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**FEATURES OF ASPECT MARKING IN
SINGAPORE MANDARIN**

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Features of Aspect Marking in Singapore Mandarin

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Master of Arts

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Statement of Originality

I certify that all work submitted for this thesis is my original work. I declare that no other person's work has been used without due acknowledgment. Except where it is clearly stated that I have used some of this material elsewhere, this work has not been presented by me for assessment in any other institution or University. I certify that the data collected for this project are authentic and the investigations were conducted in accordance with the ethics policies and integrity standards of Nanyang Technological University and that the research data are presented honestly and without prejudice.

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Authorship Attribution Statement

This thesis contains material from 3 papers published in the following peer-reviewed journal(s) / from papers accepted at conferences in which I am listed as an author.

Chapter One Section 1.1 is published as Section 2 of the review article: Lin, Jingxia and Yong Kang Khoo. 2018. Singapore Mandarin: Its variations and studies. In: *Chinese Language and Discourse* 9(2), 109-135. The section has been revised for this thesis.

The contributions of the co-authors are as follows:

- I wrote the section, which was revised by Associate Professor Jingxia Lin.

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- Associate Professor Jingxia Lin provided the corpus and I analyzed the data.
- I prepared the manuscript, which was revised by Associate Professor Lin.

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ABBREVIATIONS

1SG/PL	First-person singular/plural
2SG/PL	Second-person singular/plural
3SG/PL	Third-person singular/plural
ACH	Achievement marker
ADV	Adverbial
AUX	Auxiliary verb
BA	Object marker
CLF	Classifier
COM	Comitative marker
COMP	Complement marker
CONT	Continuous aspect marker
COP	Copular verb
CRS	Current relevant state aspect marker
DE	Nominalizer/Possessive marker/Relative clause marker
EXP	Experiential perfect aspect marker
NAME	Person/place name
NEG	Negation
PERF	Perfect aspect marker
PERF _{EXIST}	Existential perfect aspect marker
PFV	Perfective aspect marker

POT	Potential marker
PROG	Progressive aspect marker
PRT	Particle
REFL	Reflexive pronoun
RES	Resultative aspect marker

ABSTRACT

Variations in Singapore Mandarin are noted by many scholars and studies, though not all areas of these variations have been equally well-studied. Grammatical aspect is one of the areas that has received relatively little attention from scholarship on Singapore Mandarin; to date, there is still a lack of systematic studies that investigates the features of grammatical aspect marking in Singapore Mandarin. This thesis aims to fill this gap by conducting a corpus-based investigation on spoken Singapore Mandarin, focusing on the marked grammatical aspects that can be found in the variety. Aside from the more widely-discussed aspect markers in Mandarin, that is, the perfective 了 *le*, the currently-relevant-state 了 *le*, the experiential perfect 过 *guò*, and the continuous 着 *zhe*, this thesis also looks into markers that are very seldom discussed or not presumed to exist in Putonghua and other Mandarin varieties, such as 了 *liǎo*, 有 *yǒu*, and 住 *zhù*. There are three major discussions about the aspect markers of Singapore Mandarin.

First, it is observed that the verb 了 *liǎo* can be used as an aspect marker denoting the perfective and the currently-relevant-state aspect in Singapore Mandarin, though it does differ from 了 *le* when it is used as a perfective aspect marker. In particular, it occurs consecutively with the currently-relevant-state 了 *le*, as in 了了 *liǎo le* at the end of a sentence or clause. An investigation of the construction shows that it may have roots in Chinese vernaculars such as Southern Min.

Second, the morpheme 住 *zhù* may potentially be used as a continuous marker like 着 *zhe*, though it presents slightly different constraints in its use. For instance, it seems to occur more frequently with verbs that are compatible with the notion of ‘be firm’, likely because of its complemental functions. Unlike previous studies, this thesis does not treat 住 *zhù* as a ‘quasi-aspect marker’ because of this characteristic. Instead, 住 *zhù* is simply taken to be part of a *zhù* construction that can express both its complemental and its aspectual functions.

Third, this thesis also attempts to clear up the interpretations put forth by previous researchers of 有 *yǒu* in *yǒu* constructions. The aspectuality of this marker has been disputed in many previous studies and approaches to interpreting them have been disorganized, often resulting in contradictory claims that cannot or are not yet resolved. Using Singapore Mandarin

data, the current work suggests that 有 *yǒu* codes for an existential perfect aspect in Singapore Mandarin, a new category proposed in this thesis. This study also attempts to apply this interpretation to other varieties of Mandarin, such as Taiwan Mandarin and Hong Kong Mandarin, and Chinese vernaculars.

Differences between the observations in the current study and in previous works are also reconciled where possible, in hopes of producing a more organized and less contradictory account of aspect marking in Singapore Mandarin, such that this thesis may become a stepping stone toward a deeper understanding of the variety, not just in terms of aspect marking, but in general terms as well.

Keywords: Singapore Mandarin; grammatical aspect; aspectual 了 *liǎo*; continuous 住 *zhù*; existential perfect 有 *yǒu*

CHAPTER ONE: INTRODUCTION

As a variety of Modern Mandarin, Singapore Mandarin exhibits numerous differences from other varieties such as Putonghua (a constructed variety of Mandarin, typically taken to be the variety spoken in Mainland China), Taiwan Mandarin, and Hong Kong Mandarin. These differences, or language variations, have been the subject of studies on the variety (e.g., Chen 1984; Lu 2001; 2002; Chew 2002; Li & Chew 2002, among many others; see Lin & Khoo 2018 for a review of studies on grammatical variations in Singapore Mandarin). As Lin and Khoo (2018) point out, these studies often focus their efforts on presenting an overview of the variations, while studies investigating individual features are far and few between. Yet, such studies are also critical for a more comprehensive understanding of the variety and of the language in general, as they provide new perspectives on existing discussions of Modern Mandarin and inform us of language patterns that may affect the interpretation of the different varieties. This thesis, thus, focuses on the grammatical aspects of Singapore Mandarin, a feature that has been largely overlooked in the current literature. In doing so, it is hoped that the thesis can provide a more comprehensive insight into one of the grammatical features in the variety.

1.1. Development of Singapore Mandarin

Before we begin our investigation, it may be helpful to briefly review the history of Singapore Mandarin for a contextual understanding of its development and see how it may influence our interpretations of observations made in the corpus. Early Chinese immigrants arrived in Singapore in the late 13th century (Zhang et al. 2004), and by 1836, the Chinese became the largest ethnic group in the area (Xu and Wang 2004). Despite being ethnically Chinese, these immigrants did not arrive in Singapore speaking Modern Mandarin. Instead, they spoke Chinese vernaculars, such as Hokkien, Teochew, and Cantonese, depending on their respective hometowns. Even as Mandarin-medium schools were gradually set up following the arrival of more Chinese immigrants in later decades (Wang 1989: 76), Chinese vernaculars remained preferred by Singapore Chinese even till the time around Singapore's independence – only 0.1% of the Chinese population claim to speak Mandarin as their mother tongue in 1957 (Cavallaro & Ng 2014).

Even after the then-newly elected Singapore government instated Mandarin as a common tongue for Singaporean Chinese, the community persisted in using Chinese vernaculars as their language of communication. In 1979, the Singapore government launched the Speak Mandarin Campaign, which promoted the use of Mandarin among Singaporean Chinese as a way to bring about social cohesion and communication within the Singaporean Chinese community and with the wider Mandarin-speaking circle (Newman 1988; Bokhorst-Heng & Wee 2007; Dixon 2009; Shang & Zhao 2017). This pushed for the adoption of Mandarin by many non-native speakers of Mandarin; as Cavallaro and Ng (2014) note, the proportion of Mandarin speakers rose from 13.1% in 1980 (according to the census released after the launch of the Speak Mandarin Campaign) to 47.7% in 2010, while concomitantly, the proportion of Chinese vernaculars speakers declined experienced a sharp decline from 76.2% in 1980 to only 19.2% in 2010. Due to the rapid adoption of Mandarin by non-native speakers, especially when the Mandarin may not even have been based on Putonghua¹, scholars have noticed the language variations that exist in the variety due to the differences in sociolinguistic backgrounds and development with Putonghua or other Mandarin varieties (e.g., Lu et al. 2002; Xu & Wang 2004). Numerous reasons were cited for the variations, with language contact being the most common.

It must be pointed out that previous studies such as Chew and Xiao (1999), Lu et al. (2002), and Xu and Wang (2004), among many others, generally do not distinguish between the different possible pathways of language contact – namely substratum, superstratum, and adstratum influence (see LaPolla 2009 for a more detailed explanation of each). Yet, it is important that we are clear of the different mechanisms giving rise to Singapore Mandarin when looking at the variations, as different variations have different origins which may, therefore, provide a contextual understanding of how certain features should be interpreted. In sum, substratum influence is where the first language influences the second language; in the case of Singapore Mandarin, it is when Chinese vernaculars, which used to be the first language

¹ Chew (2014) notes that prior to 1990, much of the materials from China were banned in the Southeast Asian nations for its strong political messages; he claims that instead of Putonghua, the Chinese in the Southeast Asian region, including Singaporean Chinese, had access only to the variety of Mandarin used around the May Fourth Movement in China.

for many Singaporean Chinese, influence the way they speak Mandarin when they first started learning Mandarin. Superstratum influence is where the second language influences the first, as can be seen when English, a second language for Singaporean Chinese particularly before the 1980s, slowly influenced Mandarin in Singapore, resulting in a preference for terms such as 巴仙 *bāxiān* ‘percent’, which is transliterated from the English ‘percent’, over 百分比 *bǎifēnbǐ* ‘percent’ (Chew 2002; Xu & Wang 2004). Adstratum influence, where two languages “both influence each other so that they move toward a common typology unlike what either one had before” (LaPolla 2009: 228), is not yet discussed in the context of Singapore Mandarin.

1.2. Previous studies on grammatical aspect marking in Singapore Mandarin

Grammatical aspect “present situations with a particular perspective or focus” (Smith 1991: 3), and is a means to mark whether an action is viewed as complete, repeated, in progress, or engaged in habituality (de Haan 2010). Singapore Mandarin, like other varieties of Mandarin, is observed to mark the following grammatical aspects: the perfective, the completive, the continuous, the progressive, the delimitative, the inceptive, the continuative, the experiential perfect, and the currently-relevant-state aspects. Notably, the current literature on grammatical aspects in Singapore Mandarin is mostly centered on features in the above-mentioned grammatical aspects presumably not found in Putonghua, leading to studies concluding that (a) some markers are used differently and (b) some markers are unique to Singapore Mandarin. These studies are reviewed in this section; studies about the individual markers will be reviewed in their respective sections or chapters.

1.2.1. Discretionary aspect marking in Singapore Mandarin?

In investigating written data, scholars note that there is a ‘discretionary use’ of grammatical aspect markers in Singapore Mandarin, as in (1) and (2) (Zhu 2008; Liu 2010).

(1) 虽然如此我还是不知不觉的爱上他[了]。

<i>suīrán</i>	<i>rúcǐ</i>	<i>wǒ</i>	<i>háishì</i>	<i>bùzhībùjué-de</i>	<i>àishàng</i>	<i>tā</i>	<i>[le]</i>
although	like.this	1SG	still	unknowingly	love	3SG	CRS

‘Yet, I still unknowingly fell in love with him.’ (*Biepeng* 72, in Zhu 2008: 96)

(2) 人们甚至把各种各样的动物和植物，都当着神来崇拜。

rénmen shènzhì bǎ gèzhǒnggèyàng de dòngwù hé
people even BA various DE animal and
zhíwù dōu dāng-zhe shén lái chóngbài
plant all treat-CONT god come worship

‘People even worshipped all kinds of animals and plants.’ (*Zhongguo Wenhua* 36, in Zhu 2008: 97)

Zhu (2008: 96) claims that in (1), the ‘dropping’, or dis-use, of the currently-relevant-state 了 *le* from the sentence is argued to be typically unacceptable in Putonghua since it is required to express a change of state. In (2), the use of 着 *zhe* is also argued to be ‘atypical’ when compared against the same variety (Zhu 2008: 97). However, this analysis is problematic in two ways.

First, it should be noted that while aspect marking is a feature of the language in general, it is, as noted by Smith (1991: 277), optional, and context plays a huge role in determining the use or disuse of the aspect marker. In Mandarin, “sentences often appear without them in discourse” (Smith 1991: 277). When overt markers are not used, as in the case of (1), the sentence is open to interpretation; pragmatic factors and contexts play a much larger role in constraining the interpretation. Similarly, pragmatic factors are also responsible for the use of overt markings, such as in (2). Without context, “speakers tend to judge independent *zhe* statements ungrammatical, or at best, odd” (Smith 1991: 280), highlighting the issues of analyzing these sentences out of context. The pragmatics of the use of the markers is something that seems to be neglected by studies like Zhu (2008) and Liu (2010), which focuses solely on the sentences themselves to make a judgment.

Even if we ignore this issue, there is a second, and more critical, issue with these studies: they do not seem to be supported by empirical evidence, or at least, it is not apparent in their argumentation. It is likely that studies like Zhu (2008) and Liu (2010) interpreted the sentences from Singapore Mandarin using a grammaticality judgment based on their own language backgrounds and assumed knowledge of how Putonghua sounds like. Claims stemming from

such analysis are, then, shaky and easily refutable – sentences like (2) can actually be found in Putonghua, as evidenced by (3) and (4), which are sentences taken from the Beijing Language and Culture University (BLCU) Chinese Corpus (BCC).

(3) 知道又在背诵这套话，去当着笑话告诉人，又成了出了名的笑话。

zhīdào yòu zài bèisòng zhè tài huà qù dāng-zhe
 know again at memorise this CLF speech go treat-CONT
xiàohuà gào sù rén yòu chéng-le chūlemíng de xiàohuà
 joke tell people again become-PFV famous-PFV DE joke

‘[I] know, [you’re] memorizing what I said again, and will repeat it to the others; it’ll be the butt of everyone’s jokes again.’ (Eileen Chang, *Yuan Nu*, taken from BCC)

(4) 一直像个孩子一样的，当着偶像，当着爱豆

yīzhí xiàng gè háizi yīyàng de dāng-zhe ǒuxiàng
 always like CLF child similar DE treat-CONT idol
dāng-zhe àidòu
 treat-CONT idol

‘[I’ve] been idolizing [him], just like a child would.’ (Weibo, taken from BCC)

While it is indeed not very frequent, the possibility of such instances does demonstrate that there is no ‘unacceptability’ when discussing language patterns, particularly when (3) is taken from a relatively recent Chinese novel by an acclaimed novelist, while (4) is taken from Weibo (微博), a social media platform frequently used in Mainland China. This suggests that such instances are indeed in use and can be acceptable enough for authors and laypeople alike. It may, thus, be more beneficial to think of the language patterns as tendencies instead, where we speak of a higher or lower tendency to use a certain linguistic construction.

Studies also observe that some markers in Singapore Mandarin seem to perform functions that they have not observed in Putonghua. For instance, Chen (1986), Chu (1996), and Phua

and Liang (to appear) claim that the perfective aspect, which is usually overtly marked using 了 *le* in Putonghua, can also be marked by verb reduplication. Verb reduplication in Putonghua is usually taken to mark the delimitative and the tentative aspect in the variety (e.g., Chao 1968; Li & Thompson 1981; Zhu 1982; Smith 1991). Again, the issue with these studies is that their conclusions were not based on empirical data from Putonghua – the comparisons were made using pre-determined definitions and conceptualizations that may or may not reflect actual language use. Without the use of actual linguistic data to support their claims, the conclusions made about the variations can be easily refuted (as will be discussed in later chapters). Furthermore, many studies often conflate the different concepts of grammatical aspect – using verb reduplication as an example, we find that Chen (1986) conflates the notions of the perfective aspect and the completive aspect, stating that verb reduplication can convey the perfective aspect because it expresses the completion of an action, which as pointed out by Bybee et al. (1994) and Comrie (1976), is not truly the case. Even if the observations are based on empirical data and are valid, the imprecision of the linguistic concepts may be confusing for later studies which intend to base their studies on the fruits of earlier labor.

1.2.2. *'Non-typical' aspect markers in Singapore Mandarin?*

Besides the 'discretionary' use of grammatical aspect markers in Singapore Mandarin, previous studies have also pointed out that the language variety uses several markers that are not found in Putonghua. These markers include:

- (a) 了 *liǎo*, a perfective aspect marker (Chen 1986; Lua 2014; Lim 2016)
- (b) 住 *zhù* as the continuous aspect marker (Yow 2019)
- (c) 中 *zhōng* as either the continuous or the progressive marker (Zhu 2008)
- (d) 有 *yǒu*, which has been argued to be a marker of the perfective aspect (Chua 2003) or the experiential perfect (Lock 1989)

Note that these markers are only considered 'atypical' because they are compared against Putonghua – they are, in fact, quite often found in other Mandarin varieties, due to the

substratum influence from the various regional Chinese vernaculars or from language contact with other languages. In some cases, their use is even noted in Putonghua. For instance, 中 *zhōng* can be found as an aspect marker in Taiwan Mandarin, which is speculated to be the result of superstratum influence from Japanese (Diao 2013). The issue with these studies is that they often only compare Singapore Mandarin to Putonghua, which leads to the notion of an ‘atypical’ marker when the markers may actually be more commonly used than they thought. While this does not necessarily invalidate the research, it does adversely affect how certain grammatical aspect markers may be interpreted as the origins, sources, and development of the markers become masked and unclear. There are, however, more critical issues with these studies.

First, the variety of Singapore Mandarin investigated in these studies tend to be the standardized and regulated variety – for instance, Zhu (2008) investigates written Mandarin in Singaporean news outlets, which are often heavily edited to fulfill a conception of a ‘standard’ language, regardless of whether such a language use is reflective of social norms. Looking only at standardized varieties often results in the neglect of more colloquial constructions and uses, as these are quite often dropped from the standardized variety where the speakers or writers tend to be more conscious of their use of the language.

Second, quantitative findings regarding the language use were not reported by these earlier studies – again, while it may not invalidate the conclusions put forth by these studies, analyses may be limited with purely qualitative data, leading to much inconclusiveness about the nature of the grammatical aspect markers. Some studies even lack systematic collection (Chua 2003; Lim 2016) – their data is non-systematically collected from day-to-day observations; conversations are not recorded and analyzed in its entirety. Rather, instances containing the marker under investigation are simply noted by the researcher as he/she hears it. While the lack of a recorder may reduce the influence of a researcher’s presence (Schilling 2012), a lack of systematic collection may lead to the overlooking of instances, as it solely relies on the observational skills of the researcher and the identification of instances are subjected to the researcher’s intuition. In the analysis, it also removes the utterances from its contexts, leading to limited observations about the uses of the markers.

1.3. Research questions and approach

Aside from the issues mentioned in the previous section, it should also be pointed out that because of the limited attention given to the grammatical aspect system of Singapore Mandarin, studies remain scattered and often lack coherence in their arguments. Without a study providing an overview of the aspect system in Singapore Mandarin, there may be several issues, theoretical or otherwise, that may be overlooked in the investigations and discussions of Singapore Mandarin. In light of these issues, this thesis is set forth to investigate grammatical aspect marking in Singapore Mandarin in order to provide a bird's eye view of the features in the aspect system and the intricacies within, by exploring how the various markers are used in their respective contexts.

In order to do so, this study takes a corpus-based approach using mainly spoken Singapore Mandarin data, as opposed to previous research that relies on day-to-day observations (e.g., Lim 2016), elicitations (e.g., Lock 1989), surveys of previous research (e.g., Chua 2003), or written data (e.g., Zhu 2008). With the use of a corpus comprising of spoken data of more colloquial Singapore Mandarin, many of the problems that plague the previous studies, as mentioned in the previous section, may be circumvented. It can even provide much-needed quantitative data as compared to data gleaned from day-by-day observations. In addition, complete with the contexts of every utterance, a corpus of spoken data can also provide information about the situations under which the aspect markers are used, allowing us to investigate more than just a syntactic distribution or role of the markers.

The principal data is a corpus of spoken Singapore Mandarin based on Singaporean variety shows. This corpus consists of five Singaporean Chinese variety shows aired between 2014 to 2015 on free-to-air television, which come together to give around 0.54 million characters (around 2700 minutes of spoken data). These five shows include 《摆家乐》 *Bǎijiālè* 'Home Décor Survivor' (hereafter 'bjl'), 《金星火星大不同》 *Jīnxīng huǒxīng dà bùtóng* 'Mars vs. Venus' (hereafter 'jxhxdbt'), 《先锋争8战》 *Xiānfēng zhēng 8 zhàn* 'Finding 8' (hereafter 'xfz8z'), 《小毛病大问题》 *Xiǎo máobìng dà wèntí* 'Body SOS' (hereafter 'xmbdwt'), and 《美差事苦差事》 *Měi chāishì kǔchāi shì* 'Behind Every Job' (hereafter 'meskcs'). These are game shows and talk shows, with generally unscripted and naturally-occurring dialogue, and

use mainly Mandarin as the mode of communication. There is, however, occasional Chinese vernaculars, Malay and English words or sentences throughout the dialogue, a feature observed in colloquial Singapore Mandarin as well. (5) shows an example with English, (6) with Cantonese (a Chinese vernacular spoken in Singapore), and (7) with Malay.

(5) 我们就决定要这个蓝 **with** 这个 **black outline**。

wǒmen *jiù* *juéding* *yào* *zhè* *ge* *lán* ***with***
 3PL then decide want this CLF blue with
zhè *ge* ***black outline***
 this CLF black outline

‘We have decided to get this blue with the black outline.’ (bjl-ep2)

(6) 布莱恩，你**好嘢**啊！你**好嘢**。欸，Jack。

Bùlái'ēn *nǐ* **HAOYE** *a* *nǐ* **HAOYE** *āi* *Jack*
 NAME 2SG gusty PRT 2SG gutsy PRT NAME

‘Bryan, you are gusty indeed. Very gutsy. Hey, Jack!’ (mcskcs-ep7)²

(7) A: 我来玩游戏的，有没有人在？

wǒ *lái* *wán* *yóuxì* *de* *yǒu* *méi* *yǒu* *rén* *zài*
 1SG come play game DE have NEG have people in

‘Hi, how are you? I am here for the game, is anyone there? No?’

B: **Salah!**

wrong

‘Wrong (place)!’

(xfz8z-ep1)

² The gloss for the words/phrases in Chinese vernaculars is given here in Hanyu Pinyin without tones and in capital letters. The same treatment will be used for all the examples containing Chinese vernaculars, unless cited from a study which has provided a gloss for the words and phrases.

It should be noted that even though the speech is unscripted, they do ultimately still come from televised programs. As a result, the participants and hosts of the program may practice self-regularization and that their speech may also undergo some editing both during filming and in post-production. The speech patterns recorded in the corpus, then, may not reflect a truly colloquial variety of Singapore Mandarin, and the thesis should be read with such an understanding in mind – particularly, in the following chapters, when claims about the aspect markers in Singapore Mandarin are made, the claims are limited to the current dataset and should not be generalized to the entire language variety. Using the corpora available to this study, this thesis identifies ten major grammatical aspect markers; their respective functions will be discussed in the chapters that follow. Utterances containing these markers are extracted from the corpora and analyzed clause by clause, in context (including audiovisual information), manually in order to tease apart the functions of each marker. Statistical frequencies of the markers, as well as the collocations of these markers with various syntactic or grammatical features, are also tabulated, such that empirical evidence for the markers can be gathered to investigate their distributional properties, which may shed light on its functions and characteristics.

1.4. Overview of thesis

This thesis consists of six chapters. Chapter One outlines the background, research questions, approach and data of this study. Chapter Two gives an overview of the grammatical aspect markers identified in this thesis, pointing out some of the notable features of each marker, except for 了 *liǎo*, 住 *zhù*, and 有 *yǒu*. The observations in the current thesis are also compared to those of previous studies where necessary. The markers 了 *liǎo*, 住 *zhù*, and 有 *yǒu* are discussed individually in Chapters Three, Four and Five respectively: Chapter Three explores the aspectual functions of 了 *liǎo*; drawing reference from Yue vernaculars, Chapter Four studies the aspectual values of 住 *zhù* in Singapore Mandarin; Chapter Five investigates the construction ‘有 *yǒu* + verb phrase’. The conclusion of this thesis is given in Chapter Six, which provides a summary of the findings and discusses potential future studies stemming from this thesis.

CHAPTER TWO: AN OVERVIEW OF GRAMMATICAL ASPECTS IN SINGAPORE MANDARIN

Ten grammatical aspect markers are identified in this thesis: 了 *le*_{PFV}, 了 *le*_{CRS}, 了 *liǎo*_{PFV}, 了 *liǎo*_{CRS}, 着 *zhe*, 在 *zài*, 住 *zhù*, 过 *guò*, 有 *yǒu*, and verb reduplication. Notably, both 了 *le* and 了 *liǎo* can mark the perfective and the currently-relevant-state aspects concurrently. Their frequencies are given in Table 1.³

Table 1. Statistical frequencies of each marker in the corpus

Marker	Aspect	Frequency
了 <i>le</i> _{PFV}	Perfective	866
了 <i>liǎo</i> _{PFV}	Perfective	20
了 <i>le</i> _{CRS}	Currently-relevant-state	1328
了 <i>liǎo</i> _{CRS}	Currently-relevant-state	221
了 <i>le</i> _{PFV+CRS}	Perfective + Currently-relevant-state	1676
了 <i>liǎo</i> _{PFV+CRS}	Perfective + Currently-relevant-state	148
着 <i>zhe</i>	Continuous ⁴	217
住 <i>zhù</i>	Continuous	90
在 <i>zài</i>	Progressive	304
过 <i>guò</i>	Experiential perfect	299
有 <i>yǒu</i>	Existential perfect	435
Verb reduplication	Delimitative/Tentative	182

³ While previous studies on Singapore Mandarin and other varieties of Mandarin have identified 中 *zhōng* as a marker with aspectual values, this study only managed to find 4 such instances in the corpus. Due to the low frequency, observations are limited and sensible conclusions cannot be made about its usage. Furthermore, most of the previous studies focus on written Mandarin, further limiting the comparability of this study to the previous studies. Likewise, the continuative and inceptive aspects have frequencies too low (10 and 12 respectively) for analysis to be empirically sound. This thesis similarly drops these two aspects from discussion.

⁴ While Section 2.2 will show that 着 *zhe* may also be interpreted as a progressive aspect marker when occurring with dynamic verbs, the same section will also show that that is not its main function – according to the corpus, it is still mainly used as a continuous aspect marker, and is, therefore, continued to be treated as such in this thesis.

This study notes that (a) 了 *liǎo* is not observed to be used as an aspect marker in Putonghua (though it may be possible in other varieties) and (b) the aspectual values of 住 *zhù* and 有 *yǒu* remains debated across Mandarin varieties. This thesis, therefore, more closely examines the uses of these three markers and dedicates Chapters Three to Five to a discussion surrounding these markers. The following sections will, instead, explore the features of the other grammatical aspect markers identified in this corpus, comparing the current findings to those of previous studies and claims.

2.1. The perfective and the currently-relevant-state 了 *le*

In general, the Singapore Mandarin perfective 了 *le*, as identified in this corpus, is similar to its counterparts in other Mandarin varieties. In terms of functions, like the perfective 了 *le* in other Mandarin varieties, the Singapore Mandarin perfective 了 *le* occurs in a post-verbal position, expressing temporal, spatial or conceptual boundedness as a consequence of its perfectivity (Li & Thompson 1981: 185), though it puts no more emphasis on the end of the situation than on any other part of the situation (Comrie 1976: 18). Simply put, it views the entire situation as a whole, indicating only the occurrence of the action (Xiao & McEnery 2004: 113; Zhu 2019: 16), as in (1).

(1) 想知道一下那个没良心的布莱恩下了什么清单。

xiǎng zhīdào-yīxià nà gè méi liángxīn de Bùlái'ēn

wish know-a.little.while that CLF NEG conscience DE name

xià-le shénme qīngdān

place-PFV what checklist

‘I wish to know what checklist did that heartless Bryan lay out.’ (mcskcs-ep3)

Some studies (e.g., Chen 1986; Zhu 2019) claim that the perfective 了 *le* codes for a completed action, but this study finds that it is not a necessary feature of the perfective aspect marker in Singapore Mandarin, as in (2).

(2) 洗了四十五分钟，还洗不到一半！

xǐ-le *sìshíwǔ* *fēnzhōng* *hái* *xǐ* *bù* *dào* *yībàn*
wash-PFV forty.five minutes still wash NEG to half
'I've washed for forty-five minutes, and it's not even half done!' (mcskcs-ep7)

Although the perfective 了 *le* can occur with completed actions, as in (1), any action used with the perfective 了 *le* can still be taken to be incomplete, as evidenced from (2). Because the perfective 了 *le* marks an occurrence of an action, it does not occur with non-actualized events (Chappell 1988; Xiao & McEnery 2004: 91). Indeed, at least in the corpus, the perfective 了 *le* does not seem to have occurred with any negated or non-actualized events. This serves as an important distinguishing factor between the perfective 了 *le* and the currently-relevant-state 了 *le*, aside from their syntactic positions, as the latter can be used with non-actualized or negated actions and states.

Besides coding for the perfective aspect, 了 *le* can also mark the currently-relevant-state aspect when it is used at the sentence-final position, denoting that “a state of affairs has special current relevance to some particular Reference Time”, where the current is with reference to “the conversational setting in which the speaker and hearer are participating as interlocutors” (Li et al. 1982: 22). This function has been termed as the change-of-state marker (e.g., Xiao & McEnery 2004), the change-of-state cum new situation marker (e.g., Zhu 1982; Yue 2003; Lü 2015[1980]), the transformative aspect (e.g., Zhu 2019), the perfect aspect (e.g., Liu 2002), and the currently-relevant-state marker (e.g., Li & Thompson 1981).

This thesis follows from Li and Thompson (1981) and terms the sentence-final 了 *le* as a currently-relevant-state marker, given that their definition encompasses the various functions possible with the sentence-final 了 *le*, namely, (a) change of state, (b) correcting a wrong assumption, (c) reporting the progress of an action, (d) expressing what happens next and (e) closing a sentence (marker of finality). In any given context, the sentence-final 了 *le* can

express one or more of these functions at the same time. A total of 1328 instances containing a currently-relevant-state 了 *le* has been identified; refer to (3) for an example from the corpus.

(3) 第八集了。

dì *bā* *jí* *le*
number eight episode CRS
'It's the eighth episode now.' (bjl-ep8)

In (3), the sentence-final 了 *le* marks the change of state from episode seven to episode eight, with reference to the speech time, and reports the progress of the action (which, in this case, is the number of episodes they have filmed thus far).

Both the perfective and the currently-relevant-state 了 *le* can occur at the same time as the same morpheme; there are 1676 instances of such usage (hereafter, dual-function 了 *le*) in the corpus. This usually occurs when 了 *le* occurs both post-verbally and sentence-finally, as in (4), where the act of arriving can be seen as an entire single action. At the same time, it can also signal a change-of-state, wherein the speaker has arrived in that location from a previous location (i.e. change in location).

(4) 道长你好。我来了。

dàozháng *nǐ* *hǎo* *wǒ* *lái* *le*
priest 2SG good 1SG arrive PFV.CRS
'Hello priest! I have arrived!' (mcskcs-ep3)

2.2. The continuous 着 *zhe*

The aspect marker 着 *zhe* is widely discussed with various definitions, e.g., marking “a continuous and stable situation without regard to endpoints” (Smith 1991: 273), a progressive

action (e.g., Chao 1968; Comrie 1976; Tsee 1986), or the durative nature of a situation (Xiao & McEnergy 2004). Regardless of its specific wording and nomenclature, its definitions seem to revolve around the notion that 着 *zhe* indicates that a state or an action holds for a period of time. This function is identified in the 217 Singapore Mandarin 着 *zhe*. It can occur with both stative (5) and dynamic verbs (6) (c.f. Smith 1997: 273, who argues that 着 *zhe* is a stative imperfective). For instance, in (5), 着 *zhe* implies that the speaker is in a state of lying down when reading books.

(5) 有一些人有习惯 *hor*, 喜欢躺着看书。

yǒu yīxiē rén yǒu xíguàn hor xǐhuān tang-zhe kàn shū
 have some people have habit PRT like lie-CONT see book
 ‘Some people have this habit of reading while lying down.’ (xmbdwt-ep9)

(6) 比如现在是冷气, 我穿着短裤, 然后对这些关节不好?

bǐrú xiànzài shì lěngqì wǒ chuān-zhe
 for.example now COP air.conditioned 1SG wear-CONT
duǎnkù ránhòu duì zhè xiē guānjié bù hǎo
 shorts then to this CLF joint NEG good

‘You mean that it is bad for my joints if I am wearing shorts in an air-conditioned room?’ (xmbdwt-ep4)

When occurring with dynamic verbs, it is observed that 着 *zhe* may also be interpreted with the progressive aspect. In those cases, we will have to determine via contexts which aspect 着 *zhe* is expressing in the utterance. For instance, 穿着 *chuān-zhe* alone can be interpreted as either ‘wearing’ (the shorts are already on) or ‘putting on’ (in the process of putting on the shorts). In the former, 着 *zhe* marks a continuous aspect while in the latter, 着 *zhe* marks the progressive aspect. Because of the context of (6), wherein the speaker is wearing shorts in an

air-conditioned room, 着 *zhe* is taken to mark the continuous aspect. There are also instances where 着 *zhe* is more likely to be used as the progressive aspect marker, as in (7).

(7) 看大家严肃地谈论着, 看来问题不小。

kàn dàjiā yánsù-de tánlùn-zhe kànlái wèntí bù xiǎo
see everyone serious-ADV discuss-PROG seems issue NEG small
'Seeing how everyone is discussing this seriously, it seems there is a big problem.'
(bjl-ep2)

In (7), the speaker observes that everyone in the room is discussing what to do, i.e., the act of discussion is in progress. It should be pointed out that this is not a unique nor special linguistic phenomenon – studies like Comrie (1976), Bybee et al. (1994), and Heine and Kuteva (2002) have noted that the continuous aspect and the progressive aspect are often closely related to each other, with progressive aspect being only associated with dynamic situations (as will be pointed out in Section 2.3) and continuous aspect associated with stative situations on top of dynamic ones. Heine and Kuteva (2002) even simplify the issue by simply referring to both the continuous (in the sense that Comrie (1976) and Bybee et al. (1994) interpret) and the progressive as the continuous aspect. Xiao and McEnery (2004) also note this overlap in the functions of 着 *zhe* in Putonghua, where 着 *zhe* can also express progressivity with dynamic verbs and situations. However, in the current corpus, 着 *zhe* is still used as a continuous aspect marker more so than a progressive one – only 6.8% of the instances in the corpus contains 着 *zhe* as a progressive marker; this is the reason why this thesis has decided to continue labeling 着 *zhe* as a continuous aspect marker, though it must be noted that this is not its only function.

2.3. The progressive marker 在 *zài*

Where the continuous aspect marks the continuance of a state or action, the progressive is used for actions that require a constant input of energy (Bybee et al. 1994: 126); that is, it specifically refers to dynamic actions in progress, rather than states of being. Like in varieties

such as Putonghua and Taiwan Mandarin, Singapore Mandarin makes use of the preverbal auxiliary 在 *zài* as a progressive aspect marker. 304 instances are identified in the corpus; an example is given in (8).

(8) A: 我跟我男朋友在吃东西。

wǒ gēn wǒ nán péng yǒu zài chī dōng xī
1SG COM 1SG boyfriend PROG eat thing

‘I am eating with my boyfriend.’

B: 哦，那不打扰你啦！

ó nà bù dǎ rǎo nǐ la
PRT then NEG bother 2SG PRT

‘Oh, then I shall not bother you now!’

(jxhxdbt-ep3)

In (8), the progressive aspect marker 在 *zài* constrains the interpretation of the utterance to be that of active action, i.e. the agents are actively eating. The interlocutor interprets it as such, and, therefore, states that she will not bother A since A is eating. The progressive aspect marker 在 *zài* may also co-occur with the continuous aspect marker 着 *zhe*, forming what Xiao and McENERY (2004: 208) terms a “complex viewpoint”, as in (9).

(9) 因为女生是一直在守候着那个爱。

yīn wéi nǚ shēng yī zhí zài shǒu hòu-zhe nà gè ài
because girl always PROG wait-CONT that CLF love

‘Because girls are always waiting for that love.’ (jxhxdbt-ep4)

In such instances, the interpretation of the marker 着 *zhe* is constrained to that of the continuous, while 在 *zài* performs the role of the progressive. Since a progressive action can be taken as

one that requires a constant input of energy (Bybee et al. 1994: 126), in the co-presence of the continuous 着 *zhe* and the progressive 在 *zài*, the utterance can be understood as ‘constantly acting in a way to sustain a state’.

2.4. The delimitative and tentative aspect marker verb reduplication

Verb reduplication, as a means of aspect marking, is associated with two grammatical aspect, namely the delimitative and the tentative aspects. While these two aspects can both be marked by a single means, as the following sections will demonstrate, there seems to be a preference for a VV construction or a VV-一下 *yīxià* ‘a while’ for the delimitative and a VV-看 *kàn* ‘see’ or a V-看看 *kànkàn* ‘see’ construction for the tentative.

2.4.1. Delimitativeness of verb reduplication

The delimitative aspect in Singapore Mandarin is marked using verb reduplication (10).

- (10) A: Okay Ricky, 帮我一个忙, 你现在去算算多少钱好不好?
okay Ricky bāng wǒ yī gè máng nǐ xiànzài
 okay NAME help 1SG one CLF favor 2SG now
qù suàn-suàn duō shǎo qián hǎo bù hǎo
 go calculate-calculate many few money good NEG good
 ‘Okay, Ricky. Do me a favor and quickly calculate how much this is.’

- B: 我帮你算一下。
wǒ bang nǐ suàn yīxià
 1SG help 2SG calculate a.while
 ‘I’ll do a quick calculation for you.’

(bjl-ep7)

In this case, verb reduplication presents a situation where the action is done a little bit, or for a short period of time (Li & Thompson 1981: 232); that is, it reduces the duration or iteration frequency of an event. For instance, in (11), when speaker A requests that Ricky

calculates the total amount of money required for the purchase, A request that he 算算 *suàn-suàn* ‘quick calculation’, which Ricky does interpret as 一下 *yīxià* ‘a while’.

Notably, some previous scholars do include other forms of verb reduplication in their discussion of the delimitative aspect: Smith (1997) included ‘V 一 *yī* V’, He (1962) and Wang (1963) included ‘V 了 *le* V’, Li and Thompson (1981) included ‘V 了 *le* 一 *yī* V’ on top of ‘V 一 *yī* V’. There is, at current, no consensus as to which constructions can and should be included in the discussion of verb reduplication as an aspect marker and how they are related to each other. For instance, Xiao and McEnery (2004: 151) argue that V-*le*-V can be seen as being a compound aspect consisting of both the delimitative and the perfective aspect. Some, such as Zhang (1979), even go to the extent to say that constructions like ‘V 一 *yī* V’, strictly speaking, are instances of verb reduplication; instead, the ‘一 *yī* V’ component of the construction acts as a quantifier to the main verb, similar to constructions such as 踢一脚 *tī yī jiǎo* ‘gave a kick’. Due to this lack of consensus, this study only focuses on the more well-attested form, VV.

A noteworthy feature of the delimitative VV construction in Singapore Mandarin is its compatibility with the complement 一下 *yīxià* ‘a little while’ – 9 out of the 150 instances (6%) see such a pattern (11).

(11) 你情绪不好，来抱抱一下。

<i>nǐ</i>	<i>qíngxù</i>	<i>bù</i>	<i>hǎo</i>	<i>lái</i>	<i>bào-bào-yīxià</i>
2SG	emotion	NEG	good	come	hug-hug-a.while

‘Come and have a little hug since you are sad.’ (jxhxdbt-ep3)

Though not very frequent in the Singapore Mandarin corpus, it is interesting to note because this construction does not seem to occur in Putonghua – a search on the BCC returns no results on any of its sub-corpus, including the Weibo sub-corpus. Han (2011: 23) suggests, with reference to the same linguistic phenomenon in Malaysia Mandarin, that such a construction

is likely to have arisen due to substratum influence from Yue and Min vernaculars, where the construction ‘VV + 下 *xia*’ and ‘VV + 一下 *yixia*’ are used respectively to mark the delimitative aspect. Given the ubiquity of Cantonese and Hokkien speakers in early Singapore, the same can be hypothesized of the construction in Singapore Mandarin.

2.4.2. *The tentativeness of verb reduplication*

Verb reduplication can also be used to mark the tentative aspect, wherein the ‘testing’ nature of the event is emphasized. In Singapore Mandarin, when the tentative aspect is to be marked, the reduplicated verb is often followed by the use of 看 *kàn* ‘see’, as in (12). It can also take the form in (13), where 看 *kàn* ‘see’ is reduplicated instead of the main verb.

(12) 可以。调调看准不准。

kěyǐ tiào-tiao-kàn zhǔn bù zhǔn
 sure adjust-adjust-TENT accurate NEG accurate
 ‘Sure, adjust and see if it is accurate.’ (bjl-ep7)

(13) 喝看看，真的很好喝。

hē-kànkàn zhēnde hěn hǎo hē
 drink-TENT really very good drink
 ‘Try it, it’s a really good drink.’ (xmbdwt-ep12)

There are 32 such instances, with a majority (75%) being of the type seen in (12). While the tentative aspect can be expressed using just the reduplicated form without the use of 看 *kàn* ‘see’ in varieties like Putonghua (see Xiao & McEnery 2004), there is a stronger tendency in Singapore Mandarin for the tentative aspect to only be coded for when using the VV-看 *kàn* ‘see’ construction; analyzing the VV and VV-一下 *yixia* ‘a little while’ constructions shows that they do not code for the tentative aspect. The use of 看 *kàn* ‘see’ to emphasize the testing nature of the action brings to mind the conative, which some studies consider as an aspect (e.g.,

Panhuis 2006; Zeisler 2004). Like the tentative aspect, the conative refers to “situations of mere attempt, that means, a telic, and in most cases, non-durative controlled action is present in the preparatory stage and the achievement is explicitly or implicitly negated” (Zeisler 2004: 205). The conative often grammaticalizes out of verbs of perception (typically ‘look’ or ‘see’) in a number of unrelated South Asian languages (Coupe 2018: 6); this includes Tamil, a language that is also commonly spoken in Singapore.

It is unlikely that the VV-看 *kàn* ‘see’ and the V-看看 *kànkàn* ‘see’ constructions in Singapore Mandarin is a result of language contact with the Dravidian language, given that these are constructions (particularly the former) that already exist in Mandarin varieties like Putonghua and Chinese vernaculars (Chen 1986). Yet, cross-linguistic similarities suggest that there may be a tendency to use constructions involving 看 *kàn* ‘see’ to express situations of attempt, which may present a possible separation of functions between the VV (VV-一下 *yīxià* ‘a little while’) constructions and the VV-看 *kàn* ‘see’ constructions.

2.4.3. *Re-visiting the perfective account of verb reduplication*

It is at this juncture where this thesis has to point out that previous studies on verb reduplication in Singapore Mandarin suggest that when a reduplicated verb may also code for completion, that is, it functions as either a completive or perfective aspect (Chen 1986; Chu 1996; Phua & Liang to appear), as in (14).

(14) 我吃吃就来!

<i>wǒ</i>	<i>chī-chī</i>	<i>jiù</i>	<i>lái</i>
1SG	eat-eat	then	come

‘I’ll come after I have finished eating.’ (Chen 1986: 140)

According to Chen (1986), the utterance in (14) can be equated to (15), where the reduplicated verb is replaced by either the completive complements 完 *wán* and 好 *hǎo* or with the perfective 了 *le* which is taken to signal completion in Chen’s paper.

(15) 我吃了/完/好就来!

wǒ chī-le/wán/hǎo jiù lái
1SG eat-finish then come

‘I’ll come after I have finished eating.’ (Chen 1986: 140)

Barring the conflation of the completive and perfective aspects that these studies have (see Comrie 1976: 18 for a discussion on the difference between the two), their arguments for the perfective interpretation is often tenuous and lacks concrete evidence for its analysis. For instance, in (16), an example taken from Phua and Liang (to appear), it is argued that verb reduplication is directly equivalent to the perfective 了 *le*, and should be analyzed as coding for the completion of the homework, i.e., to request for the hearer to completely finish all the homework assigned to him or her.

(16) 你快做做你的功课 *leh*, 我等很久了。

nǐ kuài zuò-zuò nǐ de gōngkè leh
2SG fast do-do 2SG DE homework PRT
wǒ děng hěn jiǔ le
1SG wait very long CRS

‘Finish your homework quickly – I have waited too long.’ (Phua & Liang to appear)

Without the full context under which this sentence is uttered, there is no way of ensuring that the speaker meant for the hearer to finish the homework – it can be also taken as ‘Quickly do your homework – I have waited far too long for you to start’. In addition, the adverb 快 *kuài* ‘quickly’ refers to the internal temporal structure of the event. This is, by definition, not what the perfective aspect is concerned with and is, therefore, contradictory. The thesis also finds no instance where verb reduplication is used to mark the perfective, suggesting that earlier studies may have erroneously interpreted their data.

2.5. The experiential perfect aspect marker 过 *guò*

The experiential perfect aspect is marked by 过 *guò* in Singapore Mandarin, just like in other Mandarin varieties. As an experiential perfect marker, 过 *guò* suggests that an event has been experienced with respect to reference time and that this event is over and the final state resulting from this experience no longer obtains (Li & Thompson 1981; Tiee 1986; Smith 1997; Xiao & McEnery 2004); that is, it codes for the perfect of experience. For instance, in (17), an example from the corpus, 过 *guò* expresses the notion that the speaker has the experience of touring Malacca (and in this case, more than once), but at the time of this utterance, the speaker is no longer in Malacca (the show was filmed in a Singapore studio set).

(17) 因为马六甲我走过很多遍了。

yīnwéi Mǎliùjiǎ wǒ zǒu-guò hěn duō biàn le
because NAME 1SG walk-EXP very many CLF CRS
'Because I have toured Malacca many times before.' (jxhxdbt-ep3)

Usually, the default time of reference for this aspect is an indefinite past – the touring of Malacca is experienced in some time before the time of utterance. However, the experiential 过 *guò* may also be used with a future temporal reference, noted by this thesis and Zhu (2008), as in (18). Zhu (2008) argues that in such instances, 过 *guò* performs an aspectual function classified as the compensative aspect by Yue-Hashimoto (1993).

(18) 我要嘛就拆掉，要不然重新做过。

wǒ yào ma chāi-diào yàobùrán chóngxīn zuò-guò
1SG want PRT tear-COMP otherwise again do-EXP
'I'll either take it down or do it over again.' (bjl-ep5)

The compensative aspect is an aspect observed in various Chinese vernaculars, such as Yue, Hakka, Gan, and Wu, though studies do not necessarily refer to it as such (e.g., Chappell 2001 refers to this simply as the re-experience of an action). However, this study, unlike Zhu (2008), does not argue for the compensative aspect interpretation of 过 *guò*, at least not when it is used individually, based on the findings of this corpus. Of the 7 instances where 过 *guò* is used with a future temporal reference, all contain temporal adverbs like 再 *zài* ‘again’ or 重新 *chóngxīn* ‘again’ (18). By contrast, 过 *guò* in the various vernaculars can be used on its own to express this notion of re-experience (19); co-occurrence with adverbs meaning ‘again’ is not grammatically required (Chappell 2001: 26).

(19) 买过一个熊熊俾我好唔好

maai5gwoh3 yat1 goh3 hung4hung4 bei2 ngoh5 ho2 m4 ho2
 buy EXP one CLF teddy.bear give 1SG good NEG good
 ‘Won’t you buy me another teddy bear?’ (Chappell 2001: 26)⁵

In Singapore Mandarin, the ‘re-experience’ that seems to require an entire construction, as in ‘temporal adverb expressing ‘again’ + verb + experiential aspect marker’, which is similar to that of Putonghua (20) (Chappell 2001: 26; Li & Thompson 1981).

(20) A: 昨天给我洗的衣服，洗了就褪色了你看吗！

zuótiān gěi wǒ xǐ de yīfú xǐ-le jiù
 yesterday for 1SG wash DE clothes wash-PFV then
tùisè le nǐ kàn ma
 fade CRS 2SG see PRT

‘The colors on the clothes you washed for me yesterday has faded!’

⁵ Chappell (2001) glosses the marker 过 *guò* as an evidential marker; as this study is not concerned with whether evidentiality is expressed in the marker, we have glossed 过 *guò* as an experiential perfect marker.

B: 哎呀，我给你重新洗过吗？

āiyā wǒ gěi nǐ chóngxīn xǐ-guò ma
PRT 1SG for 2SG again wash-EXP PRT

‘Oh dear, should I wash it again for you?’ (Media Language Corpus)

2.6. Conclusion

This chapter has discussed six of the ten major grammatical aspect markers found in the current corpus, showcasing their features and comparing the findings from the current study to those of previous studies where possible. In doing so, this chapter has demonstrated that there is indeed a need to refine research on grammatical aspect marking in Singapore Mandarin due to the imprecision and unverifiability of many previous studies. It has also given a brief overview of the aspectual system in Singapore Mandarin. It is essential to re-visit their accounts and arguments in order to paint a more accurate picture of the linguistic patterns found in the variety, e.g., investigating the perfective account of verb reduplication and the compensative interpretation of 过 *guò*. In the same vein, this chapter has shown, in brief, how a study on a single language variety may also help us re-think about theories and observations in the language in general. Finally, it provides an insight into what is possible and not currently observed in the variety, such as the lack of the compensative aspect in 过 *guò* as claimed by earlier studies (Zhu 2008).

CHAPTER THREE: THE FUNCTIONS OF 了 *LIǎO* IN SINGAPORE MANDARIN

Before embarking on the discussion of 了 *liǎo* in Singapore Mandarin, it should be pointed that in Putonghua, the pronunciation *liǎo* is only used when 了 functions either as a verb expressing ‘to finish; to end’, as in 这件事总算啦 *zhè jiàn shì zǒngsuàn liǎo la* ‘This issue is finally over.’, or a complement in potential verb compounds to express the possibility of an action, as in 受得/不了 *shòu dé/bù liǎo* ‘can/cannot take it’ (Lü 2015[1980]: 366-367).

When used as a grammatical particle in Putonghua, 了 is to be read as *le*, which is phonetically reduced from *liǎo* as a consequence of its grammaticalization (Wang 2004); see Section 2.1 for its functions. Yet, the grammatical 了 can be pronounced as *liǎo* in Singapore Mandarin, as noted by previous studies like Chen (1986), Chew and Zhou (1998), Lua (2014), and Lim (2016). These studies explain this pattern of use in various ways, such as analyzing it as a complement (Chen 1986), or a perfective aspect marker (Chew & Zhou 1998; Lua 2014; Lim 2016). This thesis also observes the same pattern of use in the corpus but finds that previous analyses are inadequate in explaining its use. This chapter is, therefore, concerned with 了 *liǎo* as a grammatical particle and will begin the investigation by reviewing the previous studies before discussing and explaining the current proposal put forth by the thesis.

3.1. Previous studies on 了 *liǎo* as a grammatical particle in Singapore Mandarin

Chen (1986) is one of the earlier studies on 了 *liǎo* in Singapore Mandarin, providing the basis upon which many later studies worked on. In Chen (1986), two different accounts for 了 *liǎo* were proposed for its grammatical uses.

The first is that 了 *liǎo* replaces 了 *le* as the perfective marker when in a post-verbal position (1) and as a currently-relevant-state marker in the sentence-final position (2); this later became known as the interchangeable account of 了 *le* and 了 *liǎo* in studies like Xu and Wang (2004), Lua (2014), and Lim (2016).

(1) 这么薄的衣服，穿了也没什么用。

zhème báo de yīfú chuān-liǎo yě méi shénmeyòng
such thin DE clothes wear-PFV also NEG what use
'There is no use in wearing such thin clothes.' (Chen 1986: 148)

(2) 他已经知道了。

tā yǐjīng zhīdào liǎo
3SG already know CRS
'He already knows.' (Chen 1986: 148)

The second proposal is for when 了 *liǎo* is used consecutively with the sentence-final 了 *le*, as in (3) and (4). This is possible in Putonghua only when 了 *liǎo* is used as a verb.

(3) 机器坏了了。

jīqì huài liǎo le
machine broke COMP CRS
'The machine has broken down.' (Chen 1986: 148)

(4) 我问他了了。

wǒ wèn tā liǎo le
1SG ask 3SG COMP CRS
'I have asked him already.' (Chen 1986: 148)

Chen (1986) argues that in such instances, 了 *liǎo* acts as a complement expressing the completion of a change-of-state and rejects the equivalency of 了 *liǎo* to the perfective 了 *le* in these instances, citing that this function of *liǎo* has its source in constructions such as 坏去

啊 *p'ai k'i a* / 坏了啊 *p'ai liau a* ‘broken’ in Hokkien and 坏咗嘢 *wa:i tfo la* ‘broken’ in Cantonese. While it may be possible to analyze 了 *liǎo* in instances like (3) as a complement, there are some issues with the interpretation when applied to instances like (4). Thus far, there has been no observation where the complement occurs after object in a VO compound in Singapore Mandarin; typically, should a complement and an object both occur after a verb, the sequence tends to be “verb (V) + complement (C) + object (O)”, as in 丢 *diū* ‘throw’ (V), 掉 *diào* (C) and, 一些东西 *yīxiē dōngxī* ‘some items’ (O) in (5).

(5) 我应该会保留一些东西 then 丢掉一些东西。

<i>wǒ</i>	<i>yīnggāi</i>	<i>huì</i>	<i>bǎoliú</i>	<i>yīxiē</i>	<i>dōngxī</i>	<i>then</i>
1sg	should	aux	keep	some	thing	then
<i>diū-diào</i>	<i>yīxiē</i>	<i>dōngxī</i>				
throw-comp	some	thing				

‘I should be keeping some and throwing some.’ (bjl-ep3)

Chen’s (1986) argument, then, does not address this issue – why is there a special treatment when it comes to 了 *liǎo* in Singapore Mandarin? For instance, why is the complement analysis not used for instances like (1), where there can be also the completion of a change of state – the subject changes from a state of not wearing that set of clothes to a state of wearing. The perfective interpretation in (1) can also be applied to instances like (3), wherein the event of spoiling is seen as a single actualized event.

Second, if 了 *liǎo* is, indeed, a complement marking the completion of a change-of-state, then its distinction with the perfective 了 *liǎo* in sentences such as (1) is indistinguishable, given that a 了 *liǎo* that replaces the perfective 了 *le* (as suggested by Chen 1986) should also be able to express the completion of a change-of-state, as in 长了很多 *zhǎng-le/liǎo hěnduō* ‘grew by a large margin’. Again, it then seems to be of little reason to analyze the 了 *liǎo* in (1) and (3) any differently, other than the fact that the latter co-occurs with a currently-relevant-

state 了 *le* at the sentence-final position. Later studies like Lua (2014) and Lim (2016) simplify the issue by analyzing 了 *liǎo* in such instances as a perfective aspect marker; while their analysis is neater and clearer than that of Chen's (1986), there remain several unanswered questions. The first is that their analyses fail to answer why the construction 'V(O) 了 *liǎo* 了 *le*' (hereafter the *liǎo le* construction) exists when both Lua (2014) and Lim (2016) find the use of the dual-function 了 *le* and 了 *liǎo* in their studies. What, then, are the differences between simply using 了 *le/liǎo* and using *liǎo le* construction? Lim (2016) answers this by suggesting that the currently-relevant-state 了 *le* in Singapore Mandarin does not actually perform a dual function, but the current corpus proves otherwise, as in (6), where 了 *le* marks both the perfective aspect (viewing the action of arrival as a complete whole) and the currently-relevant-state (from not being in this location to being in this location).

(6) 李腾来了。

Lǐténg lái le

NAME arrive PFV.CRS

'Liteng is here.' (xfz8z-ep5)

Second, if 了 *liǎo* in the *liǎo le* construction is analyzed as a perfective aspect marker like the post-verbal 了 *le*, it, then, seems to exhibit slightly different behaviors not accounted for in Lua (2014) and Lim (2016). While the perfective 了 *le* tends to be used in a post-verbal position, the perfective 了 *liǎo* in the *liǎo le* construction can be used after objects as well, as in (4). This is not addressed by Lua (2014) and Lim (2016), but an understanding of this phenomenon may shed light on the functions of the *liǎo le* construction. Given the issues with the limited studies on the use of a grammatical 了 *liǎo* in Singapore Mandarin, it is, therefore, of interest to this thesis to examine the particle and its constructions more closely to tease apart its functions.

3.2. Functions of 了 *liǎo* in Singapore Mandarin

This thesis identifies 389 instances of the aspectual 了 *liǎo*. Table 2 presents the frequencies of each of the constructions that the aspectual 了 *liǎo* can be found in.

Table 2. Constructions in which 了 *liǎo* can appear

Construction	Frequency	Example
V- 了 <i>liǎo</i> - C/O	5 (1.2%)	(7) 一条有四个就去了十四寸。 <i>yī tiáo yǒu sì gè jiù</i> oneCLF has four CLF so <i>qù-liǎo</i> <i>shísì cùn</i> cut-PFV fourteen inches 'There are four pieces, so we have cut away fourteen inches.' (bjl-ep7)
V(-O/C)- 了 <i>liǎo</i>	369 (94.9%)	(8) 九公斤了。 <i>jiǔ gōngjīn liǎo</i> nine kilogram CRS 'It's nine kilograms now.' (mcskcs-ep4)
V(-O/C)- 了了 <i>liǎo le</i>	15 (3.9%)	(9) 已经打烊了了。 <i>yǐjīng dǎyàn liǎo le</i> already close PFV CRS 'It has already closed for the day.' (mcskcs-ep1)
Total	389	

As noted earlier, 了 *liǎo* can occur in the *liǎo le* construction, a construction not yet discussed in other Mandarin varieties like Putonghua and Malaysia Mandarin. This finding aligns with the observations in previous studies like Chen (1986), Lim (2016) and Lua (2014). The *liǎo le* construction is one that has not been observed with the Putonghua and Singapore Mandarin 了 *le*, as in there is no *le le* construction. It should also be pointed out that 了 *liǎo*

always precedes 了 *le* and never the other way around – both in this thesis and in previous discussions of the construction. The syntactic distributions of particles are also note-worthy. The post-verbal 了 *le* takes up around 25% of the data containing 了 *le* in the Singapore Mandarin corpus – this is a far larger proportion as compared to the 2.5% of 了 *liǎo* in the same syntactic position. The 了-particle, when read as *liǎo*, appears to be overwhelmingly used in the sentence-final position, comprising 93% of the data, suggesting a tendency for non-post-verbal positions, a position that is rather common with 了 *le*.

Upon closer examination of the distribution patterns of 了 *liǎo* and comparing it against that of the Singapore Mandarin 了 *le*, this study finds that in general, 了 *liǎo* and 了 *le* perform the same functions – in the post-verbal position, 了 *liǎo* functions as the perfective aspect marker, while in the sentence-final position, it functions as the currently-relevant-state marker. In the *liǎo le* construction, as will be presented in the following sections, this study analyzes 了 *liǎo* as a perfective aspect marker.

3.2.1. 了 *liǎo* as a currently-relevant-state marker

As the currently-relevant state marker, 了 *liǎo* occurs sentence-finally, as in (10).

(10) 二十四年多了。

èrshísì nián duō liǎo

twenty.four years over CRS

‘(It’s been) over twenty-four years.’ (bjl-ep6)

In this position, there are no significant differences observed between the currently-relevant-state 了 *liǎo* and 了 *le* in terms of aspectual functions. There are, however, speculations and hypotheses made about the differences in pragmatic functions, given that at the end of the sentence, 了 *le* (and consequentially, its ‘replacement’ or counterpart 了 *liǎo*) can also be interpreted as a modal particle. For instance, Lee and Cheong (2009) suggest that

了 *liǎo* conveys the speaker's negativity as they note that 了 *liǎo* is often used with derogatory sentences, unlike 了 *le*, which is more neutral; Lim (2016) suggests that 了 *liǎo* conveys a stronger affirmative sense than 了 *le*. However, this study finds no such evidence to support the claim, as the corpus shows that both particles are used in very similar contexts with no differences in its modality or pragmatic functions, as in (11) and (12). The markers are used to signal the departure of the speakers and are received as such by the hearers – in both examples, the acts of leaving are simply acknowledged by the hearers with no more or less emphasis.

(11) A: Ok anyway, 来, 先检查一下刚刚拍的好不好。看一下。

ok anyway lái xiān jiǎnchá-yīxià gānggāng
 ok anyway come first check-a.little just.now
pāi-de hǎo bù hǎo kàn-yīxià
 shoot-COMP good NEG good see-a.while

‘Ok, anyway, should we check our photos? Let’s take a quick look.’

B: ok ok, 你们, 你们, 你们检查, 我要走了啊! 走, 走, 走了。

ok ok nǐmen nǐmen nǐmen jiǎnchá
 ok ok 2PL 2PL 2PL check
wǒ yào zǒu le a zǒu zǒu zǒu le
 1SG want walk CRS PRT walk walk walk CRS

‘Ok, you guys check. I’m going off! Going off now!’

A: Ok ok, bye-bye, bye-bye.

(xfz8z-ep5)

(12) A: 这个东西不是比较容易饱的。Waffle 叻! 我们俩可以, 你不行。

zhè ge dōngxī bù shì bǐjiào róngyì
 this CLF thing NEG be comparatively easy
bǎo de waffle le wǒmen liǎ kěyǐ nǐ bù xíng
 full DE waffle PRT 3PL both can 2SG NEG good

‘This is not very filling. It’s waffles! Enough for the two of us, but not for you.’

B: Ok, 你们慢慢选! 那我走了。

Ok nǐmen màn-man xuǎn nà wǒ zǒu liǎo
ok 2PL slow-slow choose then 1SG walk CRS

‘Ok, you guys choose (what you want to eat) slowly! I’ll take my leave first!’

A: Ok ok, 好好好好, 走。好好。

ok ok hǎo hǎo hǎo hǎo zǒu hǎo hǎo
ok ok good good good good walk good good

‘Ok, sure, sure. Go ahead.’

(xfz8z-ep8)

Both the pronunciations can even be used in the same utterance at the same time (13).

(13) 来了, 来了, 来了, Kym 来了!

lái liǎo lái liǎo lái liǎo Kym lái le
come CRS come CRS come CRS NAME come CRS

‘She’s coming, she’s coming, she’s coming! Kym’s coming!’ (xfz8z-ep3)

3.2.2. 了 *liǎo* as a perfective aspect marker

As a perfective aspect marker, 了 *liǎo* can be used post-verbally. However, this is a rare occurrence in Singapore Mandarin (see Table 2). Even in double-了 *le/了 liǎo* sentences, as in (14), the verb-final 了 is never read as *liǎo*, only as *le*, as observed in this corpus.

(14) 欸老板, 等了五六下了, 还等一下。

āi lǎobǎn děng-le wǔ liù xià liǎo hái děng-yīxià
PRT boss wait-PFV five six CLF CRS still wait-a.while

‘(I’ve) waited for a long time, (you still want me) to wait a while more?’ (mcskcs-ep5)

Instead, the perfective 了 *liǎo* is used more in the *liǎo le* construction, as in (9), which is triple that of the proportion of post-verbal 了 *liǎo*. Another two examples are given in (15) and (16).

(15) “声势浩大”，我知道了了。

shēngshìhàodà *wǒ* *zhīdào liǎo* *liǎo*
 majestic 1sg know pfv crs
 ‘Majestic, I know now!’ (xfz8z-ep1)

(16) 刚才那个水流出去了了！

gāngcái *nà* *gè* *shuǐ* *liú-chūqù* *liǎo* *le*
 just.now that CLF water flow-out PFV CRS
 ‘The water has all flown out just now!’ (mcskcs-ep1-s6)

While the reason for analyzing 了 *liǎo* in *liǎo le* constructions as a perfective marker may be more apparent in (15), given the post-verbal syntactic position of the particle, the same cannot be said of 了 *liǎo* in instances like (16). It is, thus, essential, to first explain why this interpretation is made. There are two major reasons for this. First, looking at the distributions, collocations, and behaviors of the *liǎo le* construction, this study finds that it behaves more similarly to the dual-function 了 *le* and 了 *liǎo*. Syntactically, 了 *liǎo* always occurs in closer proximity to the verb or verbal compound; in all of the *liǎo le* constructions found in this corpus, none occurs in the reverse direction, i.e., 了 *le* 了 *liǎo*. While this does not necessitate the perfective interpretation of 了 *liǎo*, it does, to some extent, highlight the possibility that 了 *liǎo* is less preferred as the sentence-final particle than 了 *le* is in its co-presence. This observation, then, suggests that in the presence of a currently-relevant-state marker, 了 *liǎo* may be more inclined to perform other functions. When reviewing the constraints surrounding the use of the *liǎo le* constructions, it is noted that like the dual-function 了 *le* and 了 *liǎo*, the *liǎo le* construction is also not found to occur with semantically-stative verbs and negation. This suggests that *liǎo le* constructions may be subjected to the same constraints surrounding the

dual-function 了 *le* and 了 *liǎo*, which in turn suggests that a perfective aspect is present in the construction.

Second, 了 *liǎo* as a perfective aspect marker has both historical and cross-linguistic backing. As mentioned earlier, 了 *liǎo* is oft-cited as the lexical source for the perfective 了 *le*, with the latter being a phonetically-eroded pronunciation of its source. However, during the course of grammaticalization, there exists a phase wherein the particle is pronounced as 了 *liǎo* but has a function similar to the present-day perfective 了 *le* and occurs after VO compounds rather than coming in between the V and O, as in (17) (Mei 1981).

(17) 领吾言了便须行

lǐng wú yán-liǎo biàn xū xíng
understand 1SG speech-PFV then need practice

‘(You) have to practice after (you) understood what I said.’ (*Dunhuang Bianwenji* 1957: 602, in Mei, 1981)

A similar use of 了 *liǎo* is also observed in various Chinese vernaculars, ranging from Northern vernaculars like the Shangshui dialect (Central Plains Mandarin) (Chen 2015) to Southern ones like Southern Min (Bodman 1987; Shi 2014; Tan 2014). Particularly important to the discussion is the 了 *liǎo* used in Southern Min, given that Singapore Mandarin is subjected to a substantial degree of substratum influence from the vernacular. Unsurprisingly, the *liǎo le* construction is also observed in Singapore Hokkien, though it presents two differences (c.f. Bodman 1987; Tan 2014). The first is that in Singapore Hokkien, both of the 了-particles are read in the same way, unlike the case in Singapore Mandarin. The second is that, with the exception of Tan (2014), previous studies looking at the use of 了 *liǎo* in Southern Min vernaculars typically analyze the particle as a completive aspect marker, which signals the completion of an action. Yet, as we note in Singapore Mandarin, 了 *liǎo* can be used not just for completed actions, but also actions that are incomplete, as in (18).

(18) 现在工作做得差不多了了。

xiànzài *gōngzuò* *zuò-dé* *chàbùduō* **liǎo** **le**
now work do-COMP almost PFV CRS
'The work is almost done now.' (mcskcs-ep1)

In these instances, the action is simply viewed as a bounded whole, without regard for its internal constituency and with no emphasis on its end. This is more similar to the perfective aspect than to the completive aspect. When compared to Chen (1986), this current interpretation can better account for the usage of 了 *liǎo*, particularly in the *liǎo le* construction, resolving the issues brought about by Chen's complement interpretation of the particle. First, it provides a more streamlined account, needing only one analysis of the same particle across similar usage situations in Singapore Mandarin. Second, while Chen (1986) argues that 了 *liǎo* signals completion of a change of state, this study finds that not only does the use of 了 *liǎo* not necessitate completion, as evidenced by (19), it also does not necessarily code for the completion of a change of state.

(19) A: 反正你们谈得这么开心，就不干扰你们的好事 hor?

fǎnzhèng *nǐmen tán-dé* *zhème* *kāixīn* *jiù*
anyway 2PL talk-COMP so happy then
bù *gānrǎo* *nǐmen de* *hǎo* *shì* *hor*
NEG bother 2PL DE good thing PRT

'I see you are happily chatting with each other; I shan't disturb the two of you!'

B: 结婚了了!

jiéhūn liǎo **le**
marry PFV CRS
'I'm married!'

A: 哎哟!
āiyō
PRT
'Oh no!'

(bjl-ep6)

In (19), based on the context, there is no change of state – the speaker is simply presenting a piece of information already known by the other parties in the conversation (that she is already married for years), not that she was previously not married and just now is. Since there is no change of state, it would, then, not make sense to analyze the 了 *liǎo* in the construction as a marker of completion of a change of state. Rather, a perfective interpretation for 了 *liǎo* would be more logical, signaling a complete (note: complete is not completed; see Comrie 1976: 18) event of marrying, which is then coupled with the currently-relevant-state 了 *le* that simply signals the presence relevance of the marriage (possibly as a humorous reminder that she is married and, therefore, is not looking for an amorous partner). Third, the complement account also cannot account for the instances wherein the *liǎo le* constructions are used with events that do not require complements, such as in (20), where the word 对 *duì* 'correct' is an outcome in and of itself and, thus, no longer require a complement to code for an outcome.

(20) 恭喜你，真的。我的也是对了对了。

gōngxǐ nǐ zhēnde wǒ de yě shì duì liǎo le
congratulate 2SG really 1SG DE also COP correct PFV CRS
'Congratulations, really. Mine is also correct now!' (xfz8z-ep5)

Though the current interpretation is no different from studies such as Lim (2016) and Lua (2014), it should be noted that the current proposal is more comprehensive in that it covers a larger variety of instances possible with 了 *liǎo* and *liǎo le* constructions and provides a clearer and neater way of identifying and accounting for the functions of 了 *liǎo* in Singapore

Mandarin. For instance, while Lua (2014) claims that 了 *liǎo* in the *liǎo le* construction acts as the perfective aspect simply because it occurs in a post-verbal position, with a more naturalistic corpus, this study has demonstrated that *liǎo le* constructions can also occur after nouns, adjectives, and adverbs, and its perfectivity should, thus, not be explained solely based on its collocations. Instead, the analysis should be based on multiple factors, such as context, constraints, and historical developments, all of which have been accounted for in this study.

A question still remains – that is, why is the *liǎo le* construction used when there is already the dual-function 了 *liǎo* and 了 *le*. This study first turns to the analysis of the construction in Singapore Hokkien, where it is reported that the *liǎo le* construction carries a ‘completely; exhaustively’ sense (Bodman 1987: 203; Tan 2014: 13). Again, this explanation is not sufficient for Singapore Mandarin, as the sense is incompatible with instances like (18). However, it does seem that in the instances found in this corpus, the *liǎo le* construction seemingly places a stronger emphasis on the occurrence of the event in the sentence, as in (21).

(21) A: 睡得很爽 hor?

shuì-dé-hěn shuāng hor
 sleep-COMP-very well PRT
 ‘Having a nice sleep?’

B: 天亮了 wor!

tiān liàng liǎo wor
 sky bright CRS PRT
 ‘It’s daybreak now!’

A: 你知道就好，一下子就天亮了了!

nǐ zhīdào jiù hǎo yīxiàzi jiù tiān liàng
 2SG know then good a.while then sky bright
liǎo le
 PFV CRS

‘Good that you know! Day breaks very fast!’

(mcskcs-ep1)

This suggests a possible pragmatic motivation for the preference of the *liǎo le* construction over the dual-function 了 *liǎo* or 了 *le*. As the frequency of the *liǎo le* construction in the current corpus is relatively low, this observation cannot be conclusive as yet, though it does provide further evidence to refine the claims put forth by previous studies.

3.3. Summary

In sum, this chapter has presented the two functions of Singapore Mandarin 了 *liǎo* that are not observed in Putonghua, with a more comprehensive account of its distribution, constraints and possible origins. Linguistic phenomenon previously ignored or unexplained has been addressed, and messy analysis has also been tidied up by adopting this thesis's line of argument. In general, by using a more naturalistic dataset for the analysis of Singapore Mandarin 了 *liǎo*, this chapter has pointed out collocations of 了 *liǎo* previously unobserved, and from there, suggest that all uses of 了 *liǎo* correspond to either the perfective or the currently-relevant-aspect 了 *le*. A possible reason for the use of 了 *liǎo* in Singapore Mandarin is attributed to the substratum influence from Singapore Hokkien, though it must be noted that there remain some differences between the 了 *liǎo* used in the two varieties.

Further studies can be conducted to investigate why the pronunciation for 了 *liǎo* is maintained, despite the pressure from 了 *le* co-existing in Singapore Mandarin. It is also noted that 了 *liǎo* seems to express a stronger emotive intensity than 了 *le*; a follow-up study can be conducted to investigate this issue with respect to the pragmatic roles of Singapore Mandarin 了 *liǎo*. Verb class is also something that has not been looked into for this study but a closer investigation of 了 *liǎo* and its usage situation with different verb classes might shed even more light on its differences with 了 *le* and explain why it is used in a far lower frequency when compared to 了 *le*.

CHAPTER FOUR: THE USE OF 住 *ZHÙ* AS AN ASPECT MARKER

In Putonghua, the morpheme 住 *zhù* performs one of two roles: (a) as a verb, it expresses the meaning ‘to stay’ or ‘to stop’ and (b) as a resultative complement that expresses prohibition, as in 停住 *tíng zhù* ‘stop’, or firmly or tightly, as in 捉住了一只蝴蝶 *zhuō-zhù-le yī zhī húdié* ‘caught a butterfly tightly’ (Lü 2015[1980]). However, in varieties like Malaysia Mandarin (e.g., Han 2011: 43), 住 *zhù* can also be used as an aspect marker in a manner similar to those in Chinese vernaculars, particularly, Yue vernaculars; these studies have often attributed this use to substratum influence from Cantonese. The same has been observed in Singapore Mandarin in both previous studies and in the current corpus, though discussions have been scarce in literature; by far, there has been only one study that has conducted a more comprehensive study of the morpheme as an aspect marker in Singapore Mandarin – Yow (2019). This chapter, therefore, looks at this linguistic phenomenon in more detail in an attempt to identify the aspectual values that may be present with the use of 住 *zhù* in Singapore Mandarin.

4.1. Previous studies on *zhù* constructions

Due to a lack of studies on the aspectual qualities of 住 *zhù* in Singapore Mandarin, this section will also review studies investigating the morpheme 住 *zhù* in the V-住 *zhù* construction (*zhù* construction hereafter) in Putonghua, Malaysia Mandarin, and Yue vernaculars, so as to gain a more comprehensive insight into how previous studies have analyzed this particle.

4.1.1. *The continuous aspect marker: how 住 zhù is analyzed in Yue vernaculars*

The use of *zhù* construction as a continuous aspect marker is seen across many varieties of the Yue dialect, such as the Guigang dialect (Mai 2002), Hong Kong Cantonese (Zhang 2007) and Guangzhou dialect (Li et al. 1995). Like in Putonghua, the morpheme 住 *zhù* can be used as a verb and a complement (Mai 2002; Zhang 2007), though it is also very commonly used as an aspect marker, as in (1) and (2), in these Yue dialects.

(1) 落住雨，唔好走喇。

LUO-ZHU YU WU HAO ZOU LA
drop-CONT rain NEG good walk PRT

‘It’s not very easy to walk through when it is raining.’ (Li et al. 1995: 420)

(2) 佢穿住套衫，显得好靓样。

QU CHUAN-ZHU TAO SHAN XIAN-DE HAO
3SG wear-CONT CLF clothes look-COMP very
LIANG YANG
pretty look

‘She looks very pretty wearing this set of clothes.’ (Mai 2002: 275)

In these instances, it marks the continuous aspect, implying that a state arising from a prior action or event is still on-going. As a continuous marker, as in (1) and (2), 住 *zhù* is typically used in a post-verbal position, and should there be an object taken by the verb, the object occurs after 住 *zhù*. However, if 住 *zhù* occurs after the VO compound, an additional layer meaning of ‘temporariness’ is present, as in (3), where the speaker is seeking for the hearer’s help to tell someone else about the issue for now; this appears to be only possible in yes-no interrogatives (Li et al. 1995).

(3) 讲唔讲得畀佢听住？

JIANG WU JIANG-DE BI QU TING-ZHU
say NEG say-COMP for 3SG listen-CONT

‘Can you help me tell him?’ (Li et al. 1995: 505)

Mai (2002) also points out that 住 *zhù* can mark the progressive aspect in some of the Yue vernaculars, such as in (4).

- (4) A: 你在做什么哩?
 NI ZAI ZUO ME LI
 2SG PROG do what PRT
 ‘What are you doing?’
- B: 睇住电视头。
 DI-ZHU DIANSHITOU
 watch-CONT television
 ‘Watching television shows.’

(Mai 2002: 274)

4.1.2. Grammaticalization towards aspectuality: previous studies on 住 *zhù* in Putonghua

As mentioned in the introduction to this chapter, 住 *zhù* can function as a verb and a complement in Putonghua. However, studies have noted that it may also have aspectual qualities similar to that of 着 *zhe*, that is, it can be analyzed as a continuous aspect marker in instances like (5).

- (5) 朱门，雕窗，掩住一幢幽静小楼。
 zhū mén diào chuāng yǎn-zhù yī chuāng yōujìng
 red door carved window cover-cont one clf quiet
 xiǎo lóu
 small building
 ‘A red door; a carved window; a small quiet building hidden.’ (Fan 2008: 34)

However, these studies claim that it is not a ‘true’ aspect marker (e.g., Fan 2008; Wang 2009); a common argument is that 住 *zhù* still performs a non-aspectual function, unlike 了 *le* and 着 *zhe*. This study disagrees with such an argument. It is not appropriate to assume that

once a morpheme grammaticalizes into an aspect marker, it must drop all other functions that it can perform. For instance, the experiential perfect marker 过 *guò* can still be used as a complement to imply a spatial or temporal passing, as in (6) (Xiao & McEnery 2004: 139-141).

(6) 这位身材魁梧的汉子脸上略过一丝惆怅。

<i>zhè</i>	<i>wèi</i>	<i>shēncái</i>	<i>kuíwú</i>	<i>de</i>	<i>hànzǐ</i>	<i>liǎn-shàng</i>	<i>lüè-guò</i>
this	CLF	figure	burly	DE	man	face-on	flash-COMP
<i>yī</i>	<i>sī</i>	<i>chóuchàng</i>					
one	CLF	melancholy					

‘There was a moment of melancholy across the burly man’s face.’ (Xiao & McEnery 2004: 140)

The same goes for the progressive aspect marker 在 *zài*, which still functions as a verb and a preposition, and the 住 *zhù* in Hong Kong Cantonese; this is observed even in non-Sinitic languages. In English, the construction ‘be + going to’ can be interpreted both in its prospective sense and its more literal, non-grammaticalized meaning, ‘to be headed somewhere’. We do not claim that these markers are, therefore, ‘quasi-aspect markers’ (in the words of studies like Fan 2008 and Wang 2009). Why should this treatment, then, be given to 住 *zhù*?

4.1.3. A review of the case of 住 *zhù* in Malaysia and Singapore Mandarin

Studies on the *zhù* construction in both Malaysia and Singapore Mandarin have been scarce – thus far, only Han (2011) for Malaysia Mandarin and Yow (2019) for Singapore Mandarin discusses the *zhù* construction in detail. In the case of Malaysia Mandarin, Han (2011) claims that in the spoken variety, 住 *zhù* is interchangeable with the continuous aspect marker 着 *zhe*, as in instances like (7), suggesting that 住 *zhù* should also be taken as a continuous aspect marker.

(7) 曾经试过**拿住**菜刀在客厅等。

céngjīng *shì-guò* *ná-zhù* *càidāo* *zài* *kètīng* *děng*
ever try-EXP hold-CONT knife at living.room wait

‘I’ve tried holding a kitchen knife and waiting in the living room.’ (Han 2011: 43)

While 住 *zhù*, in this case, seems to be expressing a state of holding a knife, the issue is with the interchangeability account used to argue for its continuousness. As evidenced by the discussion on 了 *liǎo* in Chapter Three, interchangeability alone cannot account for the use of a particle due to the differences in origins and development. Even though both 着 *zhe* and 住 *zhù* are analyzed to mark the continuous aspect, they should not be assumed to be interchangeable, as they likely have different lexical sources and different pathways of development – a different set of usage patterns should, therefore, be expected from the two constructions. Furthermore, if we follow from the interchangeability argument provided by the study, then the same can be said of 着 *zhe* – that it should be taken as a quasi-aspect marker because it is not interchangeable with 住 *zhù*.

In another example given by Han (2011), cited here as (8), the interchangeability of 住 *zhù* and 着 *zhe* seems to fall apart as 住 *zhù* here can also be interpreted as a complement conveying a sense of ‘being firm’, as in ‘firmly locking in the fragrance and the taste of the rice’.

(8) 蒸饭**锁住**饭香的原汁原味。

zhēng fàn *suǒ-zhù* *fàn* *xiàng* *de* *yuanzhīyuánwèi*
steam rice lock-CONT.COMP rice fragrance DE original.taste

‘Steaming rice locks in its natural fragrance.’ (*Guanghua Ribao* 29/9/2010, cited in Han 2011: 43)

On the other hand, Yow (2019) finds that 住 *zhù* is only interchangeable with 着 *zhe* when the former occurs with activity verbs, such as 看 *kàn* ‘look’ and 抱 *bào* ‘hug’, and that when 住 *zhù* is used as an aspect marker, it is usually also used as a complement, as in (9).

- (9) 肯定是给他女儿的。他让他女儿扶住慢慢走，学走路。是不是，你们一物二用是不是。

<i>kěndìng</i>	<i>shì</i>	<i>gěi</i>	<i>tā</i>	<i>nǚ'ér</i>	<i>de</i>	<i>tā</i>	<i>rang</i>	<i>tā</i>	
definitely	COP	give	3SG	daughter	DE	3SG	give	3SG	
<i>nǚ'ér</i>	<i>fú-zhù</i>	<i>màn-man</i>	<i>zǒu</i>	<i>xué</i>	<i>zǒulù</i>	<i>shì</i>	<i>bù</i>	<i>shì</i>	
daughter	hold-CONT	slow-slow	walk	learn	walk	yes	NEG	yes	
<i>nǐmen</i>	<i>yī</i>	<i>wù</i>	<i>èr</i>	<i>yòng</i>	<i>shì</i>	<i>bù</i>	<i>shì</i>		
2PL	one	item	two	function	yes	NEG	yes		

‘This is definitely for his daughter – he’ll let his daughter hold on to this while learning to walk. Is that right? You are using this one item for two functions?’ (Yow 2019: 12)

As the majority of the aspectual 住 *zhù* is also found performing its complement function, Yow (2019), like studies on 住 *zhù* in Putonghua, claims that the Singapore Mandarin 住 *zhù* is still in the earlier stages of its grammaticalization. Yet, this claim ignores (a) the possibility that the use of 住 *zhù* in Singapore Mandarin is a result of substratum influence and (b) again, like the studies looking at 住 *zhù* in Putonghua, that even fully grammaticalized markers can be understood with their non-grammaticalized meanings. There is also an underlying assumption across these studies that when 住 *zhù* is used as a continuous aspect marker, it must behave in the same way as 着 *zhe* – but given different origins and sources between the two particles, this assumption is not very reasonable and should not form the basis of the analysis of the *zhù* construction. Rather, the construction should be analyzed in its own terms, looking at the circumstances and environment in which it is used. In addition, instead of a ‘quasi-aspect marker’, which has the implicature that there is a ‘real’ aspect marker, this study argues that the *zhù* construction should be taken as one with both complemental and aspectual functions.

4.2. Singapore Mandarin 住 *zhù*: empirical findings and observations

In the current corpus of spoken Singapore Mandarin, 99 *zhù* constructions are identified with an aspectual value, amongst which 75 of them (75.8%) are dual-function markers, that is, the 住 *zhù* also function as complements. Examples for its use can be found in Table 3.

Table 3. Frequencies of the aspectual 住 *zhù* in Singapore Mandarin corpus

	Frequency	Example
<i>zhu</i> as an aspect marker	24 (24.2%)	(10) 看一下, 好! 现在灯 关住 , 然后把这个放在靠窗口的地方。 <i>kàn-yīxià hǎo xiànzài dēng</i> see-a.while good now lamp <i>guān-zhù</i> <i>ránhòubǎ zhè ge fang</i> off-CONT then BA this CLF put <i>zài kào chuāngkǒu de dìfāng</i> at by window DE place ‘Let’s take a look. Good! Now, keep the lights off and place this by the window.’ (bjl-ep8)
<i>zhu</i> as a complement and aspect marker	75 (75.8%)	(11) 你就双手 搭住 她的肩, 用很深情的眼神看住她。 <i>nǐ jiù shuāngshǒu dā-zhù</i> 2SG then both hand place-CONT.COMP <i>tā de jiàn yòng hěn</i> 3SG de shoulder use very <i>shēnqǐng de yǎnshén kàn-zhù tā</i> emotional DE gaze see-CONT 3SG ‘You then place both of your hands firmly on her shoulders and gaze deeply into her eyes.’ (jxhxdbt-ep2)

The frequency is arrived at using three sets of criteria that are derived based on the previous studies of *zhù* constructions in Yue vernaculars, Putonghua, and Singapore Mandarin. Using the context (including the audiovisual information) in which the sentence occurs, this study determines if the 住 *zhù* in the sentence:

- (a) can be interpreted with its complemental meanings, such as ‘firmly’ or ‘prohibition’;
- (b) conveys that a state is in continuance (continuous aspect);
- (c) conveys that there is an action being actively carried out at the reference time, i.e., a current action (progressive aspect).

While this study also attempts to find features that may not be covered by previous studies, such as habituality or other notions of aspectuality, these have not been identified in the corpus.

Where only the aspectual function is observed with 住 *zhù*, the verbs tend to not require a complement either because the outcome is coded for in the context or the verb, as in (10), or that the action does not require the outcome expressed by the complement, as in (12).

(12) 我的顾客常常会发现他们先生最起码有三到四个电话 hor 是隐藏住的。

<i>wǒ</i>	<i>de</i>	<i>gùkè</i>	<i>chángcháng</i>	<i>huì</i>	<i>fāxiàn</i>	<i>tāmen</i>	<i>xiānshēng</i>		
1SG	DE	customer	usually	AUX	discover	3PL	husband		
<i>zùi</i>	<i>qǐmǎ</i>	<i>yǒu</i>	<i>sān</i>	<i>dào</i>	<i>sì</i>	<i>gè</i>	<i>diànhuà</i>	<i>hor</i>	<i>dōu</i>
very	least	have	three	to	four	CLF	telephone	PRT	all
<i>shì</i>	<i>yǐncáng-zhù</i>	<i>de</i>							
COP	hide-CONT	DE							

‘My customers will usually find out that their husbands have hidden away at least three to four telephone numbers.’ (jxhxdbt-ep1)

For instance, in (10), the lights were already turned off prior to the utterance (as in the audiovisual information); the speaker wants to keep the lights off, i.e., keep the continuance of the state of having no lights while placing the furniture in the room. In (12), the outcome of hiding is assumed to be ‘secure’ – that is the real-world understanding of what hiding entails.

As for the other instances, the complement function that occurs with the aspectual function is typically that of ‘firmly’, as in (11), where it is first contextually determined that the agent must firmly hold on to another’s shoulders while gazing into her eyes. This act (of holding on to another’s shoulders) is to be continuously sustained throughout the gaze. Interestingly, none of the instances containing a dual-function 住 *zhù* sees the marker used as a complement expressing prohibition.

4.3. Singapore Mandarin 住 *zhù* as a continuous aspect marker

At first glance, it seems that the *zhù* construction in Singapore Mandarin is similar to those in Yue vernaculars, wherein it can express both the continuous aspect and the progressive aspect in different conditions. For instance, the 住 *zhù* in (10) and (12) codes for the state of being switched off and the state of being hidden respectively, pointing toward a possibility that the *zhù* construction is being used as a continuous marker in these circumstances, while in (11), 住 *zhù* conveys a progressive function with the dynamic verb 搭 *dā* ‘place’ in that the act of holding on to another’s shoulders is being actively carried out. Upon closer investigation, the progressiveness does not actually seem to be present with *zhù* construction in Singapore Mandarin. Based on context, even when the verb is used with dynamic verbs, the *zhù* construction is not expressing nonstativity, a function usually associated with the progressive aspect (see Comrie 1976: 32-40); instead, it is typically used (as in the current corpus) to describe a state of being, as in the 抓 *zhuā* ‘catch’ and 绑 *bǎng* ‘tie’ in (13).

- (13) A: 我有你的一张啦!
wǒ yǒu nǐ de yī zhāng la
 1SG have 2SG DE one CLF PRT
 ‘I have one of yours.’

B: 现在只有李腾**抓住** Ben 的死穴。

xiànzài zhǐyǒu Lǐténg zhuā-zhù Ben de sǐxué
Now only NAME catch-CONT NAME DE achilles.heels

‘Only Liteng has an edge over Ben.’

C: 对，没错。

duì méi cuò
correct NEG wrong

‘That’s right.’

A: 他被人家**绑住**了，你还要跟人家合作！ Ben 就如同这个，待宰的兔子！

tā bèi rénjiā bǎng-zhù le nǐ hái yào gēn rénjiā hézuò Ben jiù rú tóng zhè ge dài zǎi tùzǐ
3SG pass people tie-CONT.COMP CRS 2SG still want
gēn rénjiā hézuò Ben jiù rú tóng zhè ge dài zǎi
with people collaborate NAME alreadylike this CLF wait kill
de tùzǐ
DE rabbit

(xfz8z-ep7)

In particular, the utterance spoken by B does not mean that Liteng is in the act of catching Ben’s Achilles’ heels; it refers to a state wherein Li Teng has some form of an edge over Ben. Compare to (14), which is re-written using 在 *zài*, the progressive aspect marker more commonly used in Singapore Mandarin. In (14), the emphasis is on the act of catching, as Liteng is in active pursuit of Ben’s Achilles’ heels.

(14) 现在只有李腾**在抓**阿 Ben 的死穴。

xiànzài zhǐyǒu Lǐténg zài zhuā Ben de sǐxué
now only NAME PROG catch NAME DE Achilles.heels

‘Only Liteng is trying to find an edge over Ben.’

The same applies to other instances where the verbs can be interpreted in both the dynamic and stative sense, such as (15).

(15) 这个是第二个防身术。他是从后面**捆住**她的那个脖子，然后她就要找一个方法摆脱她的那个攻击对手。

<i>zhè</i>	<i>ge</i>	<i>shì</i>	<i>dì</i>	<i>èr</i>	<i>gè</i>	<i>fángshēn</i>	<i>shù</i>				
this	CLF	COP	number	two	CLF	self.defense	technique				
<i>tā</i>	<i>shì</i>	<i>cóng</i>	<i>hòumiàn</i>	<i>kǔn-zhù</i>		<i>tā</i>	<i>de</i>	<i>nà</i>	<i>ge</i>		
3SG	COP	from	behind	restrain-CONT.COMP		3SG	DE	that	CLF		
<i>bózi</i>	<i>ránhòutā</i>	<i>jiù</i>	<i>yào</i>	<i>zhǎo</i>	<i>yī</i>	<i>gè</i>	<i>fāngfǎ</i>	<i>bǎituō</i>	<i>tā</i>	<i>de</i>	
neck	then	3SG	then	need	find	one	CLF	way	escape	3SG	DE
<i>nà</i>	<i>gè</i>	<i>gōngjíduìshǒu</i>									
that	CLF	attacker									

‘This is the second self-defense technique. So, he has restrained her from behind by grabbing her neck, so she must now find a way to escape her attacker.’ (mcskcs-ep8)

Referring to the context and the audiovisual information behind this utterance, again, 住 *zhù* here is not referring to the act of restraining itself – the attacker is not performing the action at that moment, but has already restrained the victim from the back via a neck lock. The utterance is made to describe the victim being in a state of being restrained and has to find a way out of the restraint. This higher affinity toward a stative interpretation sets the *zhù* construction apart from those in Yue vernaculars, which can be interpreted with the progressive aspect, which, as Comrie (1976: 35) points out, is must refer to acts associated with nonstativity (or dynamicity).

While not directly related to the continuousness of 住 *zhù*, this study also notes that most of the dual-function 住 *zhù* is used with the complemental meaning ‘be firm’. Even in instances that do not require a complemental interpretation of 住 *zhù*, as in (12), the notion of ‘be firm’ or ‘secure’ is still compatible with the verb. For instance, in (12), the state of hiding can be

interpreted as ‘hiding securely’, though the notion of ‘securely’ is not entirely due to the use of 住 *zhù* – as mentioned earlier, the act of hiding something is, based on real-world knowledge, supposed to be done so ‘securely’, such that it will not be discovered by others. This may suggest some form of constraint for the use of this continuous aspect marker, that is, it has a preference for verbs that are compatible with the notion of ‘be firm’ and ‘secure’, which can, in part, explain why 住 *zhù* is used in a much lower frequency than 着 *zhe* (the other reason being a gradual decreolization as speakers have more access to the target language, i.e., Mandarin). This is a rather stark difference between the *zhù* constructions in Yue vernaculars, which can be and is often used solely as a construction marking aspect.

This observation may shed light on processes of language contact in the form of substratum influence, pointing toward how certain categories can be transmitted across languages and how these categories may gain a life of its own in a new but related linguistic environment. It may also explain why in the instances given by previous studies such as Han (2011), Fan (2008), Wang (2009), and Yow (2019), the *zhù* constructions can be interpreted with both its complemental and aspectual functions. Furthermore, the possible constraint in the use of the *zhù* constructions may serve as a distinguishing criterion between 着 *zhe*, the other continuous aspect marker in Singapore Mandarin, and 住 *zhù*, a marker that is likely a result of substratum influence from a variety of Yue vernacular, though a bigger, more naturalistic corpus is needed to be more conclusive.

4.4. Summary

This chapter has investigated the aspectual use of the *zhù* construction in Singapore Mandarin based on the instances found in the current corpus and found that it does express the continuous aspect when used in the *zhù* construction.

While this is a similar conclusion when compared to previous studies, the line of argument in the current thesis is sounder than those studies in that it does not base the analysis of 住 *zhù* on the definition of 着 *zhe*. Instead, it looks at the cross-linguistic definition of the imperfective aspect in an attempt to synthesize and analyze the functions of 住 *zhù*. In doing so, this study finds that although 住 *zhù* is most likely a marker arising from substratum influence from Yue

vernaculars, it is not entirely similar to its source – in particular, it does not function as a progressive aspect marker. Instead, it is used as a continuous aspect marker that is also usually concurrently used as a complement that conveys ‘be firm’.

This dual-function of 住 *zhù* may also be a reason behind its preference for verbs that are compatible with the notion of ‘firm’ and ‘secure’, and why it is used less often than 着 *zhe* (more constrained than 着 *zhe* in terms of linguistic patterns). This also goes further to show that the interchangeability account should not be used as justification for the aspectual qualities (or any grammatical functions for that matter), since every grammatical particle or construction has its own origins and development, resulting in its own set of constraints and usage situations.

CHAPTER FIVE: THE CASE FOR AN EXISTENTIAL PERFECT MARKER

Scholars have observed variations in Singapore Mandarin in areas such as word orders, grammatical aspects, and grammatical categories. This study focuses on 有 *yǒu* in the ‘有 *yǒu* + verb phrases (VP)’ construction (hereafter, *yǒu* construction). In Putonghua, 有 *yǒu* usually takes noun phrases (NP) as its arguments, expressing either the possession (1) or existence (12) of the NP, or attainment of the standard expressed in the NP (3) (Lü 2015[1980]: 630-631).

(1) 他有两个孩子。

tā yǒu liǎng gè hái zi
3SG has two CLF child

‘He has two children.’ (Lü 2015[1980]: 630)

(2) 树上有两只小鸟。

shù-shàng yǒu liǎng zhī xiǎo niǎo
tree-top has two CLF small bird

‘There are two birds on the tree.’ (Lü 2015[1980]: 631)

(3) 他走了有三天了。

tā zǒu-le yǒu sān tiān le
3SG walk-PFV has three day CRS

‘He has walked for three days.’ (Lü 2015[1980]: 631)

However, in varieties like Singapore Mandarin, Taiwan Mandarin, and Hong Kong Mandarin, 有 *yǒu* also takes VPs as its arguments, as in (4), an example given by Lock (1989) on Singapore Mandarin.

(4) 有时候有讲方言。

yǒushíhòu *yǒu* *jiǎng fāngyán*

sometimes has speak dialect

‘Sometimes, we speak dialect.’ (Lock 1989: 292)⁶

Such usage is reminiscent of the 有 *yǒu* in some Chinese dialects, such as Southern Min, Cantonese, and Hakka (e.g., Chen and Wang 2010). The functions of 有 *yǒu* in the *yǒu* construction remain debated in scholarship, with many competing accounts and understandings of the morpheme. In particular, the studies on the *yǒu* construction in Singapore Mandarin are still inconclusive about the status of the morpheme to date, let alone its functions. This study, however, will show that the *yǒu* construction can be understood as an existential perfect marker, that is, it highlights a prior existence of an event or action in relation to a certain reference time.

5.1 Previous studies on the *yǒu* construction

Before going into why 有 *yǒu* should be or can be interpreted as an existential perfect marker, it is necessary to first review current studies on the morpheme and understand how the current scholarship makes sense of this construction. Although the focus of this paper is on the *yǒu* construction in Singapore Mandarin, this section will review papers that revolve around the *yǒu* construction in different varieties of Mandarin so as to gain a more comprehensive understanding of the construction. While many studies argue for the aspectual interpretation of the *yǒu* construction (e.g., Lock 1989; Chen & Wang 2010; Wang 1965; Cheng 1985; Huang 1990; Tsai 2002), these studies provide competing opinions on the issue with no sign of resolution. For instance, Chen and Wang (2010) advocate that 有 *yǒu* should be analyzed as two different aspects depending on its collocations: (a) if the constituent that follows is a dynamic predicate, including dynamic adjectival predicates, 有 *yǒu* codes for a perfect aspect;

⁶ Lock (1989) has glossed 有 *yǒu* simply as ‘has’ despite arguing for an aspectual interpretation. This thesis does not change the gloss by Lock (1989) so as to keep the integrity of the original text.

(b) if the constituent that follows is a static predicate, 有 *yǒu* is interpreted as a resultative aspect in a broader sense. However, there is no clear distinction between a stative predicate (5) and a dynamic adjectival phrase (6).

(5) 这蕊花有红。

ZHE RUI HUA YOU HONG

this CLF flower RES red

‘This flower is red.’ (Zhang 1983: 150, in Chen & Wang 2010: 50)

(6) 你睇我块脸有红无?

NI DI WO KUI LIAN YOU HONG WU

2SG see 1SG CLF face PERF red NEG

‘Is my face red?’ (Chen et al. 2006, in Chen & Wang 2010: 48)

Another common proposal is that 有 *yǒu* expresses the perfective aspect (Wang 1965; Tsai 2002; Chua 2003; Shi 2004; Xu & Wang 2004; Sun 2005; Zhu 2008). Tsai (2002) makes this claim based on two observations. The first is that 有 *yǒu*, like the perfective 了 *le*, can denote the termination of an event. Second, when negating both 有 *yǒu* and 了 *le*, the negative marker 没 *méi* is used. Shi (2004) puts forth yet another argument for the interchangeability of 有 *yǒu* and 了 *le*; that is, they can be substituted with each other with no changes in their meanings. He demonstrates the interchangeability through the similarities in their syntactic structures using the examples in (7).

(7) a. 墙上画有壁画。

qiáng shàng huà yǒu bìhuà

wall on.top.of draw PFV mural

‘There are murals on the wall.’ (Shi 2004: 37)

- b. 墙上画了壁画。
qiáng shàng huà-le bìhuà
 wall on.top.of draw-PFV mural
 ‘There are murals on the wall.’ (Shi 2004: 37)

However, in (7a), 有 *yǒu* can also be analyzed as taking the NP as its argument and expresses the existence of the said object. This is, therefore, not interchangeable with 了 *le*, which is more concerned with the actualization of the act of drawing, presenting it as a single whole (though it does imply that there are murals on the wall). Zhu’s (2008) argument for the perfective account of 有 *yǒu* is that 有 *yǒu* does not co-occur with the perfective 了 *le*, and, therefore, denote the same concept. However, as shown in other studies such as Chua (2003), their co-occurrence is actually possible, as in (8).

(8) 他有买了那本书。

tā yǒu mǎi-le nà běn shū
 3SG PFV buy-PFV that CLF book
 ‘He has bought that book.’ (Chua 2003: 133)

This study also disagrees with the perfective interpretation for the following three reasons. First, as mentioned before in Chapters Three and Four, interchangeability of markers should not be used as an argument for the aspectual interpretations given that these markers often grammaticalize from different sources and are used in different situations. Second, following from Lock (1989), 有 *yǒu*, unlike the perfective 了 *le*, cannot be used in hypotactic constructions in which the completeness of the event in the beta clause is indicated. This suggests that the two are not as interchangeable as thought to be.

Third, and most importantly, it is also observed that 有 *yǒu* can co-occur with imperfective markers, e.g., the continuous 着 *zhe*, as in (9), and the progressive marker 在 *zài*, as given in

(10). The co-occurrence would not be possible if 有 *yǒu* were indeed a perfective marker since the two would then be incompatible on their very foundations – imperfective aspects are concerned with the internal constituency of the event while perfective aspects are concerned with presenting the event as a single whole without regard for its internal temporal structure.

(9) 萧律师再问证人，当学生罢考时，是否有骑着脚踏车到每一个考场去？

Xiāo lǜshī zài wèn zhèngrén dāng xuéshēng bàkǎo shí
NAME lawyer then ask witness when student strike during
shì fǒu yǒu qí-zhe jiǎotàchē dào měi yī gè
be NEG have ride-CONT bicycle to every one CLF
kǎochǎng qù
exam.venue go

‘Xiao asked the witness again if the students were cycling to the examination venues when they decided to sit out of the exams.’ (*Huawen de Jiazhi* 99, in Zhu 2008: 106)

(10) 你有在读书吗？

nǐ yǒu zài dúshū ma
2SG have PROG study PRT

‘Are you studying?’ (Chua 2003: 134)

Lock (1989) suggests 有 *yǒu* is interchangeable with 过 *guò* and should mark experientiality. Yet, again, this study notes the non-interchangeability of 有 *yǒu* and 过 *guò*.

(11) 有时候有讲方言。

yǒushíhòu yǒu jiǎng fāngyán
sometimes has speak dialect

‘Sometimes, we speak dialect.’ (Lock 1989: 292)

In (11), if we were to replace 有 *yǒu* with 过 *guò*, we would end up with the utterance *有时候讲过方言 *yǒushíhòu jiǎng guò fāngyán*, which does not make real-world sense. As discussed in Section 2.5, the experiential marker 过 *guò* denotes the experience of an act or a situation; if used with the temporal clause 有时候 *yǒushíhòu* ‘sometimes’, it implies that the speaker only sometimes has said experience, which is a concept that is not possible in the real world since under no circumstance would the speaker cease to have an experience. Other proposals for the functions of 有 *yǒu* include:

- (a) affirmative aspect: affirming the past happening or present existence of an event (Yue-Hashimoto 1993)
- (b) assertion aspect: emphasizing the realization of an event within a time setting (Bodman 1987; Wu & Zheng 2018)
- (c) marker of habituality (Diao 2000; Shi et al. 2014)
- (d) marker of the past tense (Cheng 1985; Hashimoto 1973)

These studies tend to emphasize the past time reference of 有 *yǒu*, but it is observed that 有 *yǒu* can occur with present and even future events (12).

(12) 他明年有打算去美国。

<i>tā</i>	<i>míngnián</i>	<i>yǒu</i>	<i>dǎsuàn</i>	<i>qù</i>	<i>Měiguó</i>
3SG	next.year	has	plan	go	NAME

‘He has planned to go to the USA next year.’ (Collart 2018)

As the event in (12) has not yet been actualized, it cannot be asserted or affirmed. Collart (2018), therefore, suggests that 有 *yǒu* should be interpreted as a factual marker, wherein “the situation asserted by you is presupposed as being true by the speaker”. He demonstrates that 有 *yǒu* is compatible with future temporal references, though the future must be planned and

not just imagined. This may also explain why when 有 *yǒu* is used with future time references, the future must be planned, or that it can only be used in the protasis clause where the condition is factual. He also remarks that 有 *yǒu* is optional with past events because factual events have a tendency to have already happened. While the study irons certain issues out, there remain some unresolved problems.

First, when the *yǒu* construction is used with future events, there seems to be a closer relationship between the planning of the event and 有 *yǒu*. For instance, in (12), 有 *yǒu* seems to point toward the conceiving of the plan, and not the act itself; the assertion on truthfulness is, thus, on the planning. Second, in the lack of other aspectual markers, 有 *yǒu* has to be used, particularly in the past time. Removal of the marker in sentences like (13) without replacement of another aspect marker typically results in an incomplete sentence.

(13) 寿星婆 Jolin 坦诚有邀绯闻男友彭于晏，但因媒体太多，对方不敢来，不过有打电话祝贺她。

<i>shòuxīngpó</i>	<i>Jolin</i>	<i>tǎnchéng</i>	<i>yǒu</i>	<i>yāo</i>	<i>fēiwén</i>	<i>nányǒu</i>
birthday.girl	NAME	admit	PFV	invite	rumored	boyfriend
<i>PéngYúyàn</i>	<i>dàn</i>	<i>yīn</i>	<i>méití</i>	<i>tài</i>	<i>duō</i>	<i>duìfāng</i>
NAME	but	because	media	too	much	other.party
						NEG
<i>gǎn</i>	<i>lái</i>	<i>bùguò</i>	<i>yǒu</i>	<i>dǎ</i>	<i>diànhuà</i>	<i>zhùhè</i>
dare	come	but	PFV	call	telephone	wish
						3SG

‘The birthday girl, Jolin, admits to inviting her rumored boyfriend, Eddie, who dared not show up due to the prominent media presence, but he did call her.’ (*Lianhe Wanbao* 2007-9-16, in Zhu 2008: 107)

5.2 Singapore Mandarin 有 *yǒu*: some empirical observations

This study identifies 435 *yǒu* constructions. 221 are declaratives and 214 are interrogatives. This distribution refutes previous studies claiming that the construction is more commonly found in interrogatives than in declaratives.

Table 4. Sentence types and the 有 *yǒu* construction

Sentence Type	Construction	Frequency	Example
Declarative	<i>yǒu</i> + VP	221 (50.8%)	(14) 有找到就好。 <i>yǒu zhǎo-dà jiù hǎo</i> PERF _{EXIST} find-ACH then good 'Good that it's found.' (mcskcs-ep3)
Interrogative	<i>yǒu</i> + VP	91 (20.9%)	(15) 有约出来吗? <i>yǒu yuē chūlái ma</i> PERF _{EXIST} ask come.out PRT 'Have you asked her out?' (jhxdbt-ep8)
	<i>yǒu-méiyǒu</i> + VP	123 (28.3%)	(16) 你有没有想看看问题出在哪里? <i>nǐ yǒu-méiyǒu</i> 2SG PERF _{EXIST} -NEG-PERF _{EXIST} <i>xiàng-kàn-kàn wèntí chū</i> think-TENT problem occur <i>zài nǎlǐ</i> at where 'Have you thought about what caused the problem?' (xfz8z-ep8)
Total		435	

Notably, the *yǒu* construction does not occur in imperative sentences, unlike the perfective 了 *le* in (17).

(17) 玩归玩，不要忘了正经事！

wán guī wán bù yào wàng-le zhèngjīngshì
 play return play NEG want forget-PFV serious.matter

‘Please remember that you have serious business to attend to while playing! (bjl-ep6)

However, such an interpretation does not seem to be possible with 有 *yǒu*, where if we substitute 了 *le* in (17), we end with the utterance 不要有忘记正经事 *wánguī wán bù yào yǒu wàng zhèngjīngshì* (intended) ‘Please remember that you have serious business to attend to while playing!’, which does not seem to convey the same imperative sense. A possible reason for this is that, unlike the perfective 了 *le*, 有 *yǒu* is more closely associated with a state. In imperatives, the speaker is attempting to cause a situation to come about through some action, i.e., it is not referring to a state. Also, with stative verbs, such as in (18), the perfective interpretation cannot be arrived at with 有 *yǒu*, showing that it is indeed quite different from the perfective 了 *le*.

(18) 可是男的一直都有喜欢你，你不知道而已。

kěshì nán de yīzhí dōu yǒu xǐhuān nǐ
 but guy DE always entirely PERF_{EXIST} like 2SG
nǐ bù zhīdào éryǐ
 2SG NEG know only

‘The guy has always liked you; you just don’t know it.’ (jxhxdbt-ep3)

It is also observed that 有 *yǒu* can co-occur with other aspect markers, as in Table 5.

Table 5. Co-occurrences with other aspect markers

Co-occurs with	Frequency	Example
了 <i>le</i>	3 (1.7%)	(19)他们有加了太多东西哦。 <i>tāmen yǒu jiā-le tài duō dōngxī</i> 3PL PERF _{EXIST} add-PFV too <i>duō dōngxī ó</i> much thing PRT ‘They have added too much.’ (xmbdwt-ep7)
着 <i>zhe</i>	2 (1.1%)	(20)所以你先看我们这个单有写着。 <i>suǒyǐ nǐ xiān kàn wǒmen zhè ge dān yǒu xiě-zhe</i> so 2SG first see 1PL this CLF list PERF _{EXIST} write-CONT ‘Look at this list; it’s written there.’ (mcskcs-ep1)
住 <i>zhù</i>	1 (0.6%)	(21)那有几只是有含住那个鱼蛋? <i>nà yǒu jǐ zhǐ shì yǒu hán-zhù nà ge yú dàn</i> then have how.many CLF be PERF _{EXIST} contain-CONT that CLF fish.egg ‘Which fishes are nursing eggs?’ (mcskcs-ep7)
在 <i>zài</i>	4 (2.2%)	(22)你有在看。 <i>nǐ yǒu zài kàn</i> 2SG PERF _{EXIST} PROG watch ‘You are watching.’ (xmbdwt-ep6)
过 <i>guò</i>	160 (89.4%)	(23)你有幻想过? <i>nǐ yǒu huànxiǎng-guò</i> 2SG PERF _{EXIST} fantasize-EXP ‘You’ve fantasized about it before?’ (jxhxdbt-ep7)

了 <i>le</i>	7 (3.9%)	(24) 我有问了。 <i>wǒ</i> <i>yǒu</i> <i>wèn</i> <i>le</i> 1SG PERF _{EXIST} ask CRS ‘I’ve asked already.’ (xfz8z-ep8)
Two aspectual markers	2 (1.1%)	(25) 我们有调查过了。 <i>wǒmen</i> <i>yǒu</i> <i>diàochá-guò</i> <i>le</i> 1PL PERF _{EXIST} investigate-EXP CRS ‘We’ve investigated it before.’ (mcskcs-ep8)
Total	179 (100%)	

Interestingly, of the various markers, 有 *yǒu* co-occurs overwhelmingly with the experiential marker 过 *guò*, comprising 89.4% of the data containing co-occurrences; even in the two instances where 有 *yǒu* co-occurs with more than one aspect marker, one of those markers is the experiential perfect marker, as in (25). This marks a very high degree of compatibility between the two markers, which in turn, suggests that there may be a close functional relationship between the two.

It should also be noted that there is a higher occurrence of the *yǒu* construction in past events – 343 (78.9%) of them are used in a past temporal reference (26), while the other 92 (21.1%) are used in the present, or with habitually-occurring events (27).

(26) 刚刚李腾有去吃东西吗?

gānggāng *Lǐténg* *yǒu* *qù* *chī* *dōngxī* *ma*
just.now NAME PERF_{EXIST} go eat thing PRT
‘Did Lee Teng go eat anything just now?’ (xfz8z-ep8)

(27) 我们也有从非洲进来。

wǒmen *yě* *yǒu* *cóng* *Fēizhōu* *jìnlái*
1PL also PERF_{EXIST} from NAME import
'We also import from Africa.' (mcskcs-ep7)

This highlights a major difference between 有 *yǒu* and 过 *guò*. The experiential 过 *guò* codes for an event that has taken place at least once in the past and it presents a discontinuity of this event from the time of reference. For instance, in (28), the utterance suggests that the speaker has had the experience of smoking before, with the implicature that the speaker is no longer smoking at the time of reference.

(28) 我抽过烟。

wǒ *chōu-guò* *yān*
1SG smoke-EXP cigarette
'I have smoked before (I no longer smoke now).'

However, when the experiential marker is substituted with 有 *yǒu*, as in (29), the utterance is simply interpreted with the existence of this event and may even be interpreted with habituality, that is, the speaker is still smoking at the time of reference.

(29) 我有抽烟。

wǒ *yǒu* *chōu* *yān*
1SG PERF_{EXIST} smoke cigarette
'I smoke/I have a habit of smoking.'

The case can be made even clearer when we look at utterances containing both 有 *yǒu* and 过 *guò*. In (30), it seems that with the use of 有 *yǒu*, the experientiality of the participation is emphasized. This suggests that the *yǒu* construction may not simply code for experientiality, but performs a function that can augment the experientiality expressed by 过 *guò*.

(30) 难忘的求婚啊，我有参与过一个。

<i>nánwàng</i>	<i>de</i>	<i>qiúhūn</i>	<i>a</i>	<i>wǒ</i>	<i>yǒu</i>	<i>cānyù-guò</i>
unforgettable	DE	proposal	PRT	1SG	PERF _{EXIST}	participate-EXP
<i>yī</i>	<i>gè</i>					
one	CLF					

‘I have participated in a very unforgettable proposal.’ (jxhxdbt-ep4)

If 有 *yǒu* does not code for experientiality, could it then code for a currently relevant state, like that of 了 *le*, since the resultant state for sentences containing either 了 *le* or 有 *yǒu* can be on-going? Upon comparison, it appears that some of the functions that can be performed by the currently-relevant-state *le* are not possible with 有 *yǒu*. For instance, 有 *yǒu* does not code for a change of state.

(31) 我抽烟了。

<i>wǒ</i>	<i>chōu</i>	<i>yān</i>	<i>le</i>
1SG	smoke	cigarette	CRS

‘I started smoking (I have not been smoking before this.)’

In (31), using the currently-relevant-state 了 *le* means that the speaker was not smoking before the reference time, but has started smoking from the point after the reference time. This same interpretation cannot be yielded with 有 *yǒu*, regardless of the context. The same goes for the reverse.

(32) 也有摆歌台。

yě yǒu bǎi gētái

also PERF_{EXIST} set.up stage

‘We are having a getai too.’ (mcskcs-ep3)

The utterance in (32) is concerned with the existence of the state of setting up a getai (a stage performance). If 有 *yǒu* were to be substituted with currently-relevant-state 了 *le*, as in (33), it would place an emphasis on the change of state, that is, there was no getai before, but it was set up at the time of speech.

(33) 也摆歌台了。

yě bǎi gētái le

also set.up stage CRS

‘We just set up the getai.’

5.3 The existence of an event: 有 *yǒu* as an existential perfect marker

The observations and findings of the Singapore Mandarin *yǒu* construction can be summarized as follows:

- (a) Because 有 *yǒu* can co-occur with almost every possible aspect marker in Singapore Mandarin, it is unlikely that it is simply a substitute for any of them;
- (b) It is not found, nor can it be found, in imperatives, likely because it is more concerned with an anteriority of the event with respect to a reference time than it is in providing a viewpoint into the internal temporal constituency of the event;
- (c) Though it can occur in the same environment as the experiential perfect marker, it is dissimilar in that the state or event in question can be continuous with the time of

reference, and that when the two markers co-occur, the experientiality expressed by 过 *guò* is augmented by 有 *yǒu*;

- (d) Inception or change of state is not possible with 有 *yǒu*, unlike the currently-relevant-state 了 *le*.

Putting together these observations, this study proposes that 有 *yǒu*, as an aspect marker, is concerned with the existence of an event resulting from a prior situation or event. Like the perfect aspect marked by the ‘have’ construction in English, which can either express a perfect of result or a perfect of persistent situation, 有 *yǒu* forms a similar construction to perform these similar functions in Singapore Mandarin. Examples (34) and (35), taken from Comrie’s (1976) study on English, are first presented here for comparisons.

(34) I have had a bath. (Comrie 1976: 56)

(35) We’ve lived here for ten years. (Comrie 1976: 60)

The sentence in (34) implies that the results of the bath, that is, that the speaker does not need a bath at the time of speech, still holds, while the sentence in (35) implies that the state can be taken as one that continues up to the present time (and may continue beyond) (Comrie 1976: 60). The same interpretation can be gotten at with the utterances in the Singapore Mandarin data. For instance, in (36), the utterance implies that the speaker has already eaten and is feeling full from the meal, and thus, no longer needs food.

(36) 不要，我有吃。

bù yào wǒ yǒu chī
NEG want 1SG PERF_{EXIST} eat

‘No need (to give me), I have eaten.’ (bjl-ep6)

Even in interrogatives, the use of 有 *yǒu* seeks to ask for either the affirmation or the negation of the existence of a state or event. In (37), the speaker is looking for the existence or non-existence of the act of drinking coffee; if the answer is affirmative, it then suggests that the result of this act still holds and that the interlocutor is still feeling the awakening effects of the coffee.

(37) 刚刚有没有喝咖啡呢？

<i>gānggāng</i>	<i>yǒu</i>	<i>méi</i>	<i>yǒu</i>	<i>hē</i>	<i>kāfēi</i>	<i>ne</i>
just.now	PERF _{EXIST}	NEG	PERF _{EXIST}	drink	coffee	PRT

‘Have you had coffee just now?’ (xmbdwt-ep6)

Because it implies the persistence or the existence of a state, this study shall, thus, term it as an existential perfect aspect. It should be noted that interpreting 有 *yǒu* as a perfect marker is also consistent with cross-linguistic data, where it has been attested that the perfect aspect frequently develops out of stative auxiliary verbs like ‘have’ (Heine & Kuteva 2002: 245). The grammaticalization of 有 *yǒu* into a perfect marker has also been noted in several Chinese dialects, like Yue, Hakka, and Min (Sun 2018).

There are several advantages to such an interpretation over the previous studies: (a) the existential perfect account covers the use of 有 *yǒu* in all temporal situations, and (b) it does not conflict with existing aspect markers in terms of functions. Unlike studies like Cheng (1985), Tsai (2003), and Chen (2010), which can only account for one or parts of the situations in which 有 *yǒu* occurs as an aspect marker, the proposed analysis captures most, if not all, of the temporal situations of the marker. First, because 有 *yǒu* is often used to refer to a state arising from a prior situation, it is only natural for it to be associated with past events; simply analyzing it as a past tense marker (c.f. Cheng 1985; Chen 2010) does not fully capture the anteriority of the situation expressed by 有 *yǒu*. Analyzing it as an existential perfect marker, however, highlights this relation of the resultant state to a prior action. Additionally, it also explains why 有 *yǒu* is not optional in past time references (c.f. Collart 2018) – despite the

natural affinity between past events and 有 *yǒu*, the use of 有 *yǒu* remains critical in the interpretation of the sentence. It situates the event or state with respect to the reference time and marks the present relevance of the event or state. Without the marker, this layer of meaning is lost and will cause a shift in the meaning of the sentence.

Second, the existential perfect account for 有 *yǒu* also accounts for the habituality that seems to be possible with 有 *yǒu* (c.f. Chen & Wang 2010). As mentioned, 有 *yǒu* can act as a perfect of persistent state, just as ‘have’ can in the English language. However, simply classifying the marker as a habitual marker ignores the other possibilities with 有 *yǒu*. The current proposal does not exclude such possibilities since it marks the existence of a state, which can include the existence of a habit (a persistent action). It should be noted that it is only possible with predicates expressing acts that can be habituated, such as smoking, drinking, or exercising, and must be accompanied by a context. For instance, the act of drinking expressed in (38) can be interpreted as a habit only if the interlocutor is attempting to ask for the habit of drinking; else, the more salient interpretation of the utterance is that the act of drinking exists at the time of speech.

(38) 我有喝酒。

wǒ yǒu hē jiǔ
 1SG PERF_{EXIST} drink alcohol

‘I have drunk alcohol/I have the habit of drinking alcohol.’

On this note, it should also be pointed out that this ambiguity in the interpretation of *yǒu* construction is a possible pragmatic motivation for using the experiential 过 *guò* with the existential you – the use of the experiential constrains the interpretation of 有 *yǒu* to that of marking the existence of an experienced state.

Third, while 有 *yǒu* is not noted in future events in the current study, the proposal of an existential perfect marker does not exclude such uses. Take (39) as an example.

(39) 艺人明天有录节目。

yìrén míngtiān yǒu lù jiémù
artiste tomorrow PERF_{EXIST} record program

‘The artist will record a TV program tomorrow.’ (adapted from Collart 2018)

While Collart (2018) argues that 有 *yǒu* asserts the truthfulness of the situation, this study argues that 有 *yǒu* marks the existence of a planned future situation, in this case, that of recording a TV program. At the speech time, which is also the reference time, the planned state exists – its fruition cannot be arrived at with 有 *yǒu*. Such an interpretation can even be extended to hypothetical or ‘would-have-been’ situations, such as (41).

(40) 如果你有卷的话 hor, 它就会比较韧一点。

rúguǒ nǐ yǒu juǎn dehuà hor tā jiù
if 2SG PERF_{EXIST} wrap if PRT 3SG then
huì bǐjiào rèn yīdiǎn
will comparatively tough a.little

‘If you had wrapped it, it would have been a little tougher.’ (mcskcs-ep6)

In hypothetical situations, 有 *yǒu* marks the hypothetical existence of a situation in relation to the reference time contained within the clause; in (41), it is the hypothetical existence of the event of wrapping in relation to a time before the time of speech.

Besides accounting for the use of 有 *yǒu* in different temporal references, the current proposal of an existential perfect marker can also account for the co-occurrence situations of 有 *yǒu*, and does not conflict with their denotations; instead, it adds an additional layer of meaning to the utterance when it co-occurs with another aspect marker. In particular, in its co-occurrence with 过 *guò*, it augments the experientiality expressed by the experiential perfect

marker by presenting it as the existence of the experience; the experience itself is discontinuous with the present time, but the existence of said experience holds true to the time of reference. When it co-occurs with imperfective markers such as 在 *zài*, it presents the utterance as an existence of the progressivity of a state or situation.

In sum, the proposed interpretation of 有 *yǒu* offers a more streamlined and unified account. For instance, there is no need to distinguish between a past and present event (c.f. Yue-Hashimoto 1993), or between stative and dynamic predicates (c.f. Chen & Wang 2010). The functions of 有 *yǒu* are also made clearer and neater with such an interpretation.

5.4 Beyond Singapore Mandarin: 有 *yǒu* in other varieties and dialects

In terms of other Chinese varieties, this study has already shown that the interpretation is applicable to Taiwan Mandarin; (39) is taken from Collart (2018), based on the Taiwan Mandarin variety. The same can be said of 有 *yǒu* in other varieties.

(41) 当局证实至少有找到六十二具尸体。

<i>dāngjú</i>	<i>zhèngshí</i>	<i>zhìshǎo</i>	<i>yǒu</i>	<i>zhǎo-dào</i>	<i>liùshí'èr</i>
authority	verify	at.least	PERF _{EXIST}	find-ACH	sixty.two
<i>jù</i>	<i>shītǐ</i>				
CLF	corpse				

‘The authorities have verified that at least sixty-two bodies were found.’ (*Xingdao Ribao* 2000-9-28, in Shi et al. 2014)

(42) 你有没有听说什么？

<i>nǐ</i>	<i>yǒu</i>	<i>méi</i>	<i>yǒu</i>	<i>tīngshuō</i>	<i>shénme</i>
2SG	PERF _{EXIST}	NEG	PERF _{EXIST}	hearsay	what

‘Have you heard anything?’ (CCTV1 2001, in Wang et al. 2006: 10)

(41) is an example from Hong Kong Mandarin, while (42) is from Putonghua. In these examples, the function of the existential perfect marker can also be applied to understand the

utterance. Taking (41) as an example, the use of the existential perfect 有 *yǒu* marks the existence of the resultant state of the act of finding.

The problems arise when we try to apply the proposed analysis to the *yǒu* construction in Chinese dialects. There are two major differences between the *yǒu* construction in Singapore Mandarin and in various Chinese dialects. Besides taking VPs as its arguments, the *yǒu* construction in some Chinese dialects, such as Minnan dialects and Huizhou dialects can also be comprised of adjectival predicates (AP), such as 红 *hóng* ‘red’ and 美 *měi* ‘pretty’. Such collocations have not been observed in the Singapore Mandarin data – without such data, could the proposed analysis of an existential perfect marker only apply to situations where 有 *yǒu* takes a verb phrase? This section turns to the data put forth by previous scholars and will show that the proposed analysis can also be applied to these instances for a neater account of the linguistic phenomenon.

It should first be noted that the existential perfect account of 有 *yǒu* can be applied to cases where the marker takes VPs in Chinese dialects, such as in (43). In each of the instances, 有 *yǒu* serves to express the existence of the state.

(43) 伊有了解我。

YI	YOU	LIAOJIE	WO
3SG	PERF _{EXIST}	understand	1SG

‘He/She understands me.’ (Cheng 1981: 157, in Chen & Wang 2010: 47)

In terms of APs, consider (44) below. Chen and Wang (2010) claim that such utterances present a state and affirm its truthfulness. While this study argues against the truthfulness or factuality account of the use of 有 *yǒu*, it can still be reconciled with the existential perfect analysis – since the state marked by 有 *yǒu* is assumed to be true, it can then be taken as existing. The marker then acts as a perfect of a persistent situation in such instances, presenting the state, which (44), the state of being pretty, as an actual, existent state that holds true.

(44) 这双鞋有水。

ZHE SHUANG XIE YOU SHUI
this CLF shoe PERF_{EXIST} pretty

‘This pair of shoes is indeed pretty.’ (Zhang 1983: 150, in Chen & Wang 2010: 47)

5.5 Summary

This study has shown that 有 *yǒu* should be analyzed as an existential perfect marker, which is concerned with the existent state of an event with respect to a time of reference; we have also demonstrated that this proposal is not just applicable to Singapore Mandarin, but also to other varieties, like Taiwan, Hong Kong, and Mainland China Mandarin, and also to various Chinese dialects, like Southern Min and Huizhou dialects. This streamlines previous attempts by providing one category that captures most, if not all, of the functions of 有 *yǒu* discussed thus far.

A follow-up study can explore the modality of 有 *yǒu*, which has also been discussed in some of the previous research, such as Collart (2018). Since aspect and modality are closely related categories, it should not be surprising to see 有 *yǒu* carry modal interpretations that are not discussed in the present study. In addition, while this study has already shown, using data from previous research, that the proposal is applicable to other varieties of Mandarin and Chinese dialects, it may still be worthwhile to delve even deeper into the issue and tease apart differences, if any, in the way the *yǒu* construction is used in the regional variants and dialects.

CHAPTER SIX: CONCLUSION

6.1 Summary

Noting that there has been little systematic and organized research on the aspect marking in Singapore Mandarin, this thesis has started off with the general aim of identifying the features of grammatical aspects. In doing so, this thesis finds several features that were either previously erroneously described or neglected.

In Chapter Two, an overview of the grammatical aspectual system in Singapore Mandarin is given and features of six of these markers, namely the perfective aspect marker 了 *le*, the currently-relevant-state marker 了 *le*, the continuous aspect marker 着 *zhe*, the progressive marker 在 *zài*, the experiential perfect marker 过 *guò*, and the delimitative/tentative aspect marker in verb reduplication. In particular, it is found that previous studies had several misinterpretations of the delimitative marker in verb reduplication and the experiential perfect 过 *guò*. Where previous studies like Chen (1986), Chu (1996), and Phua and Liang (to appear) have analyzed verb reduplication as a completive or a perfective aspect marker, this study finds that their analysis lacks concrete evidence and can be easily refuted using the data found in the current corpus. The same issue can be said of the experiential perfect *guo* – while Zhu (2008) claims that *guo* can mark the compensative aspect, this study finds that at least in the current corpus, the compensative aspect is not marked solely using the marker 过 *guò* but by the use of temporal adverbs like 再 *zài* and 重新 *chóngxīn*, which often co-occur with 过 *guò* in expressions of ‘re-experience’.

Chapter Three provides an account for the possible functions of 了 *liǎo* in Singapore Mandarin using the current data. It is found that while 了 *liǎo* can perform the grammatical roles of 了 *le*, it presents its own set of constraints, particularly when used as a perfective aspect marker. Specifically, it occurs after a verb-object compound and before the sentence-final 了 *le*, which is a position not possible with the perfective aspect marker 了 *le* in both Singapore Mandarin and Putonghua. Although the outcome of the analysis is no different from previous studies like Lua (2014) and Lim (2016), the process given in this study pays more attention to the context and the data and tidies up the loose ends in the previous studies. The previously

unexplained or overlooked phenomenon was also investigated and addressed, allowing for a neater and more comprehensive understanding of 了 *liǎo* for future studies to work with.

The *zhù* construction is discussed in Chapter Four. It is found that while the marker can mark a similar aspect as with 着 *zhe*, they share different sources and should not be analyzed on the same terms. Based on the examples identified in the current corpus, this study observes that the 住 *zhù* in these constructions mark a continuous aspect, due to its non-restriction to nonstative events and higher affinity for stative ones. This is unlike its cognates in Yue vernaculars, which have been reported to be a likely source in varieties with similar linguistic environments (such as Malaysia Mandarin) – 住 *zhù* in various Yue vernaculars may also mark the progressive aspect, a grammatical aspect closely related to the continuous. In addition, it seems that 住 *zhù* in Singapore Mandarin also prefer verbs and events that are compatible with the notion of ‘be firm’, a meaning expressed by 住 *zhù* when used as a complement; this could potentially be one of the reasons as to why the marker is much less frequently used than 着 *zhe*.

Finally, in Chapter Five, the case for an existential perfect marker in 有 *yǒu* is raised. The functions of 有 *yǒu* in *yǒu* constructions are investigated using the current corpus. Unlike previous studies on the construction, this thesis does not claim that 有 *yǒu* acts as a substitute for any of the other existing aspect markers in Mandarin. Instead, based on the corpora data, this thesis argues for the case of an existential perfect aspect, that is, 有 *yǒu* highlights a prior existence of an event or state in relation to a reference time. This interpretation is not only applicable to Singapore Mandarin, but also to other varieties and Chinese vernaculars, providing for a more streamlined account of the construction cross-linguistically.

Due to the limitations of the corpus used in this study, this thesis recognizes that its findings may not be generalized to the entire variety, but it is hoped that with this study, the gaps in previous studies are filled in and future studies can have a more comprehensive understanding of what is and may be possible with the variety.

6.2 Future studies

Aside from the possible extensions regarding individual variations in aspect marking mentioned in their respective chapter summaries, future studies on the aspect in Singapore Mandarin can also investigate the situation aspect and its interactions with these grammatical aspects, as pointed out in Chapter Three. Due to the inherent connection between the two categories, a study investigating these issues may shed more light on the use and disuse of grammatical aspect markers in Singapore Mandarin, and may even lead to potential extensions in theoretical understandings in the language variety in general.

It should also be noted that while corpora studies are valuable in providing us with empirical data, with which we can generalize the usage patterns of various particles and constructions, there are certain limitations that have to be taken into account. As demonstrated in various parts of this thesis, contexts can sometimes provide critical insight into the functions and constraints of the markers, and may even shed light on discourse-level properties that help define these markers and constructions even more accurately. Furthermore, not all situations of use can be captured by a single corpus – for instance, 中 *zhōng* is used very minimally in the spoken variety of the language but does seem more common in written discourse, as evidenced by previous studies like (Diao 2013). Future studies may want to consider using other methods of investigation, such as interviews and language documentation, in conjunction with using the corpus in order to capture all the nuances in language use.

Finally, future studies can also look into a typology of aspect markers across different Mandarin varieties and Chinese dialects, such as those done in Hashimoto (1973) and Chappell (1992). For instance, it has been noted that in Modern Mandarin, in particular, Putonghua, the progressive marker 在 *zài* is the only marker, thus far, to be placed pre-verbally; i.e., the variety has a preference for post-verbal aspect markers (Chappell 1992). The case is clearly different in other varieties and dialects – Southern Min marks aspect pre-verbally almost exclusively (Chappell 1992). In addition, the number of aspects possible within a variety or dialect also differs, as shown in both Hashimoto (1973) and Chappell (1992). Their research has all been done with reference to Putonghua; adding other varieties of Mandarin to the comparison may

return other interesting features of the typology of aspect marking in these Sinitic languages in general.

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