那能放伊拉去，勿服事我佢呀，就預備六百部車子，搭之多化兵，追趕以色列人，追到紅海邊，追着快哉，以色列人望見埃及人，

拉追來，怕得極，喊叫神，對摩西話，儂領我佢出來死拉荒野裡，勿如拉埃及做奴僕個好。

第三十二章 (Chapter 32)

明朝摩西審問百姓個事體，從早晨到夜，一歇勿停，葉羅看見之對摩西話，儂獨干子管第個多化事體，忒辛苦勿好，儂能彀揀百姓當中有德氣老實個人，做千總佬百總，管理百姓小個事體，若然有大事體末儂管，蓋末大家便當哉，我想神也必定聽儂個，摩西就照丈人個說話佬做，揀多化人來管百姓個事體。

Sample paragraphs from *Shengjing Shiji* (vol.4:1889) for 4.4.1, the usage of *keh* (個)

第六十七章 (Chapter 67)

逃過之約旦河，就攔拉一個城裏，押沙龍領兵追上來，大衛分三路兵馬出去對敵伊叮囑伊個將官話，佢揼着押沙龍勿要難為伊，伊拉就出去打仗，押沙龍個兵打敗，押沙龍逃走，伊個頭髮勾住拉一根樹丫枝上，身體懸空掛拉，大衛個將官上去殺脫伊佬得勝伊拉，大衛為之押沙龍死佬，心裏悲傷，後首又領之百姓，仍舊回到耶路撒冷，當時還有一個便雅憫人，名頭叫示巴，勿肯服大衛做王，領頭謀反，有多化人跟從伊，大衛發兵去攻打，圍困拉亞伯城裏，城裏個人殺之伊佬，担伊個頭，甩拉城外頭，伊拉得勝之佬轉去個。

Sample paragraphs from *Hengli Shilu* (1856) for 4.4.2, the occurrence of of the 個哉/者.

第八章 (Chapter 8)

姑娘話，亨利呀，儂勿必是要担廳上個人來回頭我，第塊有個小囡，拉拉幾個月前頭，伊常庄話彙妄個，昨日末，伊要騎拖車子個馬，因為管車子個人，勿肯撥伊騎，伊末就動氣啐，担伊打子一記，實蓋能末可以算得好小囡否。亨利話，我曉得有罪個，虧得我手裏無沒棒啐，還勿會打傷伊，望個神撥恩典我，朝後我勿實蓋能個者，今朝末我担用剩拉個銀子，送拉伊子啐，對伊話，我有罪個者。

Sample paragraphs from *Ali Paipai Feng Dao Ji* (1921) for 7.3.2, *tsy* (之/子) as sentence-final particle.

歇之勿多一歇，木匠送棺材來者。阿里排排叫伊拉放拉天井裡向，勿許伊拉到房子裡來看死屍。毛及亞乃又同之阿里排排兩家頭拿死屍放拉棺材裡向之。再封好之。然後毛及亞乃去請回回教裡個教師來念經。

Sample paragraphs from *Lujia Chuan Fuyin Shu* (1886) for 7.3.2, *la* (拉) as sentence-final particle.

第九章 (Chapter 9)

耶穌對門徒話，叫眾人排齊之啫坐，每排五十個。門徒就照之伊個說話啫做，叫伊拉全坐下來。耶穌拿五個錫餅，兩條魚，望之天啫祝謝，擘開來撥拉門徒，擺拉眾人面前。伊拉全吃飽之，收拾剩拉個粒屑，有十二籃拉。

第十五章 (Chapter 15)

伊回頭爺話，我服事儂第個多化年數，從勿曾違背儂個吩咐，儂勿曾撥一隻小山羊拉我，使我搭朋友一淘快活。獨是儂第個兒子，嫖妓來浪費完之儂個產業，一到末，儂就為之伊啫殺壯個小牛。爺對伊話，兒子呀，儂常庄同我一淘拉，我所有個，全是儂個。佢歡喜啫快活，是應該個，因為儂個兄弟，死之啫復活，失脫之啫又得着個。

Appendix IV

Database link:

<https://drive.google.com/drive/u/1/folders/1er60knN-a6iz4BjuKlf1FAEZq7QhmyMz>