Developing a pedagogical framework for teaching Chinese aspect markers *le*, *guo*, *zai* and *zhe* --- a comparative study of the Grammar-Translation approach and a communicative approach

Qiaochao Zhang

Doctor of Philosophy

Aston University

05/11/2015

© Qiaochao Zhang, 2015

[Qiaochao Zhang] asserts [her] moral right to be identified as the author of this thesis This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without appropriate permission or acknowledgement.

Aston University

Developing a pedagogical framework for teaching Chinese aspect markers --- a comparative study of the Grammar-Translation approach and a communicative approach

Qiaochao Zhang

PhD 2015

Summary

The L2 acquisition of Chinese aspect markers has been investigated by many researchers (Sun, D. 1993; Zhao, L. 1996; Wen, X. 1997; Teng, S. 1999; Li, D. and Duff 1998, Duff and Li, D. 2002; Jin, L. and Hendriks 2005; Ma, L. 2006). Their studies show two main findings, one is the acquisition order of the aspect markers, and the other is the accuracy in using the aspect markers. Among those, only Duff and Li, D. (2002) mentioned the effect of teaching on the accuracy of using Chinese aspect. However, it is unknown what impacts teaching methods/approaches could have on learners' use of the aspect markers. This thesis aims to contribute to filling that gap. It explores whether a specific teaching framework assists the learning of Chinese aspect markers by L2 learners. We designed a session of Chinese aspect following the acquisition order of the Chinese aspect markers suggested by previous studies. The session was delivered to two groups of beginner level learners in a UK university using different teaching approaches. One is the Grammar-Translation approach, which focuses on learning of aspectual forms, and the other is a communicative approach, which focuses on comprehension. The learners took a pre-test assessing their general knowledge of Chinese, an immediate test after the teaching session on aspect to compare the immediate impact of teaching approaches, and a post-test after two months to trace the lasting effect the teaching approaches. The results show that the Grammar-Translation approach leads to better accuracy levels than communicative approach in using aspects in grammatical tasks, whereas the communicative approach does not necessarily lead to learners' better use of aspect than the grammar-translation approach in comprehension tasks.

Key words: Chinese aspect markers approach L2 acquisition and teaching Grammar-Translation approach communicative

Acknowledgement

When I was a teenager, I dreamed to be a business woman. I chose to study business combined with English hoping one day I would work in international business. To pursue my dream, I came to the UK to continue with my study in business and English until one day I realized that my passion was not in business but in teaching and languages. In the section of education and linguistics, I am like a snail climbing a ladder. Although slow, I am making progress.

In China, we often call people who give us a favour in life: Guiren (a valuable person), which symbolizes the importance of their existence to us. In my life, I have met so many Guirens in the path of my career and my research. My first and biggest thank you needs to go to my PhD supervisor Dr Emmanuelle Labeau. She guides me to grow from an academically naïve student to an equipped and deep-minded thinker in linguistics. Her patience and encouragement are like a lighthouse in the sea that enlightens my desire in continuing the research. Her sharp view and down to the point comment on my work broaden my thoughts in research, although sometimes it is very painful to change the way of thinking.

My second thank you goes to my husband, Dr Yangang Xing, who not only provides a helping hand in my life, but shares his moment of research with me. I feel very privileged to have him pushing me forward, even though he drives me crazy sometimes.

I also need to thank the School of Languages and Social Sciences in Aston University for offering me the opportunity to do my PhD research and to develop my research skills. My colleagues in the research section, especially Thomas Dan, are always there to take care of my research needs. In addition, I would like to thank my colleague, Ghizlane Lafdi, for translating articles from French to English for me to read. I also would like to thank all the people I met in the conferences for their precious opinions on my research, so that I can think over what I presented. Last but not least, I need to say thanks to all my students. It is they who make me reflect and think about teaching. Without them, it is not possible for me to complete this research.

Finally, I would like to quote an old saying in 《礼记》 (<Book of Rites>) to represent the essence of this research: 教学相长 (teaching others teaches yourself).

Abbreviation

CG1	communicative group in pilot study
CG2	communicative group in main study
CLF	Noun classifier
CS	cloze slot
GT1	Grammar-Translation group in pilot study
GT2	Grammar-Translation group in main study
IT	immediate test
N/A	not applicable (leave it blank)
TS	translation sentence
РТ	post-test
RVC	resultative verb complement
SF le	sentence final le
SQA	Specified Quantity of A
VF le	verb final le

Contents

Summary	2
Acknowledgement	3
Abbreviation	4
Chapter 1: Introduction	7
1.1 Chinese and aspect	7
1.2 Teaching Chinese as a foreign language	
1.3 Overview of the study	
Chapter 2: Aspect and Chinese aspect markers	.10
2.1 Introduction	
2.2 Tense	10
2.3 Aspect	11
2.3.1 Lexical aspect and its semantic features	11
2.3.2 Grammatical aspect	
2.4 Tense and aspect.	
2.5 Chinese aspect	
2.5.1 Chinese verbs and lexical aspect.	
2.5.2 Chinese grammatical aspect markers	
2.5.2.1 Chinese perfective markers <i>le</i>	
2.5.2.1 Verb final <i>le</i>	
2.5.2.1.1 Verb final <i>le</i>	
2.5.2.2 Chinese perfective marker <i>guo</i>	
2.5.2.3 Chinese imperfective markers <i>zhe</i> and <i>zai</i>	
2.5.2.3.1 Durative marker <i>zhe</i>	
2.5.2.3.2 Progressive marker <i>zai</i>	
2.6 Conclusion	
Chapter 3: Second language learning and teaching	.36
3.1 Introduction	.36
3.2 Second language learning and acquisition	
3.3 Second language teaching and learning	
3.3.1 Focus on Form and focus on forms	
3.3.2 Noticing methods	
3.4 Aspect acquisition hypothesis	
3.5 Studies on instructed L2 aspect acquisition	
3.6 Chinese aspect acquisition	
3.6.1 L1 Chinese aspect acquisition	
3.6.2 L2 Chinese aspect acquisition	
3.7 Conclusion	
Chapter 4: Research methodology	.61
4.1 Research hypothesis	.61
4.2 Pilot study	
4.2.1 Participants	
4.2.2 Teaching materials and design of classes	
4.2.3 Tests and testing material	
4.2.4 Data collection	
4.3 Changes in main research	

4.4 Conclusion	74
Chapter 5: Data analysis	75
5.1 Control group's data	75
5.2 Data analysis for the pilot study	
5.2.1 Pre-test	
5.2.2 Immediate test	
5.2.3 Post-test	103
5.2.4 Discussion on pilot study	104
5.3 Main study	106
5.3.1 Pre-test	106
5.3.2 Immediate test	107
5.3.3 Post-test	
5.3.3.1 Translation task	
5.3.3.2 Cloze task	
5.3.3.3 Writing task	
5.4 Discussion	
5.4.1 Test on hypotheses one	
5.4.2 Test on hypotheses two	131
5.5 Conclusion	136
Chapter 6: Conclusion	138
6.1Discussion on issues raised in the research	138
6.2 The influence of teaching approach on Chinese aspect markers' learning	140
6.3 Acquisition order of Chinese aspect markers le, guo, zai and zhe	142
6.4 Cyclical teaching of Chinese aspect markers	143
6.5 Limitation of the study	144
Reference	146
Appendices	159

Chapter 1 Introduction

Chinese belongs to the family of Sino-Tibetan languages, and it has two characteristic features. One is that the logographic writing system is made up of characters (e.g. \neq Chinese character); the other is that some written Chinese is not directly related to its pronunciation (Liu *et al.* 2002), although the majority of which are classified as 'pictophonetic'¹. Chinese includes dialects e.g. Cantonese and standard Chinese called Mandarin. However, in many situations, 'Chinese' is used to stand for 'Mandarin' due to the common use of Mandarin in practice. In this thesis, we follow the trend of using 'Chinese' for 'Mandarin'. When comparing Chinese to Indo-European languages, many linguistic features, such as phonological, lexical and syntactic structures, are significantly different (Li, P. and Shirai 2000). Among all the differences, Chinese aspects bring some of the greatest difficulties in language learning.

1.1 Chinese and aspect

Chinese has no verbal inflections to indicate temporal information, such as tense and aspect in English and other European languages (Li, P. and Shirai 2000). Tense and aspect can both provide temporal information. However, tense indicates 'the temporal location of a situation' or an event when occurred (Xiao and McEnery 2004: 2) in relation to the time when the utterance is made (Klein 1994). Whereas aspect indicates 'the temporal shape of a situation' or an event (Xiao and McEnery 2004: 2), namely the way a situation is viewed, and it can be viewed either as ongoing or as a whole (Comrie 1976). Many researchers claim that Chinese has no explicit tense marking system (Hu, J., Pan, H. and Xu, L. 2001; Xiao and McEnery 2004; Smith 1997), but has a salient aspect system including 'a rich set of grammaticized aspect markers, in the form of free-standing morphemes' (Li, P. and Shirai 2000: 91), such as *zai*, *zhe*, *le*, *guo*² However, the claim on the absence of tense does not conflict with the fact that Chinese has ways of indicating that a situation is in the past, present or future. In fact, tense in Chinese can be denoted when aspect interacts with other temporal information such as adverbial phrases (i.e. *yesterday afternoon*) or context³ (Smith and Erbaugh 2005). Because of the unmarkedness of tense and the twisted interaction between tense and aspect in Chinese, it is very challenging for speakers of Indo-European languages to accurately and appropriately use aspect to convey temporal information. From the teaching perspective, how to introduce Chinese aspect to learners, therefore, needs hand-on investigations.

¹ Dai, T. (1881) claims six principles in Chinese characters composition, namely indicatives or simple ideographs (e.g. 一 one), pictographs (e.g. 山 mountain), compound ideographs (e.g. 从 follow), deflected characters (e.g. 考 test and 老 old), adoptive characters (e.g. 又 again for 右 right) and phonetic characters (e.g. 菜 vegitable). Phonetic characters combine a phonetic element with a semantic component, which shows the category of meaning to which the character belongs. For the character 菜 (cài vegitable), the top part indicates grass or plants, the bottom part 采 (cǎi pick) gives an indication of sound.

² See chapter 2.4.

³ See table 1 in chapter 2.

1.2 Teaching Chinese as a foreign language

The study on teaching Chinese to non-native Chinese speakers started in the twentieth century both in and out of China (Xing, J. 2006). Xing, J. (ibid: 10) lists many works on Chinese pedagogy, but none of them are on teaching Chinese aspects. However, the research on Chinese aspects (Li, C. and Thompson 1981; Tai, J. 1984; Chang, V. 1986; Chu, C. 1987; Li, P. 1990; Xiao and McEnery 2004; Ma, L. 2006) and Chinese aspect acquisition (Erbaugh 1978, 1982, 1992; Li, P. 1990; Sun, D. 1993; Wen, X. 1995, 1997; Zhao, L. 1996; Hendriks *et al* 1998; Li, P. and Bowerman 1998; Li, D. and Duff 1998, Duff and Li, D. 2002; Teng, S. 1999; Yang *et al* 1999, 2000; Li, P. and Shirai 2000; Jin, L. and Hendriks 2005; Zhang, Q. 2008; Chen, J. and Shirai 2010) have been attracting more and more attention in the past three decades. These studies provide a good base for the discussion of pedagogical issues in Chinese aspect teaching.

1.3 Overview of the study

This study aims at bridging the gap between Chinese aspect acquisition and Chinese aspect teaching. The first part of the research (Chapter 2) looks at the difference of tense and aspect in general, and then discusses aspectual features of Chinese aspect markers. According to Li, C. and Thompson (1981) and Xiao and McEnery (2004), Chinese has different ways of expressing aspect: (1) Use of verbs or verbal phrases such as verb reduplication or resultative verb complement (RVC)⁴; (2) Use of aspect markers. These aspect markers are in pervasive use in Chinese, but they do not mark every perfective and imperfective situation. This will be further discussed in Chapter 2. Therefore, the research focuses on the acquisition of the aspect markers.

The second part (Chapter 3) consists in a review of second language acquisition of aspect. Concerning second language acquisition (SLA) and foreign language learning (FLL), VanPatten (1990) states that the difference between these two concepts lies in the acquisition/learning environment, as SLA takes place in a native-speaking environment where the language acquired is used, and FLL occurs in a non-native classroom environment. Nevertheless, VanPatten (ibid) also points out that SLA and FLL are both based on linguistics and psycholinguistics, and they share a theoretical background. Gass (1990: 38) further states that in SLA and FLL 'the two learning situations may in fact only be a difference of degree rather than an absolute difference in which productive competence is possible in one situation, but not in another'. Therefore, the theories in SLA lay a foundation for this research on the learning of Chinese aspect in the UK.

The third part (Chapter 4 and Chapter 5) provides empirical information to reveal the relative effect of instructions on the learning of the Chinese aspect markers in a controlled environment. The research considers two teaching approaches, a communicative approach as a type of form-focused instruction,

⁴ RVC is a type of compounded verbs, which can indicate the goal of an activity (Li and Thompson 1981).

and a Grammar-Translation approach in the category of forms-focused instruction (Long and Robinson 1998). The reason for using the Grammar-Translation approach is that, first, aspect is a grammatical phenomenon. Therefore, it is assumed that clear instruction on aspect will promote learners' awareness of the rules of Chinese aspect at early stages (Peters 1934; Duff 1989). Second, it is assumed that translation exercises will reinforce the learning in increasing the accuracy level by drawing learners' attention to linguistic and pragmatic features of the target language (Stoddart 2000). On the other hand, the communicative approach emphasizes comprehension at discourse level (Johnson 1999). It gives situations within which the aspect markers are used. The research proposes two hypotheses on the teaching approaches:

- (1) The Grammar-Translation approach leads to higher accuracy levels in using aspects than communicative approach does in grammatical tasks.
- (2) A coommunicative approach leads to better use of aspects than the Grammar-Translation approach does in comprehension tasks.

Finally, on the base of the research findings, a teaching framework is developed at the end (Chapter 6). In the next chapter, we will look at aspect and Chinese aspect markers as a start.

Chapter 2 Aspect and Chinese aspect markers

2.1 Introduction

The studies of Chinese aspect were first assimilated to Western tenses in the 1920s, and they were 'influenced to a large extent by research into Indo-European languages' (Yang, G. 2007: 26). Although 'there is no generally agreed account of the aspect system of [Chinese] (Xiao and McEnery 2004: 3) to date, many researchers' findings show that Chinese aspect can be marked lexically and grammatically (e.g. Chao, Y. 1968; Li, C. and Thompson 1981; Li, P. and Shirai 2000; Xiao and McEnery 2004, Yang, G. 2007; etc). As in other languages, the categorizations of Chinese aspect are based on the fundamental concepts of time, and sometimes space. 'Tense and aspect are the two major concepts of temporality encoded in verbal morphology' (Salaberry 2000: 14). In this chapter, we firstly distinguish tense from aspect, since both of the terms are closely linked to time.⁵ We then discuss Chinese lexical aspect and grammatical aspect respectively.

2.2 Tense

Tense is 'grammaticalised expressions of location in time' (Comrie 1985: 9). It is a deictic category, which refers to 'the time of the utterance or, alternatively to the speech time' (Lyons 1968: 315). The definitions of tense are extensively influenced by Reichenbach's (1947) description, where a model made of three time points was proposed. The time points include the point of speech (S) – the time when a description of a situation is made, the point of event (E) – the time when an event happens and the point of reference (R) – the time when an event is perceived. The relative positions of S and R on a spatial timeline distinguish tense in three types: past, present and future. When R happens before S (R-S), the tense is past. When R and S arise simultaneously (R, S), it is present tense, and when R is after S (S-R), it is future tense. Reichenbach uses E and R to further discriminate the three types of tense into anterior (E-R), simple (E, R) and posterior (R-E) tense. For example, in *Peter had gone*, the point of event is when Peter went, and the point of reference is a time between this point and the point of speech (Reichenbach 1947: 288). However, as pointed by Reichenbach himself, the point of reference (R) relies on the context of the speech, such as in a story. Without the context, the point of reference is not clear.

Comrie (1985) adapts Reichenbach's tense theory, but takes it a step further. He gives a deictic centre on a timeline, and claims that the time points need to refer to a reference point⁶. He further distinguishes absolute tense and relative tense. The event time to the speech time gives absolute tense,⁷ such as past, present and future. The relative tense is 'where a situation is located at, before, or

⁵ Labeau (2005) gave a very detailed explanation on cosmic, physical, human, linguistic time alongside the verbal time.

⁶ Comrie (1976: 14) states that 'a system which relates entities to a reference point is termed a deictic system'.

⁷ Absolute tense indicates 'where a situation is located at, before, or after the present moment' (Comrie 1985:

after a reference point given by context' (Comrie 1985: 65). According to Comrie, the deictic centre is time of speech in absolute tense, and it shifts to time of reference in relative tense. Although researchers embrace the idea that tense is a deictic system, Comrie's tense theory is criticized for being ambiguous in defining deixis and the point of reference (Dahl 1987). Is the deictic centre the time of speech or the time of reference? Researchers like Klein (1994) and Olsen (1997) believe that the point of reference should be separated from the deictic centre (Yang, G. 2007). Klein (1994) argues that absolute tense is deictic and it is defined by the topic time (TT)⁸ and the time of utterance (TU), whereas 'relative tenses are a combination of tense and aspect' (Klein 1994: 131). Klein (1994: 138) believes that the relation of TT and time of situation (TSit) gives aspectual views, and 'there is no real temporal connection between the event of speaking and the situation described'. For example, 'the (present) perfect cannot be combined with deictic adverbials referring to the past' (Klein 1994: 132). Olsen (1997) holds the same ground as Klein, although she uses different terms: ET for event time, RT for reference time and ST for speech time. In order to verify the argument, we need to look at what aspect is.

2.3 Aspect

The term '*aspect*' is a loan word translated from Russian '*vid*', and it has the meaning of '*see, view*' (Binnick 1991). The earliest discussion on aspect starts with the discussion of verbs by Greek philosophers, Aristotle's opinions on verbs being the most prominent one (ibid). The Aristotelian verb classification (Binnick 1991: 143) is still widely referred to by researchers, such as Vendler (1957) in linguistic philosophy and Smith (1997) in linguistic theory. Over the last century, the studies on aspect have moved from lexis to both lexical aspect and grammatical aspect. Aspect is not only embedded in semantics covertly, but 'obligatorily encoded in the form of auxiliaries plus participles (e.g., *Passé Composé* in French), inflectional morphology (Imperfect-Preterite in Spanish), periphrastics (Progressive in English, French and Spanish), etc' (Salaberry 2000: 16). In the following subsections, we will firstly look at lexical aspect and then grammatical aspect.

2.3.1 Lexical aspect and its semantic features

In contemporary linguistic study, one of the most influential studies on verbs is Vendler's (1957). The remarkable contribution of Vendler's work is to apply the notion of time to the partition of verbs ⁹.Vendler's quadripartition on verbs includes states (e.g. *be red*), activities (e.g. *run*), accomplishments (e.g. *draw a picture*) and achievements (e.g. *win*). Vendler (1957: 149) claims that verbs of states are unchanged and non-dynamic at any temporal instant; activities indicate continuous,

⁶⁴⁾

⁸ TT is 'the time span about which something is said' (Klein *et al.* 2000: 742). TU is 'the time at which the utterance is made' (Klein 1994: 3). TSit is 'the time span at which the situation obtains' (Klein *et al.* 2000: 742).

⁹ See p149 in Vendler's (1957) Verbs and Times.

unchanged but dynamic actions on a time stretch; accomplishments depict the completion process on a time stretch; achievements emphasize the outcomes at specific points of time. Although Vendler does not explicitly link his work to aspect, his study becomes a starting point for the discussion of lexical aspect, which is 'also called *Aktionsart, actionality, aspectual class* or *situation aspect*' (de Swart 2012: 753). Lexical aspect is a semantic category (Filip 2012) and it 'refers to the characteristics of what is inherent in the lexical items which describe the situation (Li, P. and Shirai 2000: 3). Lexical aspect is not just about verbs, but a 'complex sentential property' (Verkuyl 1989: 40). It can be conveyed by a verb constellation including a main verb and its arguments, and a subject (Smith 1997: 2). For example, *know it* is stative, and *Suddenly knew it* is an achievement.

Dowty (1979) takes a formal approach combining Montague's Universal Grammar ¹⁰ with a decomposition analysis to lexical aspectual classes (Filip 2012). He proposes to use sentential operators and connectives, such as BECOME, DO, CAUSE, for distinguishing lexical aspect into three types: state, indefinite change (activites) and definite change (accomplishments and achievements). For example, BECOME is an operator to separate state from definite change. *The room is empty* has a stative predicate; while *the room emptied* (the room BECOME empty) has a predicate of achievement (Filip 2012). Dowty's work has been criticized mainly on the ambiguous semantic functions of some operators in classifying verbal predicates, such as the test of CAUSE on accomplishment (Van Valin and LaPolla 1997; Levin 2000; Filip 2011, 2012). Researchers argue that causation is not a property of accomplishment (Filip 2012: 734). Sentences like *John ate an apple* (accomplishment) and *John ate apples* (activity) are not distinguished by their causation, but by quantifiers. On this point, it looks like Dowty's approach does not match well with the temporal nature of aspect, such as the ending part of events.

Unlike Dowty's semantic approach, Verkuyl (1972, 1989) takes a syntactic approach. He develops a composition theory stating that inner aspect delivered by verbal phrases and outer aspect delivered by noun phrases influence the situations types (Verkuyl 1993: 12). Verkuyl at first puts the three types of situations, state (e.g. I love you), process (e.g. I run), and event (e.g. I drew a picture), in a linear order (see figure 1). He states that the +/- dynamic feature of verbs [+/-ADD TO] and the noun phrase parameters [+/-SQA] (Specified Quantity of A) define the situation types. A state corresponds to a verb with less dynamic features and noun phrases with less quantified parameters. Events include verbs with the most dynamic features and noun phrases with the most quantified parameters. A process is in between. However, Verkuyl's linear order diagram has a problem, in that it ignores the relationship between state and event. For example, *I know it* is a stative situation, while *Now I know it*

¹⁰ 'Montague's "Universal Grammar" (Montague 1970) contains the most general statement of Montague's formal framework for the description of language. The central idea is that a grammar should be able to be cast in the following form: the syntax is an algebra, the semantics is an algebra, and there is a homomorphism mapping elements of the syntactic algebra onto elements of the semantic algebra' (Partee 2001: 9996).

is an event (Vendler 1957: 153). The two sentences have the same verbs and the same subjects. However, the different situations conveyed are not from the [+/-SQA] or the [+/-ADD TO] parameters, but the time adverb *now*. Verkuyl (1993) notices the flaw in this diagram, and redraws a more comprehensive one (see figure 2). In the new diagram, Verkuyl not only shows the interrelationship between the three types of situations but adds the atemporal factors. Unfortunately, Verkuyl did not give much explanation on the atemporal factors. Indeed, Verkuyl's work (1993) focuses on noun phrases more than verbal phrases or other factors, such as temporal adverbials.

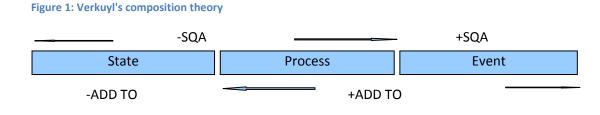
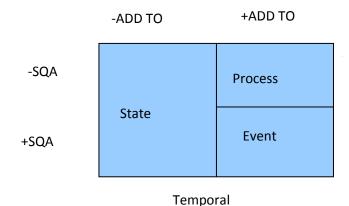


Figure 2: Revised composition theory (Verkuyl 1993: 67)



A drawback in Dowty's and Verkuyl's approach is that neither of them has fully integrated the temporal features of aspect into their classifications. The most recognized temporal features are telicity, dynamicity, and durativity. Gary (1957) is a pioneer of using telicity to distinguish verbs, and he put verbs into two categories, telic and atelic. So far, many researchers have tried to explain the difference between telicity and atelicity. Gary (1957: 106) describes telic verb as 'an action tending toward a goal'. Comrie (1976: 47) states that a telic situation has a process and a terminal point. Smith (1997) uses a final endpoint as criteria for telic situations. These interpretations on telicity vary slightly, however, all of them point to one factor: ending/goal. In this respect, states and activities are not telic, whereas accomplishment and achievement are telic. The test commonly used for telicity is the use of *for* and *in* adverbials. In sentences such as *We watched movies for two hours*, the event of watching movies goes on for a period of time, but it has no indication of ending time. The event may

continue or stop after two hours. In other sentences such as *I finished reading in ten minutes*, on the other hand, it is for sure that the reading does not continue after ten minutes.

To distinguish verbs or verbal situations merely with telicity is rather premature (Labeau 2005; Filip 2012). Researchers like Xiao and McEnery (2004) see boundedness as a semantic feature derived from telicity. They argue that spatial boundedness implies temporal endpoints, but temporally bounded situation does not necessarily have a spatial endpoint, like in the sentence 'John walked for only three minutes today' (Xiao and McEnery 2004: 51). Xiao and McEnery's argument is in disputation with Tenny (1994: 26) who states that boundedness and telicity are 'the same thing in two different domains: the spatial and the temporal'. If we apply our world knowledge here, both arguments are rational. However, we need to draw our attention away from the temporal and spatial arguments. What Xiao and McEnery are indicating is that atelic verbs can be temporally bounded by means of time adverbial.

On top of telicity and boundedness, dynamicity can distinguish statives from the other verbal types (Comrie 1976; Smith 1997; Salaberry 2000; Xiao and McEnery 2004). A stative situation has no change over time, but a non-stative situation shows changes in a period. Vendler (1967) proposes a progressive test in the dynamic feature, and he argues that the stative situations are not compatible with progressive form. Despite many researchers (Moens 1987; Klein 1994; Xiao and McEnery 2004) pointing out that some states can be used with a progressive form, such as *being ill*, the test is still being widely used.

Durativity distinguishes achievement from the other three types. Tenny (1994) points out that durativity is relative, and it is influenced by our world-knowledge. For the same reason, Dowty (1986) puts achievement and accomplishment in one category. Although Tenny's argument is sound, the amalgam of achievement and accomplishment is not a solution to the problem. In Chinese, achievement and accomplishment must be separated, as they do not have the same syntactical characteristics. Xiao and McEnery (2004) point out that accomplishment can take the durative marker *zhe*, but achievement cannot.

As discussed above, lexical aspect is a semantic phenomenon with temporal features. Although researchers like Xiao and McEnery (2004: 46) argue that telicity '...is associated with the presence or absence of a 'final spatial endpoint", as a world knowledge, an event's spatial endpoint can be translated into a temporal endpoint. The distinction of lexical types relies on the temporal features. The features are influenced by various factors, such as measurement adverbials, noun phrases, and even grammatical particles (as in Chinese), etc. Therefore, lexical aspect alone cannot denote aspect without considering grammatical aspect in many cases. As stated by Filip (2012: 725) 'The notion of

aspectual class is a wider notion than that of lexical aspect, subsuming lexical aspect as a special case when just verbs, taken as lexical items, are at stake. Aspectual class is to be distinguished from aspectual form, whereby the latter concerns the expression of grammatical aspect.' In the following section, we will look into the grammatical aspect.

2.3.2 Grammatical aspect

Grammatical aspect '...refers to aspectual distinctions which are marked explicitly by linguistic devices, usually auxiliaries and/or inflectional and derivational morphology' (Li, P. and Shirai 2000: 3). Grammatical aspect in general has two forms: perfective and imperfective (Comrie 1976). The most quoted definitions of perfective aspect and imperfective aspect are by Comrie: 'Perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation' (ibid: 16). Imperfectivity has 'explicit reference to the internal temporal structure of a situation, viewing a situation from within' (ibid: 24).

Perfectivity takes a holistic approach to aspect. It can give a sense of completion and boundedness of events. However, it is not always the case. Comrie (1976) includes ingressive ¹¹ situations in perfectivity, which emphasizes the starting point of the events without an ending point. This classification conflicts with Smith's (1997: 66) schema of the perfective, which has an initial point and a final point. Indeed, Smith's schema contradicts her own definition of perfective aspect (also called perfective viewpoint¹² by Smith). Smith gives a similar definition to Comrie's, where she does not mention the obligatory presence of the starting point and the ending point. Due to the existence of the ending points, Smith argues that perfectivity is not compatible with stative situations. Since statives does not have boundaries. This argument is very risky in aspect rich languages, such as Chinese. Xiao and McEnery (2004) find a few interactions between perfective markers and stative verbs in their corpus study. Xiao and McEnery further point out that a perfective situation does not signal completion but actualization or realization. In addition, perfectivity does not concern the duration of a situation (Comrie 1976). For example, The flowers bloomed indicates the completion of the blooming season, but it has no indication of the length of the blooming. This example also shows that perfectivity can focus on the ending point without the explicit expression of the starting point, although it is a common knowledge that there must be a starting point for blooming at some time.

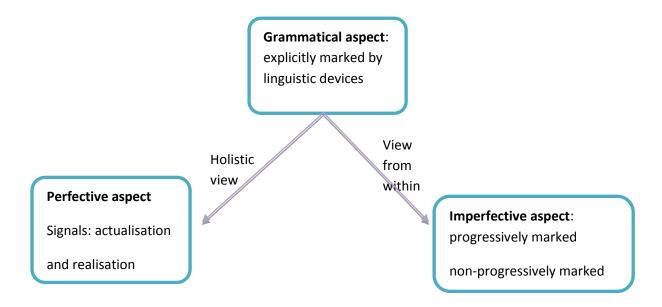
Imperfectivity is not bound to a start or ending point, it reveals the aspect of situations from within. Comrie (1976) treats habitual situations, non-progressively marked continuous situations and progressive situations as imperfective aspect. Habitual situations are 'some regular, repeated activity or event' (Carlson 2012: 829). It differs from iterativity (the repetition of a situation), although

¹¹ When a situation indicates a change of state or a start of an action, it has an ingressive meaning. For example, *He became tall* (Comrie 1976).

¹² Smith (1997: 62) defines perfective viewpoint as 'the event as a whole, taking an external perspective'.

habituality also has a repetitive nature. For example, cough five times is iterative, but He coughs a lot in winter is habitual. Filip and Carlson (1997) study the data on habituality in different languages, and they suggest that habituality should not be treated as a type of grammatical aspect, but a sententiallevel stative aspect. Since they find that in some languages, such as Czech and Russian (Filip and Carlson 1997: 98), habitual sentences can take either perfective form or imperfective form. With regard to the continuous situations with non-progressive form, Comrie states that some stative verbs cannot be used in progressive forms, but they can indicate continuous situations. For example, Human blood is red is a continuous and unchangeable situation. Although it is sound, the sentence is more prone to the features of stative aspect. Smith (1997: 77) also spots a group of situations in Chinese having 'positive semantic value...without a viewpoint morpheme'¹³. Instead of putting it under the lexical aspect, she calls it Neutral viewpoint, which has one endpoint (the initial point in the temporal schema¹⁴) (Smith 1997: 81). Xiao and McEnery (2004: 30) disagree with Smith, and they argue that 'imperfectives can also focus on the initial endpoint...the final endpoint is normally excluded'. Xiao and McEnery believe that the inceptive word -qilai used behind a predicate verb or adjective gives aspectual features of inceptiveness in Chinese, e.g. Zuo zai ta shenbian de Liu Xiaoqing hahadaxiao qilai (Liu Xiaoqing, who sat beside him, started to laugh heartily) (ibid: 217). Xiao and McEnery try to distinguish inceptive aspect from ingressiveness/inchoativeness. However, the argument is not convincing. In the example given, it is possible to interpret it as an ingressive situation changing from being quiet to laugh heartily.

Figure 3: Grammatical aspect



¹³ The example given in Smith (1997: 79) is '*Mali xie gongzuo baogao* (Mali write work report)'. It is difficult to interpret the viewpoint of Mali's situation. It only indicates an activity by Mali at sentential level.

¹⁴ Smith (1997) uses a schematic representation of the aspectual information to illustrate perfective, imperfective and neutral viewpoints. In the temporal schema ...I...F..., 'I' represents initial point and 'F' represents final endpoint, and dots represent the internal stages of the event.

Grammatical aspect is a more complicated phenomenon than lexical aspect, as it looks at sentential level with 'grammatical lenses'. It is confusing if we blend grammatical aspect and sentential-level lexical aspect into one, such as Comrie's habituality and Smith's Neutral viewpoint. It is necessary to make the description of grammatical aspect easy to understand and follow for the purpose of teaching Chinese grammatical aspect. A new chart of grammatical aspect is produced combining the works discussed in this chapter (see Figure 3). Grammatical aspect differs from lexical aspect in terms of the markedness by linguistic devices as defined by Li, P. and Shirai (2000). Perfective situation gives a holistic view (Comrie 1976), and it signals actualisation or realisation (Xiao and McEnery 2004). Imperfective situation allows views from within the situation (Comrie 1976), and it is either progressively marked in most languages or non-progressively marked in other languages.

One thing to clarify is that perfectivity and imperfectivity do not come from grammatical aspect solely. Lexical aspect can also give a perfective view. For example, achievement situations alone can lead to a view of actualisation. Therefore, lexical aspect and grammatical aspect are not two isolated conceptions, and they coexist to interact. In Chinese, there is a type of verbs called RVCs (Resultative Verb Complements), it can work on its own to give a perfective view, and it can collaborate with perfective markers as well.

2.4 Tense and aspect

After the discussion of aspect, it brings out a question: is perfect a form of tense or aspect? Some researchers (e.g. Mourelatos) strictly distinguish perfect and aspect. Mourelatos (1978: 418) states that perfect is to 'encode the "phase" of time reference, specifically, to mark a certain action, occurrence, or situation as temporally prior and relevant to a given reference point'. A situation in the perfect tense could indicate perfective aspect or imperfective aspect.¹⁵ Comrie (1976) also separates perfect from tense. He (1976: 52) states that perfect aspect concerns two time points, which are the time of 'the state resulting from a prior situation' and the time of 'that prior situation'. Comrie (1985: 78) considers pluperfect and future perfect as absolute-relative tense, since they 'serve to locate a situation in time relative to a reference point which is itself located in time relative to the present moment'. Perfect, however, 'is not distinct from the past' (ibid: 78). De Haan (2010), on the other hand, argues that perfect has both temporal and aspectual characteristics. For example, I have had my lunch indicates a complete situation and its relation to the speech time. Ritz (2012) looks at the semantic and pragmatic function of perfect and its temporal representations, and she distinguishes perfect from resultative and simple past. Ritz (2012: 904) concludes that perfect 'is the shapeshifter of tense-aspect categories, changing and adapting its meaning to fit in a given system and to serve the communicative goals of speakers'. Similarly, Salaberry (2000) points out that tense and aspect are morphologically,

¹⁵ Mourelatos (1978: 418) gives an English sentence having perfect form with an imperfective view: *He has lived here all his life*.

semantically and syntactically interrelated. '...A theory of aspect cannot be developed in isolation from other temporal phenomena (Salaberry 2000: 16), e.g. the morphological marking of aspect in past tense. In Chinese, a perfect view can be delivered by aspect marker *le*. In the following section, we will explore the nature of Chinese aspect.

2.5 Chinese aspect

Chinese is an aspect prominent language. It has both lexical aspect and grammatical aspect. Although there were no systematic studies on Chinese aspect until recently, we can still find some references in early grammar. The earliest work about aspect is in Li, J.'s (1924) book, where aspect markers were addressed as post auxiliary verbs (Li, Y. 1992: 128) including *le* and *zhe*.¹⁶ Lü, S. (1942) calls these words auxiliaries. He points out that some auxiliaries if put before or after verbs can give actions different phases (aspect), such as inceptive phase, progressive phase, completed phase, etc. Indeed, Lü's work sets out a very good foundation for the discussion of aspect later on. The limitation of Lü's work is that it does not consider the impact of verbs on the phases. In the following sections, we will investigate verbs and lexical aspect as well as grammatical aspect in Chinese.

2.5.1 Chinese verbs and lexical aspect

The study of Chinese verbs follows Vendler's quadripartition. Tai, J. (1984: 293) argues that Chinese does not have accomplishment verbs, because accomplishments should include actions and implicated results, but Chinese verbs don't imply results. For example, sha (kill) does not indicate the death, but indicates the attempt to kill; *xie* (write) in *xiexin* (write a letter/letters)¹⁷ does not imply the letter(s) is/are finished, and it only focuses on the activity of writing the letter(s). Xiao and McEnery (2004) and Li, P. and Shirai's (2000) all disagree with Tai, and insist that Chinese has accomplishment verbs, and these verbs are different from activity verbs, because verbs of activities lack a telic feature compared to accomplishments, for example, chi (eat) in chi yi wan fan (eat a bowl of rice) and xie (write) in *xie yi feng xin* (write a letter) (Xiao and McEnery 2004: 56) are telic, and therefore, they are accomplishments; while paobu (run) and xunzhao (look for) (Xiao and McEnery 2004: 54) are atelic, and therefore, they are activities. What Xiao and McEnery (2004) suggest does not conflict with Tai's argument on Chinese accomplishment. Xiao and McEnery's argument on accomplishment verbs relies on the noun phrases (NPs). The verbs, such as *eat* and *write* does not have telic features without any internal argument. It only becomes clear when they are used with countable noun phrases. For example, xie yi feng xin (write a letter) is telic not because of the verb xie (write), but the indefinite noun phrase yi feng xin (a letter); while xiexin (write letters) is atelic because of the noun xin

¹⁶ See section 2.5.2.

¹⁷ Chinese does not have a formal distinction between mass and count nouns (Ljungqvist 2007). Xin in Chinese can indicate a letter or letters, depending on the determiners used with the noun. For example, yi feng xin is one letter/a letter, henduo xin is many letters.

(letter/letters). Therefore, Chinese does not have accomplishment verbs, but has accomplishments at phrase level and sentence level. For example, *hua yi fu hua* (draw a picture) is an accomplishment verbal phrase, but *hua* (draw) is not an accomplishment verb.

Tai, J. (1984) continues to argue that achievement verbs in Chinese are different from achievements in English. Unlike English, Chinese achievement verbs cannot take the progressive. This argument of Tai is supported by Li, P. (1990) and Xiao and McEnery (2004). However, Tai asserts that except for stative verbs, Chinese verbs indicate either actions or results. What Tai suggests is sound for some verbs, but not for a special type of verbs which can indicate both actions and results. In Chinese there are a group of compound verbs, which can express the goal of an activity. These verbs are called Resultative verb completments (RVCs) (Li, C. and Thompson 1981). RVCs consist of two parts. The first indicates a presupposed activity and the second, an asserted result (Tai, J. 1984: 295). For example, in *shasi* (kill to die), *sha* (kill) is the action of killing, *si* (die) is the result of the killing. Li, C. and Thompson (1981: 55-56) identify four types of RVCs, which are

- (1) cause, such as *dapo* (hit broken)
- (2) achievement, such as maidao (buy arrive)
- (3) direction, such as *tiao guoqu* (jump pass)
- (4) Phase, such as yongwan (use finish)

Xiao and McEnery (2004) argue that achievement RVC and phase RVC are not distinct. Therefore, Xiao and McEnery (2004: 160) regroup RVCs into three types, namely directional RVCs, completive RVCs and result-state RVCs, according to the 'semantic relations between the constituents of compounds'. Li, P. (1990) and Xiao and McEnery (2004) consider RVCs as achievement verbs, as they argue that RVCs have the same semantic features as achievement verbs.

On top of Vendler's quatripartitions, Li, P. and Shirai (2000) suggest a category of mixed telic-stative verbs derived from activity verbs. '[T]hese verbs encode either the process of a telic action or the state resulting from that action, depending on which aspect markers they take' (Li, P. and Shirai 2000: 98). For example, *chuan* is an activity verb, which means 'put on' when used with imperfective marker *zai* or 'wear' when used with imperfective marker *zhe*. Referring to Li and Shirai's explanation on this type of verbs, we can see that it is the interaction of the verbs and aspect markers, which gives the verbal situations telic or stative readings. In other words, telic and stative are not these verbs' inherent features, but the semantic features of the situations which the verbs are in. It is, therefore, questionable to separate this type of verbs from activity verbs.

As discussed above, Chinese verbs can fit into the traditional verb classification, but with restrictions, e.g. the incompatibility of RVCs with progressive aspect. Due to the resultative nature of the RVCs, a sentence with a RVC can often give a perfective reading (Smith 1997; Xiao and McEnery 2004). For

example, *Ta dakai shuilongtou* (He opened the tap) is a perfective situation denoted by *dakai* (hit open). In addition, RVCs can also work with perfective markers to give a perfective reading. For the function of RVCs and perfective markers, it is further discussed in the section below.

2.5.2 Chinese grammatical aspect markers

Chinese grammatical aspect can be denoted by particles, also called aspect markers, which are used before or after verbs. The most prominent ones are perfective markers *le* and *guo*, and imperfective markers zai and zhe. Xiao and McEnery (2004) also consider RVCs and verb reduplications as perfective markers, and *-qilai* (get up) and *-xiaqu* (go down) as imperfective markers. There is a risk to treat lexical aspect as aspect markers. First, *gilai* and *xiaqu* are RVCs and they have completive and resultative features. It causes confusion when some RVCs are treated as perfective markers and others (-qilai and -xiaqu) are imperfective markers. Second, -qilai (get up) and -xiaqu (go down) can give different readings (Xiao and McEnery 2004: 217, 228), such as indicating directions, results, completion and inception/continuity, when they are used after verbs. The inception of -qilai and the continuity of *-xiaqu* are only part of the aspectual function of the two RVCs. The same applies to verb reduplications. Verb reduplications have '... the function of implying a short duration for that action or the idea of giving something a try' (Liu et al. 2002: 18). Verb reduplications have meanings, such as kankan (have a look), shishi (have a try) and changchang (taste a bit). Most importantly, verb reduplications do not always give a perfective view. In sentence Wo kankan (I have a look), it does not convey a viewpoint, but an accomplishment situation. In addition, 'there is no general agreement as to the forms of verb reduplication' (Xiao and McEnery 2004: 150). Some researchers including Xiao and McEenry claim that verb reduplication only has the format of AA, but some assert that A yi (one) A, A $-le^{18}$ A are also verb reduplications (Xiao and McEnery 2004). For example, kankan (have a look) and kan yi kan (have a look) convey the same meaning, although they have different structures. However, kan le kan (had a look) gives a perfective view due to perfective marker le. The perfective view does not come from the verb reduplication, but from aspect marker le. Therefore, it is not appropriate to treat RVCs and verb reduplications as aspect markers (Smith 1997; Yang 1995).

In this research, we focus on four aspect markers, *le*, *guo*, *zai* and *zhe*. The reasons to choose these markers are first, these markers attract discussions (see sections 2.5.2.1 to 2.5.2.4) yet '[so] far, it seems, no one has come up with a system that is able to account for all the interpretations that each of the particles can have in context, without terminological vagueness or ad hoc solutions' (Ljungqvist 2007: 199); second, although called aspect markers, these markers are not used to mark every perfective or imperfective situation, so they impose challenges to L2 Chinese teaching and learning. Therefore, it is necessary to make clear the grammatical functions of these markers before integrating

¹⁸ See 2.5.2.1.1.

them into the teaching framework. In the following sections, the grammatical aspect markers are discussed in the order of perfective markers, *le* and *guo*, and imperfective markers, *zhe* and *zai*.

2.5.2.1 Chinese perfective markers le

The perfective marker *le* 'is derived from the full verb *liao* "complete" used as a resultative' from old Chinese (Shi, Y. 2002: 132). Perfective marker *le* can appear in two syntactical places, one is to follow a verb called verb final *le* (VF *le*), and the other at the end of a sentence called sentence final *le* (SF *le*). The two *le* are homographic, and they are represented by the same Chinese character ' \mathcal{T} '. They have different grammatical functions when used in different syntactic positions.

2.5.2.1.1 Verb final *le*

With regard to VF *le*, researchers have different interpretations to its functions. Li, C. and Thompson (1981: 185) consider VF *le* as indicating perfectivity when used in temporally, spatially or conceptually bounded situations. The situations (ibid: 186) can be: a) a quantified event, b) a definite or specific event, c) an inherently bounded event due to the verb meaning, or d) the first event in a sequence. These four uses of the VF *le* can be explained in the examples (1) to (4)¹⁹,

(1) Wo chi le san wan fan.	(2) Wo kanjian le ta.
I eat LE three bowl rice	I see LE him/her
I ate three bowls of rice.	I saw him/her.
(3) Ta ying le bisai.	(4) Wo chi le fan jiu zou.
He/She win LE match	I eat LE food then go
He/She won the match.	I will go after I eat the meal.

Yip and Don (1998: 214) give a similar explanation to the first situation in Li, C. and Thompson (1981) that VF *le* cannot be used with unmodified nouns, because it sounds incomplete in Chinese, for example,

- (5) *Wo ji le xin. (ibid: 214)
 - I post LE letter/letters
 - I have sent letters.

Many other researchers (Zhao, Y. 1968; Chao, Y. 1968; Lü, S. 1980; Lin, Z. 2003; Jin, L. and Hendriks 2005; Soh and Gao 2006; Chen, J. and Shirai 2010) try to give more specific functions to VF *le* than Li and Thompson's perfectivity. They consider the function of VF *le* as to signal completion or termination. Chen, J. and Shirai (2010) argue that VF *le* indicates completion when

¹⁹ In this thesis, some examples without reference are adapted from those used in grammar books.

used in a situation with boundaries, and it indicates termination when used in a situation without boundaries. Chen, J. and Shirai's (2010) claim on the use of VF *le* with unbounded event somehow conflicts with Yip and Don's statement about VF *le* above. It is thus questionable about the termination that VF *le* conveys.

Due to the completion signalled by VF le, some researchers even treat VF le as a covert past tense marker (Lin, J. 2000, 2006) or claim that VF le 'has past as its default interpretation' (Ren, F. 2008: 792). However, completion is only part of the functions of VF le. Liu, X. (1988) criticizes the interpretation of completion of VF le, and suggests that VF le signals realization rather than completion, because in some situations, VF le is 'compatible with a present continuative interpretation' (Lin, J. 2003: 266). The event of having a dog in sentence (6) has no indication of past whatsoever.

(6) Ta yang le yi tiao gou.He raise LE one CLF dogHe has raised a dog.

Xiao and McEnery (2004: 91) give a more precise description of the function of VF *le* as '[to signal] the actualization of a situation with respect to a past, present or future reference time and presents the situation as a single whole'. This function of the VF *le* is attested in Xiao and McEnery's (ibid) corpus study. However, one can question Xiao and McEnery's claim that VF *le* can be used with all types of situations. Xiao and McEnery (ibid: 103) give an example of VF *le* used with stative situations:

(7) Ta zhongyu song le yi kou qi.He finally loose LE one CLF airHe could finally feel relieved.

Xiao and McEnery argue that in (7), *song* (loose) is a [-bounded] and [-telic] stative verb, and it is used with VF *le*, thus VF *le* is compatible with [-bounded] and [-telic] stative situations. However, in (7), the adverbial *zhongyu* (finally) and the noun phrase *yi kou qi* (one mouthful air) both give the situation an endpoint. Therefore, the situation is a [+telic] and [+bounded] accomplishment situation rather than a stative situation. Another example given by Xiao and McEnery (ibid: 103) as in (8) is indeed the result of omitting a word which indicates boundaries. In Chinese, words omission happens very often in context when 'the words are not strictly necessary for the meaning' (Yip and Don 1997: 137). The English translation of sentence (8) gives the fact that this sentence is quoted from a context. Definite article *the* in English does not have an equivalent word in Chinese, but if translated it normally uses *zhe* (this) or *na* (that) before the specific item. In a context where the noun has been mentioned, *zhe* (this) or *na* (that) can be omitted as in (8). If sentence (8) is changed to sentence (9) by adding *na* (that), the event is obviously a bounded event. Even without the omission of the pronoun,

the English translation of (8) shows it a telic situation. Filip (2001) refers to the works, such as Verkuyl's (1972, 1989, 1993) and Dowty's (1972, 1979, 1991), and gives a detailed discussion of the interaction between noun phrases and verbal predicate. She argues that quantized verbal predicates led by definite article *the*, universal quantifier *all* or *some*, and the like all have telic readings, whereas cumulative predicates do not have temporal delimitation on the contrary.

(8) Chen chengren ziji paida le xiaohai.

Chen admit self pat LE child

Chen admitted that she had patted the child.

(9) Chen chengren ziji paida le na ge xiaohai.Chen admit self pat LE that CLF child

Chen admitted that she had patted that boy.

The argument of Xiao and McEnery (2004) also conflicts with some researchers' (Kang, J. 1999; Wu, Z. 2000; Soh and Gao 2006) claim that VF *le* cannot appear in stative situations unless the situations have boundaries. Therefore, what Xiao and McEnery have found should be that VF *le* can be used with all types of verbs, but at sentential level, VF *le* need to be used with bounded verbal events. In other words, a verbal event without boundaries cannot have VF *le*.

A unique feature of VF *le* as an aspect marker is that VF *le* is not presented in every perfective situation. Yip and Don (1998: 217) list seven situations where VF *le* should not be used. However, not all situations in the table match the features and the functions of VF *le*.

Situations when VF le is not used	Example
1. In statements of habitual action	Wo meitian kan bao. I everyday look newspaper I read newspaper every day.
2. With coverbs	Wo zuo che shangxue. I sit vehicle go to school I went to school by bus.
3. With the first verb in a serial construction, particularly when the first verb is come or go	Ta xingqitian lai kan wo. He Sunday come look me He came to visit me on Sunday
4. With a causative verb	Ta quanwo qu guowai dujia.He try to persuade me go abroad holiday

Table 1 Situations when *le* is not used (Yip and Don 1998: 217)

	He tried to persuade me to spend my holiday abroad ²⁰ .
5. With the negator <i>mei</i> or <i>meiyou</i>	Wo mei qu Shanghai. I not go Shanghai I did not go to Shanghai.
6. With verbs indicating attitude	Wo xihuan ti zuqiu. I like kick football I like playing football.
7. With verbs expressing decision, intention, hope, etc.	Shujiawo dasuan qu lüxing.Summer vacation I plan go travellingI have decided to go travelling during thesummer vacation.

The first example in table 1 is the incompatibility of VF *le* and habitual events. It can be explained as VF *le* marks perfectivity not habituality. In situation 2, coverb 'refers to a class of morphemes in Mandarin', and it is followed by a noun phrase (Li, C. and Thompson 1981: 359). Li, C. and Thompson (1981: 368) give a list of these coverbs. The coverbs can function as prepositions, and they work with noun phrases to modify the verb after them. When coverbs function as prepositions, they may not take VF *le* as suggested by Yip and Don (1998). However, when coverbs function as verbs, they can take VF *le* when the verbal situation is bounded.

(10) Wo gei ta mai le yixie shu.	(11) Wo gei le ta yixie shu.
I for him buy LE some book	I give LE him some book
I bought some books for him.	I gave him some books.

In (10) and (11), *gei* (for/give) is a coverb. It acts as a preposition in (10), and works with *ta* (him) to modify the verb *mai* (buy). In (11), it acts as a verb, and it takes VF *le* felicitously in the bounded situation. In addition, the English translation given in situation 2 is questionable for using the past tense. Because firstly the sentence does not have overt time adverbs, such as yesterday, secondly it has no viewpoint without the presence of perfective markers or context. The Chinese sentence could be interpreted as a habitual event (I go to school by bus) to answer the question: How do you go to school every day?

²⁰ Although the Chinese sentence does not have time adverbs or aspect markers, due to the causative relations of the verbs, it implies that the event time happens before the speech time.

Situation 3 is also overgeneralized. The example given for situation 3 is an atelic situation, since we cannot say **He came to visit me in two hours on Sunday*. In fact, when a verbal situation in a serial verb construction is bounded, the verbal situation can take VF *le*.

(12) Wo jintian shangxue zuo le shifenzhong che.

I today go to school sit LE ten minutes bus

It took me ten minutes to school by bus today.

In (12) *shangxue* (go to school) and *zuo* (sit) are a serial verb construction, and *zuoche* (take bus) is temporally bounded, thus it takes VF *le* to indicate the actualization of the bounded event. However, VF *le* is used after *zuo* (sit), but not *shangxue* (go to school), as Xiao and McEnery (2004: 120) argue that the event taking VF *le* is normally the central focus.

Situation 4 in table 1 is about causative verbs. These verbs 'are used to form causative constructions, in which the object of the first verb becomes the notional subject of a second verb' (Yip and Don 1998: 20). In the example given in table 1, *quan* (try to persuade) is a causative verb, and *ta quan wo* (he tries to persuade me) is the notional subject of *qu dujia* (go on holiday). It is true that VF *le* cannot be used with verbs causing the following event. However, when the second event is bounded, VF *le* can be used with the second event as shown in (13).

(13) Wo qing ta kan le yi chang dianying.I invite her watch LE one CLF filmI invited her to watch a film.

In (13) *watch a film* is a bounded event, and it can take VF *le* to indicate the actualization of watching a film, and it thus automatically actualizes the event of invitation.

Situation 5 is about negative situations with *mei* or *meiyou* (no/not). The negators *mei* and *meiyou* often appear in sentences with past tense. These situations are incompatible with VF *le* for two reasons. First, the events are not actualized as in (14). Second, these situations in Chinese should not have boundaries as in (15).

(14) Wo mei kan dianying.	(15) *Wo mei kan yi chang dianying.
I not watch film	I not watch one CLF film
I did not watch film.	I did not watch a film.

Situation 6 in table 1 is about the verbs of attitudes. This type of verb is normally used in unbounded situations to indicate continuous states. Filip (2001) also points out that complex verbal predicates

headed by verbs such as liked (state) and carried (process) are cumulative, regardless whether the noun phrases filling their argument positions are singular or plural.

Situation 7 is about verbs of intention, decision and hope. This type of verb is normally used in situations, which have not been actualized. Therefore, VF *le* is not needed. One type of absence of VF *le* not mentioned by Yip and Don (1998) is when RVCs are present. When RVCs entail perfective readings in verbal situations, VF *le* can usually be omitted.

The discussion on VF *le* in this section supports the function of VF *le* described by Xiao and McEnery (2004), which is to indicate actualization of an event. The other definitions, such as VF *le* signifying perfectivity is too broad and vague. The wording of completion or termination gives a false image of VF *le* as a past tense marker. The actualization, however, expresses the perfective viewpoint of an event as well as its completion without confusion. One thing needs to be added on is that the event marked by VF *le* must be a bounded/telic situations, although sometimes words denoting boundaries/telicity, such as pronouns, are omitted in Chinese.

2.5.2.1.2 Sentence final le

In respect to the functions of SF *le*, there are also different interpretations. Some researchers claim that SF *le* is to indicate change or inchoative situations (Lü, S. 1980; Zhu, D. 1982; Xiao and McEnery 2004; Soh and Gao 2004; Chen, X. 2010).

(16) Xia yu le.	(17) Wo chi fan le.
Down rain LE	I eat food LE
It has started raining.	I have eaten.

SF *le* in (16) indicates the change of the weather from not raining to raining as well as its inchoative state of raining. However, not all the situations with SF *le* indicate change or inchoativity. Other researchers argue that SF *le* should also denote the current relevance of the situation (Li, C. and Thompson 1981; Xiao and McEnery 2004; Chen, X. 2010; Chen, J. and Shirai 2010). In (17), SF *le* indicates the current relevance of the eating event. The sentence implies that I am not hungry any more. Since many situations marked by SF *le* are perfect situations, some researchers (Lin, J. 2003, 2006) even call SF *le* a perfect marker. However, to call SF *le* a perfect marker can be very misleading, since not all perfect situations are marked by SF *le*. Comrie (1976) defines four types of perfect, namely perfect of result is '... a present state [...] referred to as being the result of some past situation: this is one of the clearest manifestations of the present relevance of a past situation' (ibid: 56). 'Experiential perfect indicates that a given situation has held at least once during some time in the past leading up to the present' (ibid: 58). Perfect of persistence describes 'a situation that started in the

past but continues into the present' (ibid: 60). Perfect of recent past indicates the current relevance of a situation or an event happened moment before the utterance (ibid: 60). SF *le* can be found in three types of perfect situations in Chinese, but not all. Sentence (17) is an example of perfect of result. In (18), the action of arriving happened in prior to the speaking. It belongs to the perfect of recent past. Sentence (19) is in the group of perfect of persistence, since the event of running has a time span of a few hours, and it is still continuing. The experiential perfect, however, is not marked by SF *le*, but experiential marker guo^{2l} as shown in (20) (Comrie 1976).

- (18) Ta yijing dao le.(19) Ta pao ji ge xiaoshi le.He already arrive LEHe run a few CLF hour LEHe has arrived.He has run for a few hours
- (20) Wo qu guo Meiguo.
 - I go GUO USA

I have been to the USA.

Jin, L. and Hendriks (2005) and Chen, J. and Shirai (2010) try to distinguish the functions of SF *le* by its interaction with lexical aspect. They claim that SF *le* marks the resultative state after the attainment of a goal when used with accomplishment or achievement situations, such as in (18), and it marks the inchoativeness when used with unbounded situations as in (16). However, this distinction can only show a tendency, since not all unbounded events with SF le have inchoative readings. In (17), the event of *chifan* (eat food) has no boundaries, but the sentence does not have an inchoative reading. Indeed, many situations with SF *le* have inchoative or 'change-of-state' (Xiao and McEnery 2004: 131) reading as well as links to current relevance.

Although VF *le* and SF *le* are found in many perfective situations, there are some occasions, such as experiential perfect, that do not take the perfective markers *le*. Instead, another perfective marker *guo* is used. What is the difference between *guo* and *le*? In the following section, we will introduce the function of perfective marker *guo*.

2.5.2.2 Chinese perfective marker guo

Semantically, aspect marker guo (过) is derived from the verb guo (过) meaning 'pass a place or some time' (Shi, Y. 2002). The verbal function is still in use in modern Chinese, such as guo qiao (cross bridge), guo yi tian (pass a day). Xiao and McEnery (2014) have identified another three functions of guo: directional complement (DC), RVC and aspect marker. They claim that the DC guo indicates temporal forwardness, while the RVC guo indicates completiveness or the resultant state of a situation. However, Xiao and McEnery's classification on the DC and RVC of guo is still based on its function

²¹ See section 2.5.2.2.

as a verb. As an aspect marker, *guo* loses its semantic meaning. It is always used after a verb to indicate that the verbal event has been experienced. Comrie (1976) claims that *guo* marks experiential perfect, the same as in English *I have been to America*. However, Smith (1997: 266) describes the function of *guo* as to '[convey] a discontinuity with the present or other Reference Time', but 'sentences with the *-guo* viewpoint have the essential properties of a Perfect construction' (ibid: 269). The discontinuity of *guo* is supported by many researchers (Iljic 1990; Xiao and McEnery 2004; Pan, H. and Lee, P. 2004). Li, C. and Thompson (1981: 226) on the other hand state that *guo* indicates 'the event has been experienced at least once at some indefinite time, when the reference time is left unspecified'. In a sentence like (21), the event of eating roast duck marked by *guo* is an experience with no specific time indicated.

- (21) Wo chi guo Beijing kaoya.
 - I eat GUO Beijing roast duck

I ate Beijing roast duck (some time in the past). / I have tasted Beijing roast duck before.

Unlike perfective marker VF *le*, *guo* can mark either bounded/telic or unbounded/atelic events. When it marks unbounded/atelic events, it only emphasizes the experience of the events; when it marks bounded/telic events, it emphasizes both the experience and the time span of the events (Xiao and McEnery 2004). Sentence (22) expresses not only the experience of living in London, but the time length in London. If *guo* is changed to *le* in (22), it is acceptable as a perfective situation, but the sense of experience will not be as strong as the meaning implicated by *guo*.

- (22) Wo zai Lundun zhu guo san nian (Xiao and McEnery 2004: 138).
 - I in London live GUO three year
 - I once lived in London for three years.

Researchers have investigated cases when *guo* can be used and when it cannot. Li, C. and Thompson (1981) conclude that *guo* is compatible with repeatable events. If events cannot be repeated, they should not be marked by *guo*. However, many researchers (Iljic 1990; Xiao and McEnery 2004; Pan, H. and Lee, P. 2004; Lin, J. 2007) challenge the repeatability. They argue that a word like *nianqing* (young) in (23) is not repeatable, but it is felicitous with *guo*.

(23) Ta ye nianqing guo (Lin, J. 2007: 239).He also young GUOHe was young once.

Xiao and McEnery (2004: 149) point out that when *guo* is with stative verbs, it denotes 'egressive dynamicity', namely, a change out of the state of [the event]'. Thus stative verbs 'whose meanings are

incompatible with egressiveness' are not compatible with *guo* (ibid: 149). For example, *cuo* (wrong/be wrong) in (24) is a stative verb, and it can be used with *guo* for an egressive situation, while *zhidao* (know) in (25) does not have egressiveness. However, it is not easy to judge the egressiveness of stative verbs. The judgment has to rely on common sense, and it does not consider special cases. As in (25), if a person lost his memory for some reasons, he might forget what he knew. In this case, *Ta zhidao guo* sounds acceptable.

(24) Ta cuo guo yi ci.	(25) *Ta zhidao guo (Xiao and McEnery 2004: 148).
He wrong GUO one CLF	He know GUO
He was wrong once.	He once knew it.

Pan, H. and Lee, P. (2004) give another solution, which is reversibility. It means one situation can move on to the next situation, but the process cannot be reversed. As in (23), people grow from young to old, but not the reverse. Pan and Lee's claim also has limitations, since it is difficult to judge which situation is not reversible. For the situation in (24), people can make mistakes repeatedly. He can change from not making mistakes to making mistakes, and then from making mistakes to not making mistakes. It is felicitous to say *He conglai mei cuo guo* (He has never made any mistakes). In this case, there is no change of the situation at all.

The discussion above shows that none of the claims on guo alone can be used to provide a failsafe definition of "guo". We can only say that guo is prototypically used in situations that are repeatable, non-reversible and egressive, and it has a stronger implication of experience compared with *le*. Xiao and McEnery (2004) even call guo an experiential marker for its unique character. In this research this title of guo is borrowed to distinguish guo from *le*. In addition, although guo and *le* are perfective markers, they do not appear in all perfective situations. There are restrictions at when the perfective markers are used and what type of verbs they are used with, and so forth. These restrictions can bring a lot of troubles to L2 learners of Chinese, which will be discussed in the next chapter. Like perfective markers, imperfective markers cannot be used freely either. In the following section, imperfective markers are explored.

2.5.2.3 Chinese imperfective markers zhe and zai

The most popular and recognizable imperfective markers are *zhe* and *zai*. These two markers are called durative marker *zhe* (着) and progressive marker *zai* (在) respectively in this research to address their functions.

2.5.2.3.1 Durative marker *zhe*

Aspect marker *zhe* is developed from a full verb *zhuo* in old Chinese meaning 'attach to', 'touch' or 'reach' (Shi, Y. 2002: 142). The syntactic function of *zhuo* first changed into a locative preposition after a verb meaning 'in/on/at', and then into an aspect marker. As an imperfective marker, *zhe* is used after verbs to indicate the continuous state of the verbal event (Yip and Don 1998), and it is given the name of durative marker by Xiao and McEnery (2004). Sentence (26) is an example of using *zhe* in a durative event.

- (26) Wo chuan zhe hong yifu.
 - I wear ZHE red clothes
 - I am wearing red clothes.

Due to the continuous and durative reading given by zhe, Xiao and McEnery (2004) argue that verbal constituents having punctual and resultative features or situations that are temporally bounded cannot take zhe. In (27), dapo (break) is a RVC, and it emphasizes the result instead of the procedure of breaking a bowl, it is thus incompatible with durative marker zhe. The event in (28) has duration, but it also has a boundary due to the SF le. The sentence thus cannot have zhe. Without the SF le, the sentence would become I am walking for ten minutes, which is not acceptable either. However, the argument on the temporally bounded event by Xiao and McEnery (2004) cannot cover situations with more than one verbal event, since zhe can be used in a serial verbal construction in Chinese, which is in the structure of V1-zhe (NP)-V2/VP2. The first event, V1-zhe (NP), provides background information for the second event denoted by V2/VP2 (Chu, C. 1987; Chief 2005). Normally, the two events are generated by one agent. Sentence (29) has two events. Reading book(s) is the central event for the agent in the context of listening to music. In this serial verbal structure, *zhe* can be used in temporally bounded event. For example in (30), SF le gives a perfect aspect to the event of watching and standing, but *zhe* is used in depicting the durative motion of how the person is being watched. Therefore, *zhe* can coexist with perfective markers, but it is to indicate the duration of an action without implication of the time length.

- (27) *Wo dapo zhe wan.
 - I break ZHE bowl
 - I am breaking the bowl.

(29) Wo ting zhe yinyue kanshu.

I listen ZHE music read book I read (a) book(s) listening to music.

- (28) *Wo zou zhe shi fenzhong le.
 - I walk ZHE ten minutes LE
 - I have been walking for ten minutes.

(30) Wo zhan zhe kan ni bantian le.

I stand ZHE look you half a day LE

I have been standing here watching you for a while.

In addition, Xiao and McEnery (2004: 189) state that verbs indicating relations, psychological sensations and adjectival verbs²², indicating personal properties, such as *shi* (be), *xing* (be surnamed), *dengyu* (be equal to), *pa* (be afraid), *baoqian* (be sorry), *pang* (be fat), *gao* (be tall) and *chengshi* (be honest) are not compatible with *zhe*. People do not say *I am being big* as shown in (31). However, Li, C. and Thompson (1976: 222) claim that *zhe* can be used as an intensifier with adjectival verbs if the particle ne^{23} is used at the end of the sentence. The particle *ne* in (32) changes the function of *zhe* into an intensifier indicating that I am very big.

(31) *Wo pang zhe.	(32) Wo pang zhe ne.
I be fat ZHE	I be fat ZHE NE
I am big.	I am very big.

Sometimes, the events taking *zhe* do not have an agentive subject. In (33), no subject is present, and clock is moved to the place of object. Marker *zhe* denotes the continuous state of hanging of the clock.

(33) Qiang shang gua zhe zhong.

Wall on hang ZHE clock

There is a clock hanging on the wall.

As discussed in this section, the durative marker *zhe* adds durative and continuous features to a verbal event, but it does not appear in all situations with duration. For certain types of verbs, such as adjectival verbs, it is used only when particle *ne* is there. In addition, marker *zhe* can also collaborate with perfective markers in a serial verbal construction to provide background information.

2.5.2.3.2 Progressive marker zai

Syntactically, *zai* is used before verbs to indicate ongoing events (Yip and Don 1998). Xiao and McEnery (2004) thus call it progressive marker. The use of *zai* can be found in (34). Without *zai*, the progressive reading disappears, and the sentence would become *I drink water*. However, in Chinese the progressive marker *zai* cannot mark achievement verbs or situations having no dynamic and durative features (Xiao and McEnery 2004). The verb *ying* (win) in (35) is an achievement with less durativity, so it is incompatible with *zai*.

²² In Chinese, most adjectives can function as verbs (Li and Thompson 1976). In (31), *pang* (to be fat) is a verb, but in other situations, *pang* is an adjective. In the example of *Ta you pang erzi* (She has a fat son), *pang* is an adjective.

²³ Ne is a sentence final particle. When used in a declarative sentence, it is to draw listener's attention (Li and Thompson 1976).

(34) Wo zai he shui.	(35) *Wo zai ying.
I ZAI drink water	I ZAI win
I am drinking water.	I am winning.

In addition, zai cannot combine with events having explicit expression of its time duration. Sentence (36) cannot have the progressive marker *zai*, since *zai* is to mark the dynamism and the medial part of the drinking, and it does not imply the temporal length of the event.

(36) *Wo zai he shi fenzhong cha le.I ZAI drink ten minutes tea LEI have been drinking tea for ten minutes.

Furthermore, *zai* cannot mark events with explicit boundaries. The progressive marker can work with accomplishments. It is because accomplishments implicitly indicate boundaries. Although reading a novel in (37) implies an ending point, it has an interval before the reading finishes. Therefore, the progressive marker can mark the interval moment of reading.

(37) Wo zai du yi ben xiaoshuo.I ZAI read one CLF novel.I am reading a novel.

Unlike *zhe*, *zai* must mark a situation having an agentive subject, which can generate the activity or the event. In (38) a clock cannot hang itself on the wall, so *zai* cannot be used. While in (39), a river flows, so *zai* can mark the ongoingness of water.

(38) *Qiang shang zai gua zhong.	(39) Heshui zai jingjingde liutang.
Wall on ZAI hang clock	River ZAI quietly run
A clock is hanging on the wall.	The river is running quietly.

Let us sum up the discussion of the Chinese aspect markers - *le*, *guo*, *zhe* and *zai*. The perfective marker *le* has two syntactic positions. VF *le* is to mark actualization rather than completion of bounded events. Therefore, it is not a past tense marker. SF *le* is either to indicate the change of state or to imply the current relevance of the situation. The third perfective marker *guo* is used to mark experience with unbounded events and to mark experience and time span for bounded events. Normally the events marked by *guo* have repeatable, irreversible and egressive features. Imperfective marker *zhe* and *zai* both cannot mark events that are punctual. Events marked by *zhe* provide stative-like situations, whereas events marked by *zai* must be dynamic and agentive.

2.6 Conclusion

In this chapter, we have discussed the difference between tense and aspect. Although both concepts are linked to time, tense needs to refer to the time of speech, whereas aspect refers to ways of seeing a situation - holistic or partial. The ambiguity of tense and aspect is on the categorization of perfect due to the overlapping of tense forms and aspectual views. We have also looked at aspect in general and Chinese aspect specifically. It is believed that aspect exists not only in verbs, verbal constituents and sentences, but in linguistic devices, such as morphemes and particles. In Chinese, grammatical markers are more intricate than lexical aspect as they have more restrictions in use.

Following the literature review on Chinese aspect, teaching templates of Chinese lexical aspect and grammatical aspect markers are developed. Table 2 has four columns of verb categories: statives, activities, accomplishments and results/achievements. Both semelfactives e.g. *tiao* (jump) and telic-stative verbs e.g. *chuan* (put on) are included in activities due to their inherent dynamic features. Accomplishments are absent at the level of verbs, because the telic feature of accomplishments do not come from the verb, but verbs and nouns/noun phrases after the verb (Pan, H. 1993). Therefore, at the level of verbal phrases and sentences, accomplishments can be found in Chinese. In addition, achievements are called results to reflect the resultative but non-progressive features of this type of Chinese verbs, such as RVCs. In table 3, the functions of the aspect markers and their interactions with lexical aspect are included from the literature review on Chinese aspect markers, and they are stated under each aspect markers.

Having looked at the theory part of Chinese aspect, in the next chapter we will move on to the second language teaching and learning.

Lexical	States	Activities	Accomplishments	Results/Achievements
aspect				
Classificati				
ons				
verbs	gao (to be	chuan (put on)		ying (win)
	tall)	chi (eat)		wan (finish)
	bing (to be	<i>tiao</i> (jump)		shasi (kill)
	ill)			
		sha (attempt to		
	xiangxin	kill)		
	(believe)			
	chengshi			

Table 2: Chinese lexical aspect classification

	(honest)			
Verbs +	xiangxin ni	kan shu	kan yi ben shu	Kanwan yi ben
objects	believe you	read books/a	read a classifier ²⁴	shu
(including		book	book	finish reading a classifier
complemen				book
ts)				
Subject +	Wo xiangxin	Wo xuexi yingyu.	Wo chi yi wan	Wo ying yi chang
verbs +	ni.	I study English	fan.	bisai.
objects	I believe	I study English.	I eat one classifier	I win one classifier
(including	you	I study English.	rice	match
complemen ts)	I believe you.		I eat a bowl of rice.	I win a match.

Table 3: Chinese grammatical aspect markers

Grammatical aspect markers	VF le	SF le	guo	zai	zhe
Syntactic position	Verb + le	Sentence + le	Verb + guo	Zai + verb	Verb + zhe
Functions	1. signals perfectivity	change of	1. indicates experience	ongoing	1. indicates continuous state of verbal events
	actualization	state or inchoativenes s	situations that	events temporally	2. indicates background information when used
	of bounded/telic events	2. indicates current relevance	are repeatable, non-reversible and egressive		in V <i>zhe</i> V/VP structure
Interaction with lexical	works with all types of	works with all			1. not with punctual and resultative verbs
aspect	lexical	lexical aspect	lexical aspect	dynamic verbs	

²⁴ In Chinese, a classifier or a measure word is needed for the expression of quantities.

		1					
aspect, but				2. not	with	n temp	orally
with the		2.	uses in	bounded situations			s
condition		agen	tive				
that the		even	ts	3.	not	with	verbs
verbal				indicat	ing	rela	ations,
situation/eve				psychological			
nt is				sensati	ons		and
bounded/telic				adjecti	val		verbs
				indicat	ing	pe	rsonal
				proper	ties		
	1			1			

Chapter 3: Second language teaching and learning

3.1 Introduction

The research in L2 Chinese aspect learning and pedagogy is very sparse, since Chinese emerged as a second language/foreign language only in the twentieth century both in and out of China (Xing, J. 2006). However, research in L2 aspect acquisition/learning in other languages and in L2 teaching and learning is prolific. Although this research is targeting pedagogic issues, language-teaching echoes learning theory and teachers need 'knowledge of the structure of the language and knowledge about how people acquire that language' (Gass 1995: 5). In this chapter, three parts are included. The first part is to review the learning theories, as many pedagogic studies are based on these theories. The second part is to discuss how instruction affects learning. The third part is to look into the findings in L2 aspect acquisition/learning, which can be used as a guidance to design the research experiment. Within this context, Chinese aspect teaching and learning are especially examined.

Before moving on to second language teaching and learning, a concept needs to be clarified - acquisition and learning. Researchers like Krashen (1985) postulate a difference between acquisition and learning. Krashen argues that acquisition is a subconscious process, like the one by which children acquire their first language(s), whereas learning is a conscious and a controlled procedure. Instructed language learning is 'any systematic attempt to enable or facilitate language learning by manipulating the mechanisms of learning and/or the conditions under which these occur' (Housen and Pierrard 2005: 3). Instructed second language learning differs from naturalistic acquisition in that instructed learning is under the control of instructors and it follows a learning process designed by them, whereas in naturalistic settings, learners have limited control²⁵ over language input. Also in instructed learning, linguistic devices such as grammar are implicitly or explicitly delivered to learners, whereas in naturalistic learning, learners may not have access to grammar books. Despite the difference, many researchers do not separate acquisition from learning. However, in this research, these words are discriminated to avoid confusion.

3.2 Second language learning and acquisition

The past few decades have seen the bloom of second language learning and acquisition theories, which can be divided into two groups: second language input theories and second language output theories. The input theories focus on the ways of learning, whereas the output theories look at the outcomes of learning. The theories of L2 input emerged early in SLA including the behaviourist approach, the contrastive analysis, the frequency hypothesis, the input hypothesis and the interaction hypothesis.

²⁵ In naturalistic settings, learners acquire a second language via different sources, such as interactions with target language speakers. Therefore, learners have limited control over the input from other parties.

The behaviourist approach originates from behaviourism, which emphasizes the role of environment on learning. Behaviourists view language learning as the formation of a habit, and they thus believe that repetition and pattern-practice are efficient ways to acquire a second language (Gass and Selinker 2008).

Based on behaviourist ideas, the contrastive analysis theory (Lado 1957) (CA) considers second language learning as the development of a new set of habits, and the habits are either positively or negatively transferred from the first language. The theory predicts that L2 elements which are similar to L1 will be learned easily, and they therefore need less emphasis in the input; and those which are different will frequently cause errors, and they need to be paid more attention. However, that hypothesis is soon under attack by researchers who find that students whose L1 language is substantially different from L2 language performed better than those whose L1 and L2 languages are similar. For example, Vietnamese has intonation like Chinese, but Vietnamese students' intonation in Chinese is not as good as that of other students whose native language has no intonation (Liu, X. 2002).

The frequency hypothesis goes beyond analyzing languages. It considers language input. The hypothesis emphasizes the relationship between input and acquisition order, and it 'states that learners acquire linguistic features according to their frequency in the input; features which occur frequently are learned before those which occur infrequently' (Ellis 1990: 95). Ellis (1990) lists some studies (Larsen-Freeman 1976; Hamayan and Tucker 1980; Long and Sato 1983; Lightbown 1983; Snow and Hoefnagel-Höhle 1982) of input frequency for its effect on the acquisition order in second languages, and the research results reveal a mixed picture. Ellis, therefore, argues that the hypothesis is valid in classroom instruction, but it is not sufficient to explain the correlation between input and acquisition.

Krashen's (1985: 2) input hypothesis goes a step further than the frequency hypothesis, and he states that 'humans acquire language in only one way – by understanding messages, or by receiving "comprehensible input"...'. In this hypothesis, Krashen emphasizes two points, one is that the input must be one-step above learners' current language level (i+1). The other is that acquisition will occur only when learners understand the meaning of the input. Krashen views acquisition as linear, and he argues that the input should follow the acquisition order one-step at a time. However, Krashen's hypothesis is mainly criticized in two ways. One is that the hypothesis puts too much weight on semantics, and it ignores the acquisition of some grammar features, which have no effect on meaning, e.g. 3rd person -*s* (Ellis 1990). The other is that acquisition is a linear procedure. Labeau (2005) studies advanced level university students learning French tense and aspect in the UK, and her results disprove the linear aspect acquisition order depicted in Andersen's Aspect Hypothesis²⁶. Labeau (2005: 229), therefore, argues that acquisition of aspect at higher levels follows a 'pendular movement'

²⁶ See section 3.4 for Aspect Hypothesis.

progressively stabilising around the target language usage. Although Krashen's hypothesis has flaws for explaining learning, it sheds light on the role of learners' input in learning.

Long's (1981) interaction hypothesis is partially linked to Krashen's input hypothesis, in that it seeks ways to facilitate comprehensible input. Long's hypothesis stretches the learners' input to a great extent. Long suggests in his interaction hypothesis that negotiation of meaning between learners and native speakers or interlocutors enhances comprehensible input. Long's hypothesis is tested by many researchers. Some prove it efficient in learning (Pica, Young and Doughty 1987; Loschky 1994), but some fail to support it (Derwing 1996; Sato 1986). Ellis (2008) questions the effect of negotiation at beginners' level and at advanced level, and he points out that the outcome of the negotiation relies on learners' negotiation ability and the purpose of negotiation. Although the hypothesis has attracted many criticisms, Long's hypothesis forms a base for his focus-on-form theory developed later. This theory has influenced teaching and learning in SLA. The details of this theory will be discussed in section 3.3.1.

To sum up, many of the language input theories regard learning as a programmed one-way process and ignore the role of learners in language learning. The studies of behaviourist approach show that high frequency of input influences learning in classroom settings, but it may have no or little impact on natural acquisition. The contrastive analysis reveals linguistic links between L1 and L2. The results can help learners to gain deep understanding of the two languages. Krashen's input hypothesis emphasizes comprehensible input, but the input of grammar is ignored, and it fails to provide an efficient input approach to facilitate learning. Long's hypothesis offers an approach to comprehensible input, but it also has its own limitations.

Unlike the second language input theories, theories of second language acquisition and output see learners as the centre of learning. Some of these theories investigate learners' innate language learning ability and others look into learners' language production. The theories include Universal Grammar, Interlanguage theory, Error Analysis, Performance Analysis and Form-Function Analysis. Chomsky (1957) argues that language learning is an innate cognitive process rather than a controlled procedure. Learners have innate devices known as Universal Grammar to set up language principles and parameters²⁷ in developing their first language(s), and it is a matter of resetting those parameters when learning a second language. However, to find out how the principles and parameters are reset and to what extent L2 learners access Universal Grammar is very challenging (Mitchell and Myles 1998).

²⁷ In generative linguistics, language principles and parameters are seen as two mechanisms, which form the syntactic knowledge of a language learner. Principles are general rules of forming the sentence structure, such as the need for a sentence subject. Parameters are the variables that distinguish one language from another, such as aspect markers.

The Interlanguage theory introduced by Selinker (1972) is more practical than Universal Grammar in revealing learning processes. Selinker states that learners form their own linguistic system in second language learning and that the system differs from L1 and L2 but is influenced by them. Learners' interlanguage experiences a few stages of development but it may fossilize²⁸ at some point. This phenomenon is normally revealed by the fact that learners make the same non-native like errors at all times with no improvement. For example, Jarvis and Pavlenko (2000) noticed that tense and aspects were often wrongly used by a Finnish learner of L2 English, despite the fact that the learner had been living in America for many years. Jarvis and Pavlenko (2000) identified two reasons for the errors, one was L1 interference, and the other was the learner's fossilization in the use of tense and aspect. As for learners' fossilization, many other longitudinal studies (see Han 2004) have also observed it, but there are very limited studies exploring ways of preventing or overcoming fossilization (Al-Shormani 2013). In these studies, one common background of the learners is that they do not continuously receive formal linguistic instruction. Some learners may have received linguistic instruction for a period, but the instructed learning normally stops at some stage. Therefore, it is unknown whether long-lasting formal instruction can prevent fossilization. Although this research does not investigate fossilization, it may provide a pedagogical basis for preventing fossilization in using aspects.

With regard to L1 interference, Error Analysis (EA) illustrated in the following section gives a good explanation for it. Corder's (1974) Error Analysis looks at interlingual errors caused by L1 interference and intralingual errors caused by misunderstanding or inappropriate use of the L2. It aims at enhancing learning by tackling errors. However, a learner's 'linguistic behaviour' is reflected not only by errors, but by non-errors (Gass and Selinker 2008). Even if learners do not have errors in their L2 language production, it does not mean that they have acquired the language. For example, L2 Chinese learners can use adverbs and chronological order as well as aspect markers to express temporal information. In many situations, aspect markers are not needed for linguistic reasons as shown in chapter two. If L2 Chinese learners did not use aspect markers, it does not indicate the learners of Chinese are aware at what situation the aspect markers shall not be used.

Performance Analysis (PA) (Lightbown 1984) goes further than EA. It investigates learners' language development by analyzing both errors and well-formed structures in their interlanguage. As argued above, learners' L2 incompetence is reflected in both errors and non-errors. Learners can avoid errors in many strategic ways, such as using simple sentence structures or using alternative words. However, PA has weaknesses in its methodology when analyzing L2 learners' interlanguage (Ellis 1990). First, PA cannot detect the over-generalization of language features by learners since the key factor for PA to assess whether a language feature is acquired or not is the accuracy rate of language features used

²⁸ 'Fossilization is the process whereby the leaner creates a cessation of interlanguage learning, thus stopping the interlanguage from developing, it is hypothesized, in a permanent way...' (Selinker 1996, cited in Han, Z. 2000: 5 and Doughty and Long 2003: 519)

in a context. A high accuracy rate can prove the mastery of a language feature to some extent, but it cannot tell whether the learner has fully acquired the language feature or he/she simply uses it in all contexts, e.g. Verb-*ing* is used in both progressive and non-progressive situations (Lightbown 1983). Second, PA compares learners' interlanguage to the target language used by native speakers, and it ignores learners' true performance. For example, a learner may use syntactic rules to form a meaningful sentence, but the sentence may never appear in native speakers' language. In this case, we cannot say the learner's performance is bad because native speakers do not say the same thing. Therefore, PA is not sufficient to analyze learning either.

The Form-Function Analysis (FFA) (Huebner 1979) goes a step further than the PA. It not only 'reveal[s] hidden systematicity', but 'show[s] the inner logic of the learner's mental grammar' (Ellis 1990: 49-50). Researchers have taken either 'A form-to-function approach' or 'A function-to-form approach' to analyze learners' interlanguage. Huebner (1983) studied a Hmong L1 speaker learning L2 English in the USA throughout a 12-month period in a natural learning environment. Huebner started with the forms in the speaker's interlanguage, e.g. (a) and da [the], and traced the change of the functions of these forms. He found out that the learner's early grammar system was influenced by discourse structure. He also captured the variability of the learner's interlanguage reflecting one of the characteristics of interlanguage depicted by McLaughlin (1987), namely the fact that the learner's grammar is incomplete and unstable. Sato (1990) studied English past time reference used by two Vietnamese boys who had stayed in the USA for over 10 months. She first identified all means for past time expression, and then she translated the means of expression syntactically. Sato found that without specialist instruction the boys did not show obvious progression on the use of syntax for past time reference within the time period. However, the communication did not break down due to the boys' communication strategies, such as the use of adverbials and the context inferences. Both Huebner and Sato's studies show that in natural settings learners' language development is 'driven by pragmatic communicative needs' (Mitchell and Myles 1998: 117) and linguistic forms develop after the functions.

The second language output theories build a link between learning processes and learning outcomes. Universal Grammar concerns learners' innate learning ability, but struggles to explain how it works. EA and PA target learners' learning output, but ignore the interaction between learning and learning outcome. FFA works on learners' learning process by analyzing learners' output.

As discussed above, theories on language input or language output work separately. Each focuses on a part of learning. However, many researchers and applied linguists have tried to seek links between language input and language output, especially in instructed settings. These studies are reviewed in the following section.

3.3 Second language teaching

The research in second language teaching has four trends in general starting from the early 1900s (Chaudron 2001). These trends are

- (1) quasi-experimental method comparisons directed at identifying the relative effect of different teaching methods on L2 achievement
- (2) observational studies of the oral interactions that take place in a language classroom
- (3) discussions of research methodology for classrooms and
- (4) investigation of the teacher-student interactions that occur when performing specific instructional tasks (Ellis 2012: 6).

Among these research trends, the comparison of teaching methods concerns this research the most. The method-comparison research bloomed in the 1960s and the 1970s (Ellis 2012), as it is the period when different innovative teaching methods, such as the Natural approach, came to challenge grammatical competence²⁹ oriented teaching, such as Grammar-Translation, Audio-Lingual Method (ALM), the Silent Way and the Total Physical Response (TPR). Among these well-known teaching methods, the Grammar-Translation has the most explicit approach to grammar with no attention to learners' speaking and listening skills. The Grammar-Translation also attracts the most criticism from applied linguists, although it has been 'the major language teaching pedagogy in Europe and North America for a 100-year period from the 1840s to the 1940s, and continues to be used today, primarily in the foreign language or English as a Foreign Language teaching situation' (Fotos 2005: 662). The method-comparison research lost its attraction in the 1990s when Communicative Language Teaching (CLT) became the centre of attention. CLT emerged in the 1960s with the aim of enhancing learners' communicative competence.³⁰ CLT is welcomed by many applied linguists including those (e.g. Dulay et al. 1982; Krashen 1981, 1993; Prabhu 1987; Chaudron 1988; Truscott 1998) who argue strongly that grammar teaching is impossible or unnecessary. However, more and more applied linguists nowadays embrace the teaching of grammar in CLT. Littlewood (1981: 1) states that 'one of the most characteristic features of communicative language teaching is that it pays systematic attention to functional as well as structural aspects of language, combing these into a more fully communicative view'. Thompson (1996) calls the learning of grammar through CLT the retrospective approach. He suggests that students discover grammars themselves, and discuss them explicitly after being exposed to a comprehensible context. CLT, therefore, has different interpretations. On the one hand, it emphasizes the use of communicative tasks, e.g. make phone calls, in classroom in order to

²⁹ 'Grammatical competence refers to the knowledge we have of a language that accounts for our ability to produce sentences in a language. It refers to knowledge of the building blocks of sentences (e.g., parts of speech, tenses, phrases, clauses, sentence patterns) and how sentences are formed' (Richards 2006: 2-3).

³⁰ Communicative competence is first used by Dell Hymes in 1966 against Noam Chomsky's linguistic competence. It refers to learners' grammatical knowledge as well as the ability to appropriately use knowledge.

achieve high proficiency level in communication (Richards 2010). On the other hand, it integrates linguistic forms into the learning tasks to be discovered or induced by students instead of being noticed incidentally (Thompson 1996). With the extended concept of CLT, it becomes more a teaching approach than a method. Celce-Murcia (1991: 3) cites Anthony's (1963) distinction on approach and method: 'an approach to language teaching is something that reflects a certain model or research paradigm- a theory, if you like;...A method, on the other hand, is a set of procedures, i.e., a system that spells out rather precisely how to teach a language. Methods are more specific than approaches'.

3.3.1 Focus on Form and focus on forms

Long (1988) uses a term Focus on Form (FonF) as a combination of the communicative aspect and the grammatical aspect in teaching, but it puts more weight on the communicative feature. It is defined (Long 1991: 45-46) as '...overtly draw[ing] students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication'. Therefore, Focus on Form includes CLT, such as Task-Based Language Teaching (TBLT) and Content-Based Language Teaching (CBLT) (Long and Robinson 1998). 'Task-Based Language Teaching (TBLT) refers to an approach based on the use of tasks as the core unit of planning and instruction in language teaching' (Richards and Rodger 2001: 223). Tasks are the vehicle for teaching and learning. Teachers encourage learners' involvement by doing various tasks so as to generate negotiation and discussion on meaning and grammar within meaningful contexts. The tasks are designed in accordance with functions rather than with linguistic forms. 'Content-based Language Teaching (CBLT), on the other hand, refers to an approach in which teaching is organized around the content or information that students will acquire, rather than around a linguistic or other type of syllabus' (Richards and Rodger 2001: 204). From a language teaching perspective, this approach requires language teachers to have not only linguistic knowledge, but knowledge related to the learning content. From the learners' perspective, this approach can enhance their language skills as well as their world knowledge. CBLT differs from Natural approach³¹ and Immersion³². Natural approach and immersion programmes are natural ways of acquiring a second language. Natural approach supporters believe that learners acquire a language via communication, and in return it enhances their communicative abilities. As for linguistic knowledge, the natural approach supporters assume that learners have access to universal grammar, and they can analyze language subconsciously and acquire linguistic forms themselves (Long and Richardson 1998: 19). However, some studies show that Natural approach and Immersion

³¹ The Natural approach was introduced by Tracy Terrell (1977), a Spanish teacher who taught L2 Spanish in a communicative way (Richards and Rodger 2001).

³² 'Immersion Education is a type of foreign language instruction in which the regular school curriculum is taught through the medium of the foreign language' (Richards and Rodger 2001: 206). Language immersion is a teaching method that concerns the use of target language in school curriculum as well as out of school. In other words, this method creates a target language environment for learners, just as when they learn their first language. The best-known immersion program is the French Immersion in Canada in 1960s.

cannot help learners reach a native-like proficiency level (Long 1990, 1997; Newport 1990), even for children learners (Swain 1991). The accuracy rate in the learners' L2 language production is less than 50% in Harley and Swain's (1984) study of L2 French learners in content-based immersion classes. It is believed that the learners' errors are accepted by the native speakers if the errors do not impede communication (White 1991), and the learners do not pay sufficient attention to the forms in the input (Leeman *et al.* 1995). Due to the high demands of target language in teaching, the Natural approach and Immersion are not being considered in this research experiment. It will be further explained in chapter 5.

Doughty and Williams (1998) question the incidental grammar in FonF teaching, and argue that the teaching of grammar should be intensive for a few reasons. First, incidental grammar struggles to match teaching in classroom settings. Since learners' language skills and their abilities to acquire a second language vary (Lightbown 1998), it is unrealistic to cover a number of incidental grammar points within a limited teaching period. Second, some grammatical problems have been spotted by other teachers or researchers many times (Williams 2005), but learners may not notice them, such as the morphological contextualization cues in Japanese (Cook 2001). Samuda's (2001) experiment on the teaching of modal words (e.g. might and must) shows the same problem. The candidates did not use the modal words until the teacher gave instructions explicitly. Third, teachers do not need to always follow the learning sequence. Lightbown (1998) suggests that 'a pedagogical focus on advanced forms can have some long-term, if not immediately noticeable effects' (Matsuzaki 1998: 2).

When the researchers focus on defining teaching approaches, a question emerges in real classroom settings: should L1 be banned from teaching in CLT classrooms? In many writings on CLT (e.g. Richards 2006), researchers do not mention the language used for classroom instructions, except for immersion classes. Many teachers thus assume that the avoidance of L1 is an interpretation of CLT. However, Cook (2001: 405) points out that 'whatever the advantages of demonstrating 'real' classroom communication through the L2, there is no logical necessity why communicative tasks should avoid the L1. The six types of task used in task-based learning are described in Willis (1996: 26-27) without mentioning the L1 but are followed by the by now familiar advice 'Don't ban mothertongue use but encourage attempts to use the target language' (Willis 1996: 130). Cook embraces the idea of using target language in teaching as much as possible. However, she debates on when the L1 can be used to enhance learning. Cook argues that for situations, such as conveying meaning, giving instructions, communication/discussion in group-tasks, and even explanation of grammars, L1 should be used as long as the use of L1 does not prohibit L2 learning. Nonetheless, Cook's support on using L1 in classroom does not conceal the gap of CLT and traditional teaching, such as Grammar-Translation. The fundamental differences between CLT and Grammar-Translation are context and communication/negotiation.

Long (1991) refers to the isolated and explicit grammar teaching without any meaningful context as focus-on-formS. In the focus-on-formS class, '[p]edagogical materials and accompanying classroom procedures are designed to present and practice a series of linguistic items, or forms' (Long and Robinson 1998: 16). With this type of instruction, learners are exposed to language parts in a linear sequence, and they need to connect the parts to the whole structure of the language (Wilkins 1976: 2), this is known as the synthetic approach theory. In other words, learners have to assemble the grammatical pieces for communication after the class. The Grammar-Translation counts as a type of focus-on-formS. The term FonF, however, differs from Ellis' (2001a) form-focused instruction (FFI), since FFI 'includes FonF but potentially also decontextualized, highly metalinguistic, teacher-centred grammar instruction' (Williams 2005: 671). Ellis (2001a: 1-2) states that "Form-focused instruction" is used to refer to any planned or incidental instructional activity that is intended to induce language learners to pay attention to linguistic form. It serves, therefore, as a cover term for a variety of other terms that figure in the current literature - 'analytic teaching' (Stern 1990), 'focus on form' and 'focus on forms (Long 1991), corrective feedback/error correction, 'negotiation of form ' (Lyster and Ranta, 1997). Thus, FFI includes both traditional approaches to teaching forms based on structural syllabi and more communicative approaches where attention to form arises out of activities that are primarily meaning-focused'. As Ellis (2012: 275), himself explains that FFI can be implicit and explicit, '[i]mplicit FFI seemingly involves focus on form while explicit FFI involves focus on forms', but neither of the instructions need the use of tasks necessarily.

To date, many researchers have contributed to the debate of learning effect of focus on form and focus on forms, but nothing conclusive has been found. Long and Robinson (1998) have reviewed seven studies, and the results showed a mixed picture. Some findings (Lightbown and Spada 1990; Leeman et al 1995) show that focus on form enhances learners' accuracy level in forms. Some (White 1991; Spada and Lightbown 1993) show that instruction in question formation has long and lasting positive effects on learners' grammatical accuracy level. Similar lasting effects are also found in Day and Shapson's (1991) research on the use of the French conditional, and also in Lyster's (1994) research on contextual language markers tu and vous. Other studies (e.g. Harley 1989), in contrast, reach opposite conclusions on the duration of the effects. However, Long and Robinson (1998) question the value of the research they reviewed, because they argue that these investigations use various types of instructions and it is difficult to tell which one contributes to learning. Ellis (2012) also reviews seven studies comparing communicative approach to explicit teaching of forms. He concludes that three studies (Allen et al. 1990; Hammond 1988; Palmer 1979) do not show noticeable differences in the results of tests. Two studies (Beretta and Davies 1985; Savignon 1972) show that the communicative approach has better effects on learning than explicit teaching. Yet, two studies (Laufer 2006; Sheen 2006) present contrary findings. Nevertheless, the voice for explicit teaching of form has been getting stronger recently (Norris and Ortega 2000; Cook 2001; Ellis 2005). Some researchers (Doughty 2001;

Ellis 2001b; Swain and Lapkin 2001; Dekeyser 1998) reassess the effects of grammar teaching in second language learning, and they believe that if the grammar teaching is in line with learners' language developmental sequence, it will have positive effects on L2 learning (Nassaji and Fotos 2004). Meanwhile, Schmidt's (1990, 2001) Noticing Hypothesis about the impact of attention to forms in L2 learning is tested by many researchers (e.g. Leeman 2003, Takahashi 2005, Simard 2009), and the results show that noticing has a good impact on the acquisition of forms if used properly. In the following section, we will investigate some noticing methods.

3.3.2 Noticing methods

With regard to the noticing methods, Matsuzaki (1998) reviews articles in Doughty and William's (1998) book, and puts them in a continuum from most implicit to most explicit. Matsuzaki considers input flooding (Trahey and White 1993) and task-essentialness (Loschky and Bley-Vroman 1993) as the most unobtrusive interventions, the input enhancement (Sharwood Smith 1993) and negotiation-for-meaning tasks are in the middle, and consciousness-raising tasks (Fotos and Ellis 1991), processing instruction (VanPatten 1993, 1996) and garden path technique (Tomasello and Herron 1988) are seen as the most explicit teaching methods.

Among these noticing methods, input flooding, input enhancement, and consciousness-raising tasks are closely linked. Input flooding is a form of input enhancement. The difference between the two is that input flooding does not highlight learning points using techniques such as underline, boldface, and stress intonations, to attract learners' attentions to forms. Some researchers have investigated the input enhancement on learning (Trahey and White 1993; White 1998; Williams and Evans 1998), but not all research shows positive results. Trahey and White (1993) explore the effects of input flooding on L1 French speakers learning English adverb placement. They give the learners only positive samples over two weeks. They find that learners do accept the correct use of adverb placement in English (subject-adverb-verb-object). However, the learners do not discard the French adverb placement (subject-verb-adverb-object) in producing English sentences. White (1998) investigates the use of possessive determiners his and her in francophone learners. She compares three groups each using different input methods: (1) input enhancement with explicit instruction, (2) typographical input enhancement, (3) input flooding. She argues that input enhancement with explicit instruction works most effectively, but input flooding alone does not have significant effect on learning. This result indeed echoes the findings of frequency hypothesis in learning theory (see section 3.2). Williams and Evans (1998) compare enriched input to input enhancement plus explicit instructions and corrective feedback in learning participial adjectives and present passive, and they come to similar conclusions as White, that input-based instruction does not work as effectively as explicit instruction in combination with input-based instruction. In addition, Williams and Evans also find that input enhancement leads to outperformance compared to the control group in passive structures, but not in participial adjectives. Some researchers (e.g. Doughty and Williams 1998; Park 2005; Ellis 2012) point out that the factor leading to different results of input enhancement is the semantic value of the linguistic form, since linguistic forms with more semantic values are more likely to be noticed than those forms with little or no semantic values. On top of these research projects, Lee and Huang (2008) have done a meta-analytic review on 16 studies published in a period of 15 years, which look into the effect of visual input enhancement on learning grammar. Lee and Huang find that visual input enhancement does not make significant difference to input flooding.

Conscious-raising tasks which is 'a communicative task with a grammar problem to be solved interactively as the task content (Fotos 1993: 388), are proposed by Fotos and Ellis (1991). Conscious-raising³³ task is closely linked to input enhancement (Long and Robinson 1998), but it involves learners' interactions, such as discussion, group works. Fotos (1993) has investigated the frequency of noticing using conscious-raising tasks in teaching. Fotos believes in Schimdt (1990), who claims that if learners do not notice linguistic forms, there will not be intake³⁴ happening to build up their interlangauge. Fotos compares the learning of indirect object, adverb placement and relative clause usage among three groups of L2 English learners in a Japanese university. The groups consist of a conscious-raising task group, a grammar-teaching group and a communicative group (control group). Fotos finds that conscious-raising task works as effectively as traditional grammar teaching in noticing forms. Conscious-raising task also leads to significant proficiency gains in all tests. However, Doughty and Williams (1998: 240) argues that conscious-raising tasks are '...different from the notion of implicit cognitive processing during task- or message-based communication', so some of them are focus on forms, but Doughty and Williams do not further explain what types of consciousraising tasks are FonF and what are not. Nonetheless, Long and Robinson (1998) treat consciousraising as focus on forms, as they argue that it is synthetic but not analytic. Synthetic and analytic approaches are introduced by Wilkins (1976), who distinguishes two strategies for syllabus organization. The difference of these two approaches is that learners have different roles in learning. In a synthetic approach, learners are spoon-fed with language pieces and forms, whereas in an analytic approach, learners are exposed to natural language materials, and they need to work out language rules themselves (Johnson 1999). According to Wilkins' definitions, it looks as if the consciousraising tasks are not synthetic but analytic. This might be the reason why Doughty and Williams do not treat conscious-raising tasks purely as focus on forms.

Like conscious-raising tasks, negotiation-for-meaning tasks involve interactions, but it happens when communication breaks down (Pica 1996). Negotiation of meaning was initially '…used to refer to the ongoing process by which interlocutors structured their social relationships through interaction, taking

³³ Conscious-raising is a term used by Rutherford and Sharwood Smith (1985) to refer to increased learners' awareness of linguistic features.

³⁴ Language intake is first coined by Corder (1967: 165), which is defined as 'a mental representation of a physical stimulus'.

turns at talking and communicating meaning to each other' (Pica 1996: 246). Some researchers (Pica 1991, Pica 1996) argue that negotiation for meaning serves the communication purpose well. It enhances comprehensibility in input. However, negotiation of meaning is questioned for its reality in actual practice. Foster (1998) has done an investigation on negotiation of meaning. She observes an intermediate L2 English class in a college. The learners are asked to do tasks in pairs and in small groups. She finds that most students barely contribute to discussion or negotiation, but a small number of learners tend to dominate the talking. She therefore argues that negotiation for meaning has hypothetical value, but learners may not choose it when having gaps in understanding. In addition to Foster's argument, negotiation of meaning also lacks support for learners with low language proficiency levels. It is not known how negotiation-of-meaning tasks can be done in lower level language groups.

Due to some deficiencies of negotiation of meaning between learners, researchers try to bring the teachers' effort into negotiation by giving feedback. A few regular forms of feedbacks include recast, explicit correction and negotiation of form. Lyster (1994) separates negotiation of form from negotiation of meaning, since he argues that negotiation of meaning is not enough for improving L2 accuracy in immersion classes. Students need to generalize syntactic rules in their L2 production.

Lyster (2001) distinguishes negotiation of form from recast and explicit correction, and he claims that negotiation of form includes elicitation, metalinguistic clues, clarification requests and repetition of error. Lyster (2001: 272) defines these as:

- '1. Explicit correction: teacher supplies the correct form and clearly indicates that what the student had said was incorrect;
- 2. Recasts: teacher implicitly reformulates all or part of the student's utterance;
- 3. Elicitation: teacher directly elicits a reformulation from students by asking questions such as *"Comment ça s'appelle?"* or *"How do we say that in French?"* or by pausing to allow students to complete teacher's utterance, or by asking students to reformulate their utterance;
- 4. Metalinguistic clues: teacher provides comments, information, or questions related to the well-formedness of the student's utterance such as "@ ne se dit pas en français" or "C'est masculin?";
- 5. Clarification requests: teacher uses phrases such as "Pardon?' and "I don't understand?';
- 6. Repetition: teacher repeats the student's ill-formed utterance, adjusting intonation to highlight the error.'

In this respect, garden path technique³⁵ resembles feedbacks, which is to point out learners' errors at the moment of overgeneralization. Lyster and Ranta (1997) collected data from 4 immersion primary classes in Montreal. The data contains 18.3 hours transcript of audiotape recording of classroom interactions between teachers and students. They found that despite the highest frequent uses of recasting by teachers, it did not improve learners' accuracy level noticeably. Repetition did not bring in good results either. Lyster (1998, 2001) reinforces the findings in Lyster and Ranta, and he argues

³⁵ The garden path technique was introduced by Tomasello and Herron (1988). Students were led to make overgeneration errors and then corrected on the spot by the teacher.

that recast and repetition do not give learners' a chance to repair their language production. However, negotiation of form makes learners notice and assess the errors in their interlanguage. Therefore, it is the most effective to repair grammatical errors.

The processing instruction is a type of grammar instruction introduced by Vanpatten (1993, 1996). Vanpatten (2002: 764) describes three features of processing instruction as:

- '1. Learners are given information about a linguistic form or structure.
- 2. Learners are informed about a particular IP³⁶ strategy that may negatively affect their picking up of the form or structure during comprehension.
- 3. Learners are pushed to process the form or structure during activities with structured input: input that is manipulated in particular ways so that learners become dependent on form and structure to get meaning and/or to privilege the form or structure in the input so that learners have a better chance of attending to it (i.e., learners are pulled away from their natural processing tendencies toward more optimal tendencies). It is not comprehension-based approach, but aims to set up form-meaning connections.'

Vanpatten and Cadierno (1993) tested on the effect of processing instruction in contrast to traditional instruction in learning word order and object pronouns in Spanish. They found that processing instruction leads to better result in interpretation test, but does not differ from traditional instruction group in production test. These findings are supported by some replicate studies (e.g. Cadierno 1995; Cheng, A. 1995). However, some researchers (e.g. DeKeyser and Solkaski 1996, Salaberry 1997; Allen 2000) question the generalizability of the findings. Although Vanpatten (2002) disputes the research results of the counter voices, he does not give a clear explanation of why the difference appears in interpretation tasks but not production tasks. The cause for the result may be that the input processing instruction is more in favour of the performance of interpretation tasks, but not in other tasks.

The task-essentialness is the least discussed noticing method. Task-essentialness is identified by Loschky and Bley-Vroman (1993). It is described as '[t]he most extreme demand a task can place on a structure is essentialness: the task cannot be successfully performed unless the structure is used' (Loschky and Bley-Vroman 1993: 132). Loschky and Bley-Vroman admit that task-essentialness is only usable for comprehension tasks, but it is difficult to be achieved in other tasks.

³⁶ IP stands for input processing. Vanpatten (2002: 758) claims that input processing follows four stages. These stages are 'P1. Learners process input for meaning before they process it for form.

P1a. Learners process content words in the input before anything else.

P1b. Learners prefer processing lexical items to grammatical items (e.g., morphology) for the same semantic information.

P1c. Learners prefer processing "more meaningful" morphology before "less" or "nonmeaningful" morphology.

P2. For learners to process form that is not meaningful, they must be able to process informational or communicative content at no (or little) cost to attention.

P3. Learners possess a default strategy that assigns the role of agent (or subject) to the first noun (phrase) they encounter in a sentence/utterance. This is called the first-noun strategy.

P3a. The first-noun strategy may be overridden by lexical semantics and event probabilities.

P3b. Learners will adopt other processing strategies for grammatical role assignment only after their developing system has incorporated other cues (e.g., case marking, acoustic stress).

P4. Learners process elements in sentence/utterance initial position first.

P4a. Learners process elements in final position before elements in medial position.'

The noticing methods discussed above give a broad view of how to introduce forms to learners without explicit explanation of grammatical rules. It seems that methods with less attention to forms lead to less learning effect, such as input flooding, recasting and repetitions, whereas methods involving interactions/negotiations can achieve better learning outcomes, such as conscious-raising tasks and negotiation of forms. This trend echoes the research findings in language input and output theories discussed in section 3.2. From the learners' perspective, learning happens when they participate in learning and think actively. From a teaching perspective, teachers need to find ways to get learners involved in learning. Having looked at teaching and learning in general, in the following section we will focus on studies of L2 aspect acquisition.

3.4 Aspect acquisition hypothesis

When talking about L2 aspect acquisition, the most influential theory nowadays is Andersen's Aspect Hypothesis (AH). Andersen (1986) described eight stages of aspect acquisition after studying two children learning Spanish in a non-instructed environment. The finding is summarized into four claims known as Primacy of Aspect hypothesis (POA) (Andersen and Shirai 1996), and it is quoted here (ibid: 533):

- ⁽¹⁾ Children first use past marking or perfective marking on achievement and accomplishment verbs, eventually extending its use to activity and stative verbs.
- 2. In languages that encode the perfective-imperfective distinction, imperfective past appears later than perfective past, and imperfective past marking begins with stative verbs and activity verbs, then extending to accomplishment and achievement verbs.
- 3. In languages that have progressive aspect, progressive marking begins with activity verbs, then extends to accomplishment or achievement verbs.
- 4. Progressive markings are not incorrectly overextended to stative verbs.'

The hypothesis has been tested in both L1 and L2 language acquisition. Both supportive and contrary references can be found in the literature review of many published works, e.g. Andersen and Shirai (1996), Gass and Selinker (2008), Sharma and Deo (2009). Andersen and Shirai (1996) pointed out two reasons causing inconsistency in the findings. The first is the inconsistency in aspect classification as well as the accuracy in the interpretation of lexical aspect. The second is the different interpretations of the findings due to different tasks used. The testing tasks can easily be controlled, but the interpretation of aspect is difficult to control, because it is very subjective. Apart from those two reasons, language specificity also needs to be considered. For example, in Chinese aspect, researchers (Li, C. and Thompson 1981; Xiao and McEnery 2004) claim that the progressive marker *zai* cannot be used with RVCs (achievements), so the marking of *zai* may never proceed to achievements, therefore, this phenomenon may affect the result of the development tendency for progressive marking. Moreover, Andersen's AH has its limitations in its study on verbs. As discussed in chapter two, the lexical aspect of a situation is not only delivered by verbs, but is influenced by other elements. Labeau (2005: 230) as well as some other researchers (Vet and Vetters 1994), points

out that , 'cotextual elements such as the presence of an object and its type, number and negation could modify the lexical aspect and that aspectual complements could alter the limits of a situation'. An activity verb used alongside an indefinite noun can express an accomplishment, e.g. *run a mile*. Likewise, Sharma and Deo (2009) argue that AH concerns the relation of the inherent meaning of verbs with the grammatical aspect markings, but verbs alone do not reflect the lexical aspect of the situations. Aspect acquisition is not a process of simply acquiring verbs and their forms, but of acquiring both form and meaning at sentential level and discourse level.

Based on Andersen's AH, Sharma and Deo (2009: 7) develop a Sentential Aspect Hypothesis (SAH). They state that 'learners hypothesize that morphological marking is a form of agreement with the aspectual class of the sentential predication (not narrowly with lexical aspect alone)'. The claim is illustrated in the following mapping (ibid: 7),

Derived aspect		morphology			
a.	imperfective		present		
b.	perfective		past (overt)		
c.	imperfective		progressive (overt)		

The mapping shows how learners pair up three morphological markings with two aspectual classes at sentential level -- perfective and imperfective. The present morphology is often treated as imperfective aspect, overt past morphology is seen as perfective aspect, and overt progressive morphology indicates imperfective aspect. Sharma and Leo (2009) studied 12 English-Hindi bilinguals' interviews on various topics, and found the order of overt past marking from high to low in sentential aspect is: perfective>delimited habituals³⁷> progressive> stative > non-delimited habituals³⁸. At verbal level, their data showed the emergence order of lexical aspect with past marking: activity > state > event, which was in line with the AH. Sharma and Deo also found the following progressive expansion order: delimited habitual > non-delimited habitual > progressive > stative > perfective. The finding that the progressive extends to stative is against claim 4 in the AH. Sharma and Deo's hypothesis provides another possible solution that overrides the weakness of the AH by considering sentential level aspect rather than verbal level aspect in the study. However, their research method and data analysis are questionable. First, the research did not compare the two hypotheses to demonstrate the advantage of SAH over AH. In other words, it would be more convincing if we could see the data showing the change from verbal level to sentential level. Second, Sharma and Deo's hypothesis is

³⁷ Delimited habituals (Sharma and Deo 2009: 13) 'are sentences with habitual predicates in which it is implied that the habit is temporary, or temporally bound. For instance, the temporal expression *(in) those days* delimits the temporal extent of the situation described.'

³⁸ Non-delimited habituals 'are the sub-class of habitual predicates in which there is no explicit or understood temporal bound on the habit described' (Sharma and Deo 2009: 13).

tested on advanced level English speakers, but it has not been tested on beginner level and intermediate level learners.

Unlike AH and SAH, the Discourse Hypothesis (DH) argues that discourse structure is a factor that affects morphological marking in correlation with lexical aspect. The DH claims that 'learners use emerging verbal morphology to distinguish foreground from background in narratives' (Bardovi-Harlig 1994: 43). 'Foreground information is generally new information that moves time forward; background information is supporting information' (Gass and Selinker 2008: 210). Under the discourse analysis, the research findings on verbal morphology markings are quite different from those in the AH. Bardovi-Harlig (2000) find that simple past appears in foreground first, and it marks the verbs of all lexical aspectual classes (see also Bergström 1995). Achievements are most likely to attract past marking regardless of grounding, followed by accomplishments and then activities. Unlike punctual predicates, which do not undergo the influence of grounding, non-punctual and dynamic predicates attract past marking more in the foreground. However, DH also has its limitations, as Bardovi-Harlig (2000) points out: discourse analysis is based on narrative context. From a second language acquisition perspective, the discourse hypothesis may not work well at lower language levels, because learners' production of comprehensive narration is limited.

While the three hypotheses mentioned above are focusing on language output, Andersen (1988) pays attention to language input, which he argues can cause the developmental pattern predicted in the AH. This is known as the Distributional Bias Hypothesis (DBH). This hypothesis is first tested on motherese³⁹ addressed to children (Stephany 1981; Shirai 1991), and the results are consistent with the DBH. However, Salaberry (2000) refers to Garcia and vanPutte's (1988) and Salaberry's (1998) research, and he argues that classroom students' developmental pattern may not comply with the developmental stages of natural language learners as predicted in the AH, since the effect of the input in natural speaking environments is different from that of the classroom input which lacks consistent discourse content. On the other hand, Bardovi-Harlig (1995) states that second language learners experience a few stages: 1. no systematic use of tense/aspect morphology. She goes on arguing that instruction leads to high accuracy level in forms, but it does not affect the natural pattern, and 'the distribution of past-tense morphology across aspectual categories is the same for learners in both [tutored and untutored] environments, suggesting that instruction does not change the basic stages of form-meaning associations' (Bardovi-Harlig 1995: 164). There is no doubt that Salaberry and

³⁹ Motherese refers to the patterns of speech used by parents or other adults to infants, and it is also called baby talk. It differs from adult speech as the words are shortened and simplified, and the intonation has high pitch, low tempo and wide fluctuation. (<u>http://findarticles.com/p/articles/mi_g2602/is_0003/ai_2602000387/</u>, accessed on 14 Oct, 2010)

Bardovi-Harlig have different opinions on acquisition orders in instructed SLA, but they both highlight the pedagogical effects on tense and aspect acquisition. In fact, a few researchers have investigated the instructional effects on tense-aspect acquisition using comparative studies. The studies are reviewed in the following section.

3.5 Studies on instructed L2 aspect acquisition

The studies on the influence of teaching methods in L2 instructed aspect acquisition are sparse. Therefore, the studies on L2 tense teaching are also included, since aspect and tense are both closely linked to the notion of time. Harley (1989) studied the use of imparfait and passé composé by 319 school students in French immersion classrooms. The majority of the students from 12 schools were at Grade 6 (aged 11 to 12). The students were split into two groups -6 schools in each, one was the experiment group which used the teaching materials designed by the researcher, and the other one was the comparison group which received no special instruction at all. All students were taught by their own teachers. The experiment lasted for 8 weeks. The students received a pre-test before the experiment, an immediate post-test after the experiment, and a follow up post-test three months later. The subjects were familiar with the *imparfait* and *passé composé* forms before the experiment. The learning activities including storytelling, pictures explanation, miming game, sentence puzzle, aimed at bringing students' attention to the difference between imparfait and passé composé without explicit grammatical explanation. The students were tested with three tasks, which were compositions, cloze tests and oral interview. The results were then analyzed with ANCOVA⁴⁰. The immediate post-test showed that the experiment group outperformed the comparison group on cloze and oral tasks, but not on compositions. The follow up post-test showed no difference between the groups in all the tasks, although some teachers continued to use some materials and activities after the experiment period. The results led to Harley's conclusion that properly designed learning activities and materials could accelerate students' grammatical development in immersion classes, but the effect was not long lasting. However, in Harley's experiment, one variable was not controlled, and it may contribute to the big difference between the experimental group and the comparison group in the immediate post-test. The variable is the students' awareness of the purpose of the test. In the immediate post-test, the students will try to use more *imparfait* and *passé composé* in tasks whenever is possible. The context in the cloze test and the oral interview could give students clues and information on when to use the imparfait and the passé composé; whereas the composition task has no reminder to the students when to use the *imparfait* and the *passé composé*. It may also explain why the experimental group outperformed the control group in the cloze test and the oral interview, but not in the composition.

Cadierno (1995) studied the effects of formal instruction on the acquisition of Spanish tenses by 61 L1 English speaking university students. All students were at the early stage of L2 Spanish learning,

⁴⁰ ANCOVA is a term stands for analysis of variance in statistics.

though they had learned the past tense before the experiment. The subjects were divided into three groups, one received traditional grammar instruction, one received a processing grammar instruction⁴¹, and the third group acted as a control group that received no instruction. Cadierno argued that instruction brought learners' attention to forms and helped learners establish correct form-meaning mapping, since learners always processed lexical meaning prior to morphological item in tense (Cadierno et al. 1991). Cadierno further argued that traditional instruction focused on production rather than comprehension, whereas learning should occur in the input process. The opinion was in line with VanPatten (1986) and Ellis (1990) who advocated the process instruction. In the experiment, the traditional instruction group did activities at sentence level including sentence rewriting, sentence completion and question and answer. The processing instruction group's activities aimed at revealing the difference between past tense form and present form, and the activities were to interpret and comprehend past tense in both oral and written form. The students took an immediate test after the experiment, a second post-test after a week and another test after a month. The tasks were an interpretation task and a production task, both at sentential level. The data was analyzed with MANOVA⁴², and the results showed that formal instruction had significant effect on L2 learning. Cadierno concluded that unlike traditional instruction where the effect was on production, processing instruction enhanced both students' comprehension and students' production. However, Cadiemo's conclusion on students' comprehension enhancement is doubtful. If we take a look at the tests, we can see that all the tasks are tested at sentence level. The result of these tasks may prove that students have gained comprehension at sentence level, yet it does not add any weight to the students' comprehension at discourse level. Therefore, it would be more conclusive if discourse level tasks were used to examine the results.

Leeman *et al.* (1995) tested the accuracy rate and the frequency rate in the use of preterit and imperfect by advanced L2 Spanish learners by comparing the pure communicative method to the focus-on-form integrated method. Leeman *et al.* argued that neither focus-on-meaning methods nor focus-on forms methods could provide sufficient input in L2 acquisition. Instead, communicative instruction combined with carefully designed tasks or techniques on forms in a meaningful context enhance the accuracy and the use of specific forms. There were 30 university students involved in the experiment, and they were divided into two classes. Each class took three 50-minute classes per week for 15 weeks in one semester. At the end, only 22 students whose L1 was English and who attended all the classes were selected. Four tasks, namely in-class topic based debate, in-class topic based essays, picture based appropriateness judgement task and modified cloze paragraph with infinitive verb form, were tested prior to the experiment and again after the experiment. In the experiment, both groups were given the same materials and activities, and both of them received feedback from the

⁴¹ Processing instruction is to attract students' attention to grammars at the input, and then reinforce the learning through practice and activities.

⁴² MANOVA stands for multivariate analysis of variance, and it is a generalized form of ANOVA.

instructors, while the focus-on-form group was given the materials with preterit and imperfect forms highlighted, and they were instructed to pay attention to the forms and received explicit feedback on form structure. The results were analyzed using Wilcoxon matched-pairs Signed-ranks test,⁴³ and the findings showed that compared to the focus-on-meaning group, the focus-on-form group made superior improvement on the accuracy of forms with techniques, such as highlighting and emphasizing used by the instructors. In addition, the techniques used in the focus-on-form group also led to the students' increased use of forms. However, Leeman *et al.*'s experiment may be influenced by a variable, which is the students' learning background. The participants are all at advanced level, yet it is not clear how these participants learned tense and aspect prior to the experiment. This variable may enhance or reduce the value of the conclusion. Therefore, it is worth testing the hypothesis at different proficiency levels.

In general, the three studies on instructed tense and aspect learning have shown some positive effects of instruction on language learning, e.g. learning comprehension, and learners' output, e.g. accuracy and frequency. The studies' performance has also shown some positive effects of communication and comprehension in teaching and learning. In other words, both focus-on-formS and communicative methods can enhance L2 learning in certain ways, but what matters is how to integrate the salient features of these methods to achieve the best learning outcomes.

3.6 Chinese aspect acquisition

This section especially reviews studies of Chinese aspect acquisition. It starts with acquisition of L1 Chinese aspect, followed by acquisition of L2 Chinese aspect, and on the basis of the research results, a teaching framework of Chinese aspect system will be developed.

3.6.1 L1 Chinese aspect acquisition

As the studies of aspect acquisition in other languages, Chinese aspect acquisition research is rooted in children's language acquisition. There are two focuses of these studies: the acquisition order of aspect markers and the interaction of viewpoint aspect and situation aspect.

The earliest study is on the acquisition order of aspect, and it is Erbaugh's (1978) study on the use of aspect markers by two 2-year-old Chinese children. Erbaugh studied two recorded tapes, which lasted 7 hours and 9 hours respectively, and she found that children like adults used more aspect to distinguish time than other temporal means, such as time adverb. Among the aspect markers, *le* is used first to mark change of state by the children, and then used to mark completion. The resultative

⁴³ 'The Wilcoxon Matched-Pairs Ranks test is a non-parametric test that is often regarded as being similar to a matched pairs t-test. The Wilcoxon Matched-Pairs Ranks test is used to determine differences between groups of paired data when the data do not meet the rigor associated with a parametric test' (MacFarland, 1998).

statements very rarely appeared in the data. In her later studies (1982, 1992), Erbaugh further found that the imperfective markers *zai* and *zhe* appeared before the experiential marker *guo*. Another study on the acquisition order of the aspect markers is Kong (1993, reviewed in Jin, L. and Hendriks 2005), but the study only looked at verb final *le* and sentence final *le*. Kong's experiment involved quite a large number of children (N=90) ranging from 1 to 5 years. Kong found that sentence final *le* appeared before verb final *le*, which was consistent with Erbaugh's findings in 1978. The same result was also found in Jin, L. and Hendriks' (2005) study, in which the subjects had mean ages of 5, 7 and 10.

The studies on viewpoint aspect and situation aspect interactions have gained more attention than the acquisition order studies of L1 Chinese. Most of the studies are closely associated with Andersen's Aspect Hypothesis (AH) by examining the influence of semantic features of verbs or situations on aspect markers (Li, P. 1990; Li, P. and Bowerman 1998; Li, P. and Shirai 2000; Jin, L. and Hendriks 2005; Chen, J. and Shirai 2010). Reviews of L1 Chinese aspect research can be found in Jin, L. and Hendriks (2005) and Chen, J. and Shirai (2010). The results of these studies support the AH, and the researchers reach the same conclusion that Chinese children tend to associate perfective markers with telic verbs and imperfective markers with atelic verbs. However, some researchers (Jin, L. and Hendriks 2005; Hendriks *et al* 1998; Chen, J. and Shirai 2010) point out the deviation from the AH, such as 'the over generalization of imperfective marker *zai* to States and *zhe* to Achievements' (Jin, L. and Hendriks 2005: 91). They claim that the deviation is caused by the impact of discourse factors on situations when aspect markers are not used, such as to use of time adverbials and context instead. However, none of the studies examines the interaction of systematic aspect input and the aspect acquisition in L1 Chinese (Chen, J. and Shirai 2010).

In sum, the studies on aspect markers acquisition order show a natural aspect system developmental pattern in children, but the result needs to be verified by more studies. The studies on the interaction of aspect marking and verbs in L1 Chinese limit themselves by considering solely the outcomes of learning without investigating the process of learning or the effects of input factors. Nonetheless, the research results still provide a reference for research on L2 Chinese aspect acquisition in terms of acquisition order and aspect form and meaning mapping.

3.6.2 L2 Chinese aspect acquisition

Most studies on L2 Chinese aspect focus on the use and development of perfective aspect marker *le* by L2 Chinese learners. The reason is that *le* has various functions depending on whether it is attached to verbs or sentences, and it does not follow the One-Form One-Function Principle (Andersen 1989). Jin. L. and Hendriks (2005: 77-78) reviewed seven studies on the acquisition of aspect markers. Four of them (Sun, D. 1993; Wen, X. 1995; Zhao, L. 1996; Teng, S. 1999) focused on investigating *le*, and

the rest (Wen, X. 1997; Yang *et al* 1999, 2000⁴⁴) investigated perfective markers *le*, *guo* and imperfective marker *zhe*. All works reported problems caused by *le*, and learners at all levels either overused or underused it. Some works also reported overuse and underuse of *guo* and *zhe*. In order to gain insight into the problem, this research will review studies on the use of aspect markers.

Wen, X. (1995) focused on the acquisition of *le* by 14 English native speakers in a college in the USA. Wen studied le by its functions, one function is to work as a perfective aspect marker (VF le) and the other is to work as a particle (SF le). Wen investigated the acquisition order of VF le and SF le as well as the reasons causing the acquisition order. The subjects in Wen's study had five hours of language teaching per week, 8 of them had been learning Chinese for 14 months, and the rest had been learning Chinese for 26 months. They conducted three tasks during the interview on the use of *le* including conversation-based questions and answers, picture-based questions and answers and pictures description. In relation to the acquisition order of le, Wen found that the perfective marker le appeared before the sentence final le, which differs from Erbaugh's (1978) and Kong's (1993) findings in L1 Chinese. However, Wen gave an insightful analysis on the result of the acquisition order. Wen believed that verb final le was easier to learn than sentence final le in terms of their semantic function and pragmatic function. Semantically, Wen found in her study that learners tended to use a meaningbased approach in linguistic form learning, and the meaning of completion of an action conveyed by verb final *le* when attached directly to verbs was more explicit than the meanings that sentence final *le* conveyed. Pragmatically, sentence final le could indicate the end of speech or the change of state, which was also more complicated than the function of perfective marker le. In addition, Wen observed L1 transfer in aspect learning even at more advanced level with two facts. One was the overuse of verb final le to indicate past tense, and the other was the underuse of sentence final le.

Duff and Li, D. (2002) examined the use of perfective *le* by L2 Chinese learners who were native English speakers, based on the result of their pilot study (Li, D. and Duff 1998) on 'developmental trends in learners' form/function analysis of LE and past time/perfective aspect in oral narratives by adult English-speakers learning Mandarin' (Duff and Li, D. 2002: 427). In their pilot study, Li, D. and Duff (1998) found that learners underused *le* at early stages, and then overused it later, which Li, D. and Duff believed was caused by L1 tense marking transfer. In Duff and Li, D.'s (2002) study, subjects were 9 English speakers who were studying Chinese in a university, and 9 Chinese speakers, who were also university students. Duff and Li, D., however, did not mention the learners' Chinese proficiency level. The three tasks used were story retelling of the Pear Story, a monologue on vacation travel and a cloze test of *le* in a passage. Duff and Li, D. compared the L2 Chinese learners' use of *le* with the native Chinese speakers' production of *le*. They found that L2 learners underused *le* in the tasks in general. They normally used it with telic verb or verbal phrase, such as verb with quantified

⁴⁴ Refer to Jin and Hendriks (2005).

object and RVC, only when the verb or the verbal phrase had obvious perfective features. In contrast to them, Chinese speakers used le with all situations, but especially in telic situations with accomplishment verb and achievement verb. Duff and Li, D. (2002) concluded that six factors caused the difference: 1. L1 past tense transfer, because students treated le as a past tense marker. 2. How learners interpret function of le, such as perfective/perfect distinction. 3. Language input and frequency of exposure to forms/functions. 4. Interaction of le and lexical items is complicated. 5. Discourse features of the tasks. 6. Instructions and explanations on le can affect learning. In these factors, the first two factors concern learners' learning strategy and learning ability, the third and the last concern input factors, and the fourth and the fifth concern Chinese language itself.

Jin, L. and Hendriks (2005) investigated the development of aspect marking in L2 Chinese including the use of perfective aspect marker le and imperfective markers zai and zhe. Meanwhile, Jin and Hendriks also tested Andersen's AH in L2 Chinese. The subjects included thirty L1 English speaking university students, thirty L1 Chinese learners and ten Chinese adults. The L2 Chinese learners had learned Chinese for at least 6 months and had spent at least one month in China, and they were divided into three groups according to their Chinese level, namely Lower Intermediate, Intermediate and Upper Intermediate based on their scores in a cloze test. The quasi-experiment task used storytelling based on sets of pictures. With regard to the acquisition order of aspect markers by L2 learners, Jin and Hendriks found that verb final *le* appeared first, followed by sentence final*le*, *zai* and then *zhe*. Among these aspect markers, *le* was the most problematic. It was either overused or underused by lower level learners, and it was underused by higher-level learners. Jin and Hendriks believed that the acquisition order was mainly caused by L1 influence. As for the interaction between verb aspect and aspect markers by L2 learners, Jin and Hendriks' findings generally supported the AH. Zai was used with durative situations, while *zhe* with states and activities. However, some deviation existed, such as over generalization of zai to achievements. Jin and Hendriks also believed that it was caused by L1 English transfer. The conclusion on L1 transfer is very similar to Wen, X.'s (1995) observation.

Ma, L. (2006: 42) studied the use of three functions of *le* in discourse, namely (1) to mark an anteriority, (2) to mark peak event⁴⁵, and (3) to mark the end of a discourse unit, by L2 Chinese learners from two universities. The L2 learners from University of Iowa and University of Wisconsin-Madison were assigned to three language level groups. Beginners' level learners had completed two semesters of learning, intermediate level had completed four semesters of learning, and advanced level were learners who continued with the study after completed four semesters of learning. A control group of 30 Chinese native speakers at university level were used as reference. Three tests were carried out, one was a grammar test, which was used to evaluate the learners' overall grammar

⁴⁵ Ma (2006) uses peak event in her thesis for main event or foregrounded event.

knowledge, one was a multiple-choice cloze knowledge test in a dialogue, and this one was to test the learners' knowledge of the discourse functions of *le*, and the last test was a storytelling task based on 6 pictures in sequence. The control group only did the last two tests, because the first one was not necessary for them. Ma found that the higher level L2 Chinese learners had better understanding of the discourse functions of *le* than the lower level learners. Meanwhile, advanced level learners outperformed intermediate level and beginners' level learners in using *le* to mark main events. Ma argued that the reason for the results was that the incompetent discourse knowledge of the lower level learners hindered their understanding of the discourse functions of *le*.

To sum up, the above studies have explored two issues in Chinese aspect learning. One is the acquisition order of aspect markers, and the other is the accurate use of these markers. With regards to the first issue, Wen, X. (1995) and Jin, L. and Hendriks (2005) both find that verb final *le* appears before sentence final *le*. Jin, L. and Hendriks (2005) also find that imperfective markers appear after perfective marker *le*, and for imperfective markers, *zai* appears before *zhe*. However, in Jin and Hendriks's research, no data of perfective marker *guo* is shown due to the low usage rate in their Chinese adult data. Therefore, it is unknown whether *guo* is acquired at the same time as *le* or later. Ma, L.'s (2006) study on the acquisition of the discourse functions of *le* discovers that the peak event function of *le* is the most difficult one to learn compared to the other two functions.

As for the accuracy of aspect markers used by L2 learners, the common finding is that higher language level learners produce better aspect use than lower level learners. On top of the common findings, Jin, L. and Hendriks (2005) and Duff and Li, D.'s (2002) find the underuse of *le* at all language levels. Jin, L. and Hendriks (2005) also observe the overuse of VF *le* at lower levels. Given the reasons for the overuse and underuse, all researchers believe these are caused by learners' L1 language transfer as well as the fundamental difference between Chinese and learners' native languages. In these studies, only Duff and Li, D. (2002) mention the effect of teaching. However, none of them investigates how teaching can possibly influence learning of Chinese aspects.

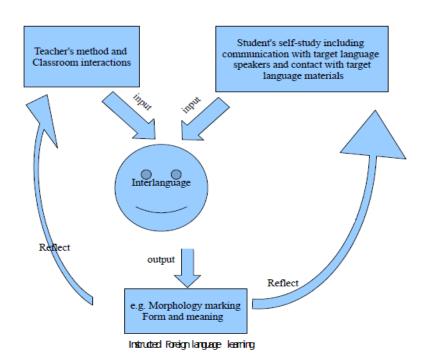
3.7 Conclusion

In this chapter, although we reviewed language learning theories and language teaching methods separately, teaching methods and learning theories are inseparable. The key element around L2 teaching and L2 learning is learners' interlanguage. All teaching methods have their own ways of language input to assist learners' interlanguage. However, there are constraints when applying these methods. The naturalistic approach imitates first language acquisition, but it needs to consider some important element, such as age. The focus on mearning approach may work better for younger learners than adult learners. This is not because that younger learners and adults differ in the developmental stages of their interlanguage. In fact, studies (e.g. Meisel, Clahsen and Pienemann 1981) including the ones in aspect acquisition (e.g. Aspect Hypothesis) reviewed in this chapter show that

children and adults go through the same stages in language learning. However, one of the differences between children and adults lies in their acquisition of implicit competence, which declines with aging for two reasons. '(1) [B]iologically, the plasticity of the procedural memory for language gradually decreases after about age 5; (2) cognitively, reliance on conscious declarative memory increases both for learning in general and for learning a language from about age 7' (Paradis 2004: 59). Dekeyser's (2000) study show that adults apply different learning styles to children. 'It has been widely assumed that young children rely more on memory-based processes, whereas adults are more characterized by rule-based learning' (Nikolov and Djigunovic 2006: 234). From this point of view, it looks that Grammar-Translation method matches adult learners' learning styles. However, many researchers dislike the Grammar-Translation method (GTM) as they think learning in this way is 'spoon-fed'. In compare, the idea of focus on form is to give learners more autonomy in learning. Then again, it contains too many varieties of techniques, so its boundary to focus on meaning and focus on forms is not very clear.

As for the learners' interlanguage, some researchers believe that learners follow the same acquisition pattern in their L2. However, it should not minute the role of teaching. Indeed, some studies reviewed above show that teaching can influence learners' accuracy level and comprehension abilities, etc. On the other hand, learners' language output can reflect the effect of teaching. If the learners' interlanguage and teaching are in tune with each other, it may bring more benefits to learners.

Figure 4: Second language learning procedure



As a summary of what has been discussed in this chapter, a diagram is drawn to show the relation of teaching and learning in a cyclic pattern (see figure 4). In the diagram, learners are at the centre of learning. Learners receive language input through different ways, such as classroom instructions or self-study. Learners then transfer the input information to their interlanguage using learning strategies, such as L1 transfer. Finally, learners produce their interlanguage via speaking or writing. The language production can be analyzed, and the results in return reflect on effectiveness of the input. This will be the focus of this research. In addition to teachers' input, learners may also develop their interlanguage by contacting people outside of classrooms. This variable is very difficult to control in experiment. However, in foreign language learning, the influence of this variable may be subtle, since learners may not have much contact with foreign language resources. Therefore, this variable will not be considered in this research.

Finally, a teaching order of the aspect markers in L2 Chinese is generated for this research following what was revealed in Jin, L. and Hendriks' (2005) research. It starts with VF *le* and SF *le* and then imperfective markers *zai* and *zhe*. Because Jin and Hendriks did not find out the acquisition order of *guo*, the learning order of *guo* will follow native Chinese speakers' acquisition order (Erbaugh 1982, 1992) to appear after the imperfective markers. The functions of the aspect markers and their interactions with lexical aspect are included in the literature review on Chinese aspect markers, and they are stated under each aspect markers. With the framework of teaching Chinese aspect markers, in the following chapter, we will develop research methodologies.

Chapter 4 Research methodology

Based on the literature reviews in aspectual theories and studies in second language acquisition/learning, research hypotheses about learning Chinese aspects are firstly proposed in this chapter. They are followed by a presentation of the research design including participants, teaching materials and procedures, selection of testing tasks, data collection, and analysis methods. A pilot study is also briefly introduced, as its findings are used to shape the design of the main research.

4.1 Research hypotheses

To date, no study has tested whether a specific teaching approach helps with the learning of Chinese aspects by L2 learners. The debate about teaching approaches does not show a preferable way of teaching grammar, although the focus on forms (see chapter 3) is gaining more attention than before. The lack of research in teaching L2 Chinese aspect adds a question to teachers: what teaching approach leads to better acquisition of L2 Chinese aspect? As a starting point for this question, this research has chosen to compare two teaching approaches. One takes a focus on forms perspective, and relies on the Grammar-Translation approach, and the other favours a focus on form.⁴⁶ The reason for using the Grammar-Translation approach is that, first, aspect is a grammatical and lexical phenomenon. It is assumed that explicit instruction on aspect will help learners gain a better understanding of the grammatical rules of Chinese aspect. Second, the nature of this approach is to transfer the competence from the native language to the target language, so it may increase the effect of L1 transfer if there is any. Third, it tests if translation exercises have any effect on accuracy levels by drawing learners' attention to linguistic and pragmatic features of the target language (Stoddart 2000). On the other hand, focus on form focuses less on explicitly grammatical explanation, but emphasizes comprehension at discourse level. It provides situations within which the aspect markers are used. It may thus raise learners' implicit awareness of form and function mapping. The communicative approach applied in this research follows the main principles of communicative teaching, such as learner-centeredness (Poole 2005), authenticity and communication (Richards 2006). However, it differs from the conventional Communicative approach in terms of language use in class. Due to the learners' low L2 proficiency level, English as their first language is used in instructions and group discussions. The approach also differs from Long's (1991) focus on form, for the reason that the teaching of Chinese aspect does not occur incidentally (see section 3.3.1 in chapter 3). It is difficult to implement the experiment on an incidental basis for many realistic reasons. First, learning content does not occur incidentally in a classroom setting. Teachers need to prepare lessons in advance according to their teaching syllabus. Second, the contact hours with students are limited. To draw students' attention on Chinese aspect as it naturally occurs takes time, since students may pay less attention to words without semantic meanings (VanPatten 2004). Third, as Ellis (1984) pointed

⁴⁶ Refer to chapter 3.

out that learners would go through some silent periods before producing in target language like children do in learning their first language, some learners at beginners level would rather receive information by listening than by making questions.

Therefore, the research's hypotheses are:

1. The Grammar-Translation approach leads to higher accuracy levels in using aspects than a communicative approach does in grammatical tasks.

2. A communicative approach leads to better use of aspects than the Grammar-Translation approach in comprehension tasks.

4.2 Pilot study

As a pioneer study in exploring the teaching of Chinese aspect, the pilot study gives a holistic view of the research design. Although many issues were considered thoroughly beforehand, there were still factors that could have skewed the results and needed to be addressed.

4.2.1 Participants

In the pilot study, three groups of informants were involved. Two groups of informants were Mandarin learners at beginners level enrolled in University Wide Language Programme (UWLP) in Aston University in the UK. UWLP Mandarin course consists of a two-hour in-class learning session each week over two semesters, made of ten sessions. None of the learners at beginners' level had any knowledge of Chinese prior to the Mandarin course. This is confirmed by the informants' course application form, in which the informants need to state their language learning experience. One group of informants was taught Chinese aspect with the Grammar-Translation approach, and the other group took the lesson with the communicative approach. The groups had mixed genders and were from different departments in the university. There were 17 students in the communicative group. Ten of them were native English speakers, and the others were non-native English speakers with different nationalities. For the Grammar-Translation group, 14 out of 15 students were native English speakers. One of the native English speakers was a mature student. To keep the dependent variables to a minimum, the mature student's test results were excluded.

For the language level of participants, the researcher chose beginners, rather than higher-level for a number of reasons. First, Chinese is a relatively new foreign language taught in the UK classrooms. The number of learners is scarce at higher levels. It is extremely difficult to find two groups with enough learners. Second, higher-level learners in UWLP come from different sources. Some learners move on from beginners' level, but others learned Chinese in other settings. For learners coming from other sources, it is very difficult for the researcher to trace the teaching approaches applied to these

students' Chinese aspect acquisition/learning prior to the experiment. In that case, students' learning background becomes a variable which may influence the research results. Third, there are no research findings showing when aspect markers can be taught. To start the research with beginners' level was therefore the most logical and rational step taken.

The third group was a control group consisting of 12 native Chinese speakers. All of the L1 Chinese speakers were qualified English teachers working in a private school in China. The performance of the control group provided the benchmark for using Chinese aspect markers.

4.2.2 Teaching materials and design of classes

The teaching was delivered using Power Point slides (PPT). Two sets of PPT were designed one for each of the classes (see appendix 1 and appendix 3). Each set lasted for one hour of teaching. In the first set of PPT for the Grammar-Translation group (GT), the lesson started with a brief introduction of the concepts of aspect and tense using examples of English sentences. The researcher then moved on to Chinese aspect including Chinese lexical aspect and grammatical aspect. In the lexical aspect section, a table of the classification of Chinese lexical aspect was distributed to the class (see table 2). The examples in the table were further explained to assist students understanding lexical aspect in Chinese. The last part was a presentation of grammatical aspect, which included perfective aspect and imperfective aspect. The syntactic rules of Chinese aspect markers were given following the order of acquisition by native Chinese speakers (see table 3). The perfective markers came before imperfective markers except for perfective marker guo that was put last, since it was not used as frequently as other perfective markers, and there was a lack of empirical evidence about when it was acquired by native speakers. After the presentation of aspects, the researcher gave participants some translation exercises (see appendix 2) to drill them through the markers' linguistic rules. The class was very teachercentred. Students could ask questions about the presentation, but they did not have opportunities to discuss it between themselves.

The translation exercises consisted of 33 sentences. Some needed aspect markers, and others did not. All the sentences were semantically isolated. Most sentences were chosen from examples in published books (e.g. Yip and Don 1998; Xiao and McEnery 2004), but some words were changed to easier ones to suit the lower level learners. All these exercises had been given to native Chinese speakers to translate from English into Chinese beforehand to find out whether native Chinese speakers used the expected aspect markers in the translation. If the Chinese speakers did not use aspect markers as expected, the sentences were discarded.

The design of the communicative lesson for teaching aspect at lower language level was very challenging. Many techniques in focus on form, such as recast and negotiation of meaning, could not be applied, since sentences were limited to very simple forms as learners had limited access to

different categories of lexical aspect. In addition, these techniques rely substantially as well on learners' good listening skills. Many beginner-level learners do not meet the requirement. However, some methods, such as input flooding and negotiation of form, could be adapted in designing the lesson. In the second set of PPT, the lesson was designed to use pictures and comprehensive context to explain Chinese aspect to learners. The learners were firstly given four sets of pictures indicating four types of lexical aspect. The researcher then asked the learners to discuss their thoughts about the differences of the words in small groups, and students were encouraged to express their opinions in front of the whole class. The researcher listened to their discussion and opinions, and gave verbal guidance whenever the discussion lost focus. The learners were continually asked to read texts in small groups. The texts included all aspect markers, and illustrated all their functions in it (see appendix 3). The aspect markers were underlined in the texts to attract attention. Some pictures were also added to help learners with the understanding of the context. However, the texts only showed correct uses of aspect markers, but not incompatible uses of lexical aspect and grammatical aspect, such as the incompatibility of imperfective markers zai and zhe with punctual verb ying (win). In addition, due to the lexical constraint at beginners' level, English was added to individual words to facilitate the comprehension of the texts. Without the support of English, the learners can go astray, which causes confusion and frustration in learning (Krashen 1985). To provide students with English words differs from the translation approach, as the translations of sentences are not given. Therefore, the learners still need to figure out the function of Chinese aspect on their own, and integrate the aspect markers into their interlanguage. The same applied to the introduction of lexical aspect, the researcher gave the learners time to discuss their thoughts about the markers based on their understanding of the texts. The researcher only provided scaffold to the discussion. The class was very interactive. Learners negotiated with each other and with the researcher. However, the researcher encountered two challenges in class. One was to control the explicitness of the guidance given. As indicated by Doughty and Williams (1998), the boundary between focus on form and focus on forms is difficult to define when it involves negotiation of forms. The other is to bring learners' discussion back on track. Very often, the learners did not get to the point of the use of markers. The researcher needed to be flexible in teaching and responsive to students' actions and discussions, but within a time limit.

Due to the ethical issue, the handouts used in each group were given to the other group in the following week. The learners were asked to go through the handouts with the researcher to make sure that they received the same information on aspect markers in class. Despite this, the treatments to the groups are different in the teaching session. The CG group received instruction on the Chinese aspect markers in a communicative way, while the GT group used translation exercises to drill through the grammar rules. Therefore, the test results can still show the effect of the teaching approaches.

4.2.3 Tests and testing material

In the experiment, three tests were given to the learners: a pre-test, an immediate test and a post-test. In all these tests, the participants were asked to use their candidate numbers, so that the results were anonymous to the researcher. The first test was a general knowledge test, and it was a two-hour reading and writing exam after 20 hours of instruction. It aimed at testing the learners' reading abilities of Chinese characters and their writing abilities in pinyin (phonetic system of Chinese) as well as their use of basic grammar. The test included several tasks, such as multiple choices, translation and reading comprehension, and two writing tasks. None of the tasks tested the use of aspect markers.

The immediate test (see appendix 4) aimed at testing the short-term effects of teaching approaches to the learning of Chinese aspect markers. It took around one hour immediately after the presentation of Chinese aspect in the same day. In this test, three tasks were chosen, namely a translation task, a multiple-choice cloze task and an elicitation task. The translation task was selected in favour of the GT group, since it resembled the format of the exercises used in the GT. It had 15 unrelated English sentences to translate into Chinese. However, all sentences were different from the ones in the translation exercises given when presenting aspect to the GT group. The sentences were adapted from published books (e.g. Yip and Don 1998; Xiao and McEnery 2004). Chinese vocabulary was given under English words to assist the learners in completing the task. Most of the sentences needed aspect markers, and only one sentence did not need an aspect marker. The reason for not having many distractor sentences or none aspect marking sentences was because this task aimed at finding out whether the learners could use appropriate aspect markers for different situations, but not whether the learners knew when not to use aspect markers.

Cloze tests have been widely used in L2 aspect studies (e.g. Cadierno 1995, Salaberry 2000, and Labeau 2005). Honeyfield (1987) points out that cloze task develop learners' prediction skills by referring to syntactic and semantic cues of the text and general knowledge. The cloze task in the immediate test slightly differed from conventional gap filling, as three options were given for each gap. The adaptation of the task was to prevent learners from avoiding aspect markers. Therefore, the cloze task not only examined readers' comprehension skills, but their ability in processing grammar rules. In total, the task had 15 gaps but with a few distracters. To assist the learners, English words were given under Chinese words.

The third task in the immediate test asked to describe five pictures in a sequential order. The aim of this task was to reveal how the learners would use aspect markers in a less controlled situation. A vocabulary list was provided alongside the pictures to facilitate learners' work. Bardovi-Harlig (2013) states that impersonal elicitation tasks have an advantage over personal narratives in lower level learners due to its foreseen event order. However, Bardovi-Harlig (2013) also warns that learners may

focus more on the foreground and ignore the background in impersonal narratives. Taking Bardovi-Harlig's concern into account, the pictures used in this research did not contain many details in the background. Each picture could be described with one or two sentences.

For the sake of data analysis in the next chapter, each task in the immediate test is further explained here.

Translation task

In this translation task, all functions of aspect markers are tested. Sentences 1 to 9 test perfective markers *le* and *guo*, except for sentence 5, which is a distracter where verb final *le* is not supposed to be used. The remaining sentences 10 to 15 target imperfective markers *zai* and *zhe* with sentence 13 as a distracter.

The first three sentences involve sentence final *le*. It tests its function of denoting a change of state. The Chinese translations of these sentences are shown below.

- (1) Huakaile (Yip and Don 1998: 44).(2) Shangdianguanmenle (ibid: 48).Flowers openLEShopcloseLEFlowers are in bloom.The shop is closed.The shop is closed.
- (3) Wo meiyou qian le (ibid: 50).I not have money LEI do not have any more money.

The fourth sentence is *I drank a glass of water*. This sentence needs a verb final *le* to depict a perfective situation of drinking water. Without VF *le*, the sentence is changed to *I drink a glass of water*.

(4) Wo he le yi bei shui (ibid: 47).I drink LE one glass waterI drank a glass of water.

Sentence 5 gives a perfective situation. However, in this sentence verb final *le* is not needed, because the verbal situation of seeing me is not temporally bounded. The temporal adverbial *Sunday* (Topic time) gives a broader time span within which the situation happens (Time of Situation). It is unknown whether he stayed with me for one hour or a whole day on Sunday. Indeed the temporal adverbial only indicates the relation between the event time (Topic time) and the speech time (Time of Utterance). Therefore, the time adverbial gives a reference to tense rather than aspect.

(5) Xingqitian ta lai kan wo (ibid: 147). Sunday he come see me He came to see me on Sunday.

Sentence 6 uses SF *le* to indicate the event's relation with current situation as well as a change of state. This sentence differs from sentence 7 in that the event of seeing Beijing opera gives a sense of experience, since Beijing opera is not the performance that people can see often even in Chinese society nowadays. Therefore, the experiential marker *guo* shall be used, but not *le*.

(6) Ni zuo wan nide zuoye le ma? You do finish your homework LE MA Have you done your homework?
(7) Ni kan *guo* jingju ma (ibid: 159)? You see GUO Beijing opera MA Have you seen Beijing opera?

Sentence 8 is to test whether learners can distinguish *guo* from VF *le*. Although grammatically both are correct in this Chinese sentence, *guo* gives a more experiential reading to the event of buying Chinese books. If learners use *guo* in this sentence, it will strongly show their understanding of the experiential feature of *guo*. Sentence 9 is another example to use the experiential marker *guo*. If a VF *le* is used instead, the sentence is changed to *I became a teacher*.

(8) Ta mai guo	henduo	zhongwen	shu.	(9) W	o dan	ng guo	laoshi.
He buy GUO	many	Chinese	book	Ι	be	GUO	teacher
He bought ma	any Chin	ese books (i	in the past).	Ιv	vas o	nce a tea	icher.

Sentence 10 is a durative situation, so a durative marker *zhe* must be used. When the other imperfective marker *zai* is used, the event becomes *She is putting on red clothes*.

(10) Ta chuan zhe hongse de yifu.She wear/put on ZHE red DE clothesShe is wearing red clothes.

Sentence 11 includes a bounded perfective situation of walking and its background information of smiling. The V1 *zhe* V2 structure can link the two events together. The verb before *zhe* gives background information of the situation depicted by the verb after *zhe*.

(11) Ta xiao *zhe* zou jin jiaoshi.She smile ZHE walk enter classroomShe walked into a classroom smiling.

Sentence 12 is an ongoing situation in the past. It needs the progressive marker zai.

(12) Ta gangcai zai kan dianshi.He just now ZAI see TVHe was watching TV just now.

Sentence 13 contains an ongoing situation, but it highlights more the relation of the event to the current situation. Despite the ongoingness in the sentence, no imperfective marker shall be used in the Chinese translation. As mentioned in the literature review, marker *zai* is to mark the ongoingness of an event, but not an event with a final boundary. Whereas the other imperfective marker *zhe* indicates the duration of an event, it cannot be with temporally bounded situations either. This sentence is very challenging to learners, especially the communicative group.

(13) Wo zou *le* sishi fenzhong le.I walk LE forty minutes LEI have been walking for forty minutes.

Sentence 14 is similar to sentence 11. It has two simultaneous situations, one is to read the book, and the other is to listen to music. The event of listening to music gives the background information.

(14) Wo ting *zhe* yinyue kan shu.I listen ZHE music look bookI read the book listening to music.

Sentence 15 depicts a durative status of a clock. It is very challenging to beginners' learners. It can take durative marker *zhe*. It can also leave the marker out. There are two ways of translating. Sentence (15) uses *zhe* to mark the duration of hanging. In sentence (16), the *zai* used is not a marker. It forms a prepositional structure with *shang* meaning *be on*....

(15) Qiang shang gua zhe zhong. Wall on hang ZHE clock A clock hangs on the wall. (16) Zhong gua zai giang shang. Clock hang be wall on A clock hangs on the wall.

As can be seen above, some markers are used in more than one sentence, but some are not. It is designed in this way due to the complexity of some markers, such as SF *le* and *zhe*. This will be further explained in the control group's data.

Cloze task

Figure 5: Cloze task in the immediate test							
A: Lǐ nà, nǐ (1) kàn yĩngwén shū ma?	(1)	A	zai	В	zhe	С	N/A
You read English book ?							
B: Shì de. Wǒ cānjiā (2) yí gè yīngwén bān.	(2)	A	zhe	В	guo	С	le
Yes. I join one English class							
<u>A: Nǐ wèishénme xué (3)</u> yīngwén?	(3)	A	zhe	В	le	C N	N/A
You why study English?							
B: Yīnwei wǒ xiǎng qù yīngguó dúshū. Wǒ yǐ qián xué (4) yīngwén,	(4)	A	zhe	В	le	С	guo
Because I want go UK study. I before study English,							
kěshì xiànzài hěnduō dōu wàng (5) 。	(5)	A	zhe	В	le	С	<u>gu</u> o
But now many all forget .	(6)	A	N/A	В	le	С	guo
<u>A: Wǒ qù (6) yīngguó, wǒ zài Aston dàxué xuéxí (7) yì nián.</u>	(7)	A	N/A	В	le	C	zhe
I go UK, I in university study one year.	(8)	A	N/A	В	le	C	guo
Wǒ hěn xǐhuan (8) yīngguó。Yīngguó yǒu (9) hěnduō gōngyuán。	(9)	A	N/A	В	le	С	guo
I very like UK. UK has many park							
<u>Tiānqì hǎo deshíhou, hĕnduō rén zài cǎodì shàng tǎng (10)</u> shài tàiyáng₀	(10)	A	zai	В	zhe	С	le
Weather good when, many people are grass on lie bath sun							
B: Zhème shuō, nĭde yīngyǔ yídìng hěn hǎo. Nǐ néng bāng wǒ xué yīngyǔ (1) ?	(11)	A	N/A	В	ma	С	le
This say, your English must very good. You can help me study English ?							
A: Néng. Búguò xiànzài bùxíng. Xiàwǔ sāndiǎn, nǐ zài zhèr zuò (D) děng w	vŏ(12)。		A he	e	B zh	e	C le
Yes. But now not possible. Afternoon 3 o'clock, you at here sit wait me	e.						
B: Hǎode。 Xiànzài kuài zhōngwǔ 💷 , nǐ qù chī zhōngwǔfàn 🛄 ?	(13)		A ne		B N/.	A	C le
Ok. Now nearly noon , you go eat lunch ?	(14)		A le		B N/.	A	C ma
A: Wǒ bù è (15), nǐ xiān qù。	(15)		A le		<u>B</u> zhe	;	<u>C</u> N/A

I not hungry , you first go.

The cloze task contains a dialogue between two Chinese university students in a library talking about English learning and life in the UK. Six out of 15 blanks are distracters, which are slot 3, slot 8, slot 9, slot 11, slot 14 and slot 15. In the nine uses of markers, all markers appear twice, except for *zai*. Since in the context, *zai* should not pose challenges or confusion. In the control group's data, all candidates correctly used *zai*. Slot 1 is the use of *zai*, which can indicate Lina's action of reading an English book

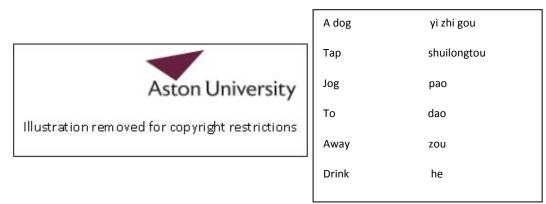
when person B approaches her. Option B *zhe* should not be used due to its wrong syntactical position, as it has to be after the verb kan (read). Slot 2 and slot 7 are testing VF le. In slot 2, VF le gives person A an idea that Lina (person B) has joined the English class. For the other two options, if readers interpret joining an English class as an experience, then they would use guo instead of le. However, guo gives a feeling that person B is not in the class now due to its discontinuity with present (Smith 1997), which is not the case according to the context. If readers do not consider the rule that zhe cannot be used with temporally bounded events, they can go for zhe. It is assumed that GT group would have less cases of using zhe than the communicative group (CG) does, as CG did not learn when not to use the markers. The same approach applies in slot 7 to test learners' understanding of using VF le in an actualized and bounded event, where person A says that I studied in Aston University for a year. Without VF le, the aspect of the event of study is not clear. Slot 3 does not need any markers, as the sentence why do you study English does not need an aspectual view in Chinese. If person A wants to add an imperfective view as why are you studying English, then imperfective marker zai is needed, but not zhe. The reason is that we treat study as a progress with dynamicity rather than a continuous status. Slot 4 and slot 6 need guo for the past events. The option distracting learners in these two slots is VF le. Slot 4 I studied English before is not a bounded event, thus VF le is not compatible. However, grammatically slot 6 can take VF le. The difference between VF le and guo lies in the context. From what person A says about the UK, we can see that person A sees I have been to the UK as an experience rather than a single actualized event. Slot 5 and slot 13 are for SF le. Both situations have a sense of changing state and its relevance to present. In slot 5, time adverbial xianzai (now) and conjunction keshi (but) are the clues for getting le. In slot 13, the clues are the time adverbial xianzai (now) and adverb kuai (nearly). The options in the two slots are very different. Slot 5 has verb wang (forget) directly linked to le, thus learners may think of using an aspect marker. The problem is which marker to use, whereas in slot 13, le is not after a verb but at the end of a sentence. Therefore, learners may not consider aspect markers but other functional words or use none. In this case, if a learner gets slot 5 correct, but slot 13 wrong, it shows that the learner is not competent in using SF le. Slot 8 and slot 9 are like slot 3, which has no aspectual views. I like the UK very much and the UK has many parks are two statements without indication of ending points. When perfective markers are used, the positive tone of the statements will be changed. It will imply that person A may not like the UK now and the UK may not have many parks now. Slot 10 and slot 12 test learners' understanding of V1+zhe+V2 structure. It is assumed that this structure is hard to cope with. Option C in the two slots may confuse learners if they do not accept the *zhe* structure in their interlanguage. In addition to option C, option A he (and) in slot 12 presents another challenge to learners, since option A matches learners' L1. With zhe, slot 12 is you wait for me sitting here at 3pm. With he (and), it becomes you sit here and wait for me at 3pm. It sounds perfect in English, but it is not a usual way to speak like this in Chinese. Slot 11 and slot 14 both need a yes/no question marker ma. Because the slots are located at the end of the sentences, an option of le is given to confuse learners. Slot 15 does

not need any marker. Option A in slot 15 tests learners' knowledge on when not to use SF *le*. Learners can go for option A if they do not understand the context, or if they are not aware the limit of using SF *le*. Option B gives a good translation in English *I am not being hungry*. However, in Chinese the negator *bu* (not) cancel the duration of the state of being hungry. It thus does not need a durative marker *zhe*.

The discussion above shows that every slot and every option for the slot are chosen carefully. Each answer can give a measure of learners' understanding of aspect markers. In order to complete the syntactic task, learners need to use their general knowledge and semantic cues. Compared to the translation task, the cloze task is designed more in favour of the CG than the GT due to its use of context. The third task, on the contrary, gives both groups more freedom of using aspect markers.

Describing pictures

Figure 6: Picture-description task in the immediate task



http://www.91118.com/composition/photo/write_221.html

The set of pictures (see figure 6) was downloaded from a website for storytelling exercises. The vocabulary list only gives the key words needed for the task, and they are selected from the control group's data. The pictures contain two key characters - a dog and a cat, and one item – a water tap. The first three pictures portrait the actions of the dog and the last two pictures those of the cat. The water tap appears in all the pictures. Each picture has a number on it to guide students. The first picture shows that a dog runs to a closed tap. In this picture, learners can add an imperfective view to the running event by using *zai*. In the second picture, we can see that the dog is washing its paws or drinking water, depending on how people interpret the scene. This picture tests how learners describe an imperfective event. The third picture shows that the dog has run away, but the tap is still running. Learners are expected to describe both events in this picture. One is for the dog as a perfective event, and the other is for the tap as an imperfective event. The focus of this picture shows that a cat looks at the running tap with a shocked expression on its face. The focus of this picture can be on the cat, since the running tap has appeared in picture 3. The last picture shows the cat's paw is on the tap with a drop of water coming out. It can be interpreted as either the cat is closing the tap or the cat has closed the tap.

Although the last task resembles a storytelling task, learners are not assessed for the quality of sentences or content structures, such as the use of conjunctions to link foreground and background. Instead, learners are assessed only for using aspect markers. If a marker is correctly used, but the other parts of the sentence are wrong (e.g. wrong spelling), it still counts as correct.

In the three tasks in the immediate test, the cloze task is the most straightforward in terms of comparability. The open-ended task can never achieve the level of comparability of the controlled tasks (Bardovi-Harlig 2013), since learners may use different ways of describing the same picture. Nonetheless, the control group's data is referred to in marking the tasks.

The tasks in the immediate test are the same for the two experiment groups, but the order of the tasks is different in the test papers. For the Grammar-Translation group, the translation task comes first, followed by the elicitation task and then the cloze test. For the communicative group, the elicitation task appears first, and then the translation task and the cloze test the last. It is assumed that translation task will give GT a more confident start, and the elicitation task will bring out better performance in CG.

Finally, two months after the immediate test a post-test on aspect markers was given. This time the test was integrated into a two-hour reading and writing exam (see appendix 5). The exam covered grammar and general knowledge of Chinese learned during the second term. Therefore, learners would not be reminded to use aspect markers. In addition, due to the time limit and restrictions on the format of closed book exam, no vocabulary list was provided. The number and the complexity of the tasks on markers were much lower than those in the immediate test. Furthermore, for the format of tasks on aspect markers, it included translation of five sentences from English into Chinese, a cloze task with ten slots to choose answers from three options, and a free writing task. After this description of the tests, we will present the way data have been collected.

4.2.4 Data collection

The control group's data were collected through an associate in China. The participants were asked to do the same set of immediate test as the experiment group. The only difference was that the instructions were in Chinese. The experiment groups' data were collected after each test by the researcher. In the data selection, the researcher only takes results from candidates, whose first language is English, in order to reduce variables in data analysis. In addition, if a learner missed any part of the experiment or achieved a score lower than 40% in the general knowledge test, his/her results would not be treated as valid. In the university, 40% is a benchmark for passing a module. When students performed lower than this level, it proved that the students had not achieved the module outcomes. If a learner just missed the post-test, the results of the first two tests could still be processed. However, the after effect of the teaching on the individual's performance on aspect

markers could not be traced. As the course is not compulsory to learners, learners are not obliged to take exams or tests or attend lessons. Therefore, the number of participants cannot be guaranteed. In addition, many students did not continue with the course to the intermediate level, so the long-term effect of teaching Chinese aspect markers could not be further studied. As a result, we have to focus on the effect of teaching only at beginners' level. Moreover, all data collected were in a written format. There was no oral data produced due to the learners' low proficiency level in communication in the target language. In the tests, no dictionaries or other electronic tools were allowed so to reduce any external influence on the results.

To sum up, the design of the pilot study had considered many aspects in research. It took a whole year from recruiting students to implementing the experiment. Although the experiment did not last for a year, the preparation for the students to get equipped for the experiment took more time than the experiment itself. Since the researcher implemented the same teaching materials and used the same teaching approach in the two experimental groups prior to the experiment, the variables in the research results were reduced. The pilot study had given the researcher a more detailed insight into the research procedure, and it showed a few places that needed amendments in the main research. The changes are discussed in the following section.

4.3 Changes to the main research

The main research was carried out at beginners' level in the following academic year. Therefore, the research cohort was different from the one in the pilot study. All participants were newly registered to the UWLP Chinese course. They were randomly assigned to the teaching groups by administrators, which was the same as in the pilot study. The number of each cohort at the beginning of the term was very similar to those in the first experiment.

By doing a preliminary data analysis for the pilot study, it did not show obvious deficits of the test materials, except for the translation task in the post-test. It looked as if students in both groups struggled to cope with translations from English into Chinese without a given word list. The learners' use of aspect markers was hindered by wrong sentence structures, missing verbs or other elements, and it caused misinterpretation of the data. For this reason, in the post-test in the main research the translation task was changed to translating from Chinese into English. There were five sentences in total. Each sentence contained an aspect marker. Learners' understanding of Chinese markers was expected to show in the way they interpreted the sentences. Unexpectedly the free writing task in the post-test had fewer problems than the translation task, despite no word list was given. The details will be discussed in the data analysis.

Another issue the pilot study brought out was the arrangement of the teaching session on aspect. Since the learners had to take the lesson and the immediate test consecutively, the amount of work had imposed pressures on the learners, especially the ones in Grammar-Translation group, and the researcher. Anxiety may affect learners' performance. Therefore, in the main research, the teaching on aspect markers was divided into two small sections: one for perfective markers *le* and the other for markers *zai*, *zhe* and *guo*. The immediate test was given in the following week after the teaching of markers. In this way, the experiment lasted for three weeks in a row. The consequence for doing this was that the number of participants who qualified for analysis could be smaller than that in the pilot study due to students' absence of classes. The materials from the other group were circulated after the immediate test.

4.4 Conclusion

This chapter gives details on how the experiment proceeded to test the two hypotheses. Some modifications were made to the teaching and the materials when implementing the experiment due to the learners' low L2 proficiency level, such as the use of the learners' native language in the communicative group and the use of L1 in the learning material and test material. These changes are considered necessary. Since the Chinese words or sentences produced by beginners' learners are very limited, it narrows the scope of aspect markers in use. In order to get a broad picture of how beginners' learners' take on aspect markers, a number of unlearned words from different categories of lexical aspect must be introduced with the support of the learners' first language. Without a strict definition of communicative approach, the use of L1 in this way does not seem to be in conflict with the ideology of communicative teaching.

In addition, the researcher has collected two sets of data, one from the pilot study and the other from the main study. Both sets of data will be analyzed and the research findings will be compared, to reveal if the changes made in the main study have any influence on the results. These will be discussed in chapter 5.

Chapter 5 Data analysis

In this chapter, we need to analyze three sets of data. The first set is provided by the control group. As the test materials have been designed by the researcher, testing them with native speakers adds credit to the reliability of the tasks. If there are many discrepancies in a task in the control group's data, it will be discarded in the experiment. The second set of data comes from two experimental groups in the pilot study, which includes results in the pre-test, the immediate test and the post-test. The third set comes from two other experimental groups in the main study. Each set of data from the experimental groups aims at testing the research hypotheses proposed in chapter 4. As a reminder, the hypotheses are:

1. The Grammar-Translation approach leads to higher accuracy levels in using aspects than a communicative approach in grammatical tasks.

2. A communicative approach leads to better use of aspects than the Grammar-Translation approach in comprehension tasks.

The data collected are treated in three ways: namely 1) the use of raw scores, 2) cross group analysis and 3) a within-group analysis. This analysis starts with sorting and encoding raw data, and the coded data are then compared across the groups to test the hypotheses using statistic tools, such as *t*-test. The results of the intermediate test and the final test are also compared within the groups to see if the teaching approaches have long-lasting effects. Details of the students' performance are further interpreted using a qualitative analysis, since the quantitative analysis only gives a broad overview of variation in the results but cannot provide more information at micro-level. In addition, the results in the pilot study and in the main study also need to be compared to investigate the effect of the changes brought to the main experiment in the light of the pilot study.

5.1 Control group's data for immediate test

The control group was made of 12 informants. The analysis started with the writing task of describing five pictures, followed by the translation task of sentences from English to Chinese and then the cloze task.

Picture-description task

Candidate ID	picture 1	picture 2	picture 3	picture 4	picture 5
1	0	0		0	VF le
2	0	0	SF le	0	SF le

Table 4: Use of aspect markers in each picture in the picture-description task

3	0	zhe	VF le +zhe+zai	SF le	SF le
4	0	0	SF le	VF le	VF le
5	0	0	SF le	VF le	VF le
6	0	VF le	SF le	VF le	SF le
7	zhe	VF le	VF le	0	VF le
8		zai	0	VF le	VF le
9	VF le	0	SF le	VF le	SF le
10	0	0	0	VF le	VF le
11		0	0	VF le	VF le
12	0	0	SF le		

Table 4 lists the uses of aspect markers by the 12 participants in the picture-description task. In the table, '0' indicates that no aspect markers are used. When no description is produced for the picture, the box is left blank. At first sight, we can see that the frequency of the markers increases towards the last picture. In picture 1 (see figure 7), only two markers were found for describing the dog's action. One was *zhe* in the structure of V1+ zhe+V2 as shown in (1). The participant treated *running* as a background action. The other was VF *le* (2), which appeared after a RVC – *paoxiang* (run towards). As mentioned in the literature review for aspect markers, VF *le* can be omitted when a RVC is present. Therefore, it is not surprising to see that most participants have only used RVCs in picture 1.

- (1) Xiaogou pao zhe qu shuichi.Little dog run ZHE go water fountainThe little dog was running to the water fountain.
- (2) Xiaogou pao xiang le shuichi.Little dog run towards LE water fountainThe little dog runs/ran towards the water fountain.

Figure 7: Picture one in the picture-description task in the immediate test



Figure 8: Picture two in the picture-description task in the immediate test



In the second picture (see figure 8), two more uses of markers are found. As in picture 1, most participants described the event of opening the tap using RVCs instead of perfective markers. The difference between sentence (3) and sentence (4) resides only in the absence / presence of VF *le*. Because the perfective view can be delivered by *dakai* (hit open), VF *le* is not compulsory.

- (3) Ta da kai shuilongtou.
 - It hit open tap

It opened the tap.

(4) Ta da kai le shuilongtou.It hit open LE tap It opened the tap.

Apart from the perfective markers, two imperfective markers were also found, one for the event of drinking water (5), and the other for the event of washing hands (6). Answers (5) and (6) provided two examples of using imperfective markers for the event in picture 2.

- (5) Shou peng zhe shui he.Hand hold ZHE water drink(It) is/was drinking water from its hand(s).
- (6) Gou zai xi shou.
 - Dog ZAI wash hand

The dog is/was washing hand(s).

In picture 3 (see figure 9), both perfective and imperfective markers were found. The most used marker was SF le for describing the action of the dog, such as the change of status of the dog delivered by the SF le in sentence (7). A few answers with zero markings were also observed, but these sentences focused on the status of the tap not that of the dog. Another case of omitting VF le was when the negation *mei* (not) was present for a non-actualized event like sentence (8) (see table 1 in chapter 2). Out of the 12 participants, only candidate No. 3 mentioned the status of the tap water

using two imperfective markers. The candidate used *zai* to indicate the ongoingness of running water, and used *zhe* to emphasize the duration of the scene. The two markers were compatible in this situation (9).

- (7) ... jiu pao zou le. then run walk LE ... then runs/ran away.
- (8) Ta mei guan shuilongtou.He not close tapHe did not close the tap.
- (9) Shui hai zai yuanyuanbuduan liutang zhe.
 Water still ZAI non-stop run ZHE
 Water is/was still running continuously.

Figure 9: Picture three in the picture-description task in the immediate test



Figure 10: Picture four in the picture-description task in the immediate test



For picture 4 (see figure 10), almost all the answers contained aspect markers. Despite the use of a RVC - kanjian (see), most participants still used VF *le* (10). This is very different from what we have found in the first two pictures, where the majority only use RVCs but not VF *le*.

(10) Yi zhi xiao mao kan jian le (shuilongtou).One CLF little cat look meet LE tap A cat saw (the tap). Figure 11: Picture five in the picture-description task in the immediate test



Picture 5 (see figure 11) had the same phenomenon as picture 4, VF le or SF le was used by all participants along with a RVC. Sentence (11) and sentence (12) conveyed the same meaning but using different sentence structures. The preposition ba in (12) moved the object forward to emphasize the manipulation exerted by the subject on the object.

(11) Ta guan shang le shuilongtou. He close up LE tap

He closed the tap.

(12) Ta ba⁴⁷ shuilongtou guan shang le.
He BA tap close up LE
He closed the tap.

 Table 5: Number of candidates using zero marking and number of candidates using aspect markers for each picture by

 the control group

ID	P1	P2	P3	P4	P5
zero marking	8	8	3	3	0
aspect markers	2	4	8	8	11

The pattern of aspect markers used by the control group in the task of describing pictures matched Ma, L.'s (2006) finding on perfective markers *le*, which stated that perfective markers tended to be used to mark main/foregrounded events in a sequence of events in narration. As shown in table 5, the number of candidates using zero marking decreases from picture 1 to picture 5. The number drops significantly in picture 3, and it reaches zero in the last picture. We have mentioned above that there is a change of scenario in picture 3. The dog left and the cat came into action. In picture 5 the series of actions came to an ending. Therefore, we can see that the candidates increase the use of markers to a great extend. In the last picture, all candidates used either VF *le* or SF *le* to mark the main event, except for one who did not describe the picture. For the markers used, perfective markers appear

⁴⁷ Ba is a preposition used between a subject and an object. The noun phrase after ba must be definite. A sentence with ba has a sense of manipulating or disposing (Liu *et al.* 1998)

much more frequenly than imperfective markers. However, the less use of imperfective markers is due to the omission in describing the ongoing events, such as the running water. For those who used the imperfective markers, the answers can be used as reference in the analysis of experiment group's data. A disadvantage of using this task in the Grammar-Translation group is that the group does not have contact with context but contextually isolated sentences in class. Therefore, the group may not have any knowledge of the discourse function of perfective markers VF *le* and SF *le*. It may reduce the overall performance of the group when comparing to the communicative group. This effect will be traced in the Grammar-Translation group's data.

Translation task

In the translation task, all sentences had over half of native-like uses of markers, except for three sentences. The use of markers in the sentences are listed in the table below.

Sentence	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ID (TS)															
Markers to	SF	SF	SF	VF le	None	SF	guo	guo/VF	guo	zhe	zhe	zai	SF	SF	None/zhe
use	le	le	le			le		le					le	le	
Number of	33	92	58	100	42	10	92	50/50	0	83	83	83	50	8	100
uses in %						0									

Table 6: Use of aspect markers in translation task by control group

As shown in table 6, TS1, TS9, TS14 and TS15 all scored less than 50% in the use of the expected markers. In these sentences, a number of zero markings were found. For example, in the translation of TS1, four participants used set phrases to describe a scene of blooming flowers. Sentence (13) was one of the set phrases used. This Chinese structure may add vivacity to the translation, but it differs slightly from the meaning intended in the task (*Flowers are in bloom*). For TS14, only 7 participants gave answers. Out of the 7 answers, SF *le* appeared in two answers. Two extreme cases of using zero marking were TS9 and TS15. In TS9, the temporal advertial *cengjing* (once) in example (15) was used throughout the group, whereas in TS15 everyone went for zero marking instead of *zhe* (see section 4.2.3). The high proportion of zero markings showed how native speakers had used verbs, temporal advertials and sentence structures rather than aspect markers to express verbal events.

(13) Bai hua sheng kai.hundred flower flourishingly openFlowers are open flourishingly.

(14) Wo cengjing shi yi ming jiaoshi.

I once be one CLF teacher

I was once a teacher.

Contrary to the overwhelming zero markings in TS9, only 42% of answers had zero marking in the distractor TS5, when no marker was needed. A third of the group used the experiential marker *guo*, as if they were translating the sentence in a narrative context where a person told others an experience. On top of these, TS3 and TS13 also had low percentage in using SF *le*, although neither of them was below 50%. As in the two sentences shown above, the low percentage was mainly caused by the omission of aspect markers. Out of the 6 answers not using SF *le*, 4 of them used time adverbial *yijing* (already) to deliver the perfect situation as shown in (15). Two markers were found in TS8, and they are equally represented within the group. As explained in chapter four, the choice of markers in this sentence depended on how people viewed the situation, either a complete event or an experiential event. Without a context, both were grammatically correct.

- (15) Wo yijing zou le sishi fenzhong.
 - I already walk LE forty minute
 - I have been walking for forty minutes.

The control group's translation work shows a couple of discrepencies by the native speakers, in using aspect markers. First, some native speakers tend to underuse SF *le* in their Chinese translation, such as TS1 and TS3. Second, the native speakers have only showed preference for *guo* when the event is obviously an experience to them, such as watching Beijing opera in TS7. As a traditional performance, this type of event does not happen often in modern China. For other situations, they would rather use verbs or adverbials than markers for the temporal relationship. This finding somehow echoes Jin, L. and Hendriks' (2005: 83) report on their control group's storytelling, which states that '...more than 60% of the predicates are used without any aspect markers. The temporal relationship is expressed through the means of temporal adverbials and discourse organisation'. Because the sentences explained above have caused translation problems to native speakers, they are not suitable to test the experimental groups. Although TS15 has the same answer from all the group, it does not show a single use of *zhe*, so the sentence does not seem to be suitable to test the learners the use of *zhe*. Therefore, it leaves 8 valid sentences including two sentences testing on SF *le* and *zhe* resepctively, one each for VF *le*, *guo* and *zai* and one for VF *le* or *guo* in the translation task.

Cloze task

Unlike the translation task, the cloze task does not show many discrepancies between the informants. There are 15 slots in total. As shown in table 7, five participants got all expected answers. Candidate No. 4 scored the lowest due to two omissions in answers. The remaining only had one or two unexpected answers. The control group's data shows that the cloze task does not have ambiguities that would hinder comprehension. The cloze task can be used as it is.

Candidate ID	1	2	3	4	5	6	7	8	9	10	11	12
Number of correct answers	14	15	15	12	13	15	15	13	14	14	13	15

Table 7: Number of correct answers in the cloze task

To sum up, the control group's data provides sample answers to the test. It also reveals native Chinese speakers' tendencies and areas of uncertainty in using aspect markers in the three tasks. Since this research is not focused on L1 learners, we will not investigate further the unexpected answers provided by the control group. However, the mistakes have exposed some weaknesses in the design of the tasks, mainly in the translation task. In the analysis of the experimental group's data below, the results of these problematic sentences are therefore not included.

5.2 Data analysis for the pilot study

In this research, we include the data we collected from the pilot study for a few reasons. First, the data from the pilot study adds more credibility to the results of the main study. As cohorts in the main study are relatively small compared to those in the pilot study, it is precarious to merely use data from the main study to test the research hypothesises proposed. Second, the cross-group comparison of the immediate test results in both studies will reveal the change of behaviour when the design of the teaching is amended. As mentioned in chapter 4, the immediate test used in the pilot study remained the same as in the main experiment. Therefore, the test results of the immediate test can be used to carry out the cross-group comparation. Third, as a pioneer study in teaching L2 Chinese aspect markers, more cohort and more test results can reveal more research findings.

The data from the pilot study includes the results of the pre-test, immediate test and post-test. Two groups are assessed: a communicative group (CG1) and a Grammar-Translation group (GT1). In the following sections, we will look at the results of the three tests in a sequential order.

5.2.1 Pre-test

The pre-test is a knowledge test without the presence of aspect markers. It was a closed book exam at the end of the first term.

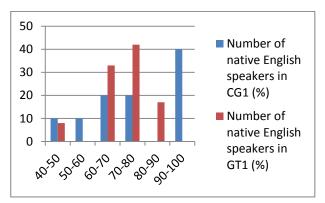
In this test, all the students in the communicative group scored over 40. The average mark was 74.95 (see table 8). The Grammar-Translation group had one candidate scoring under 40. As 40 is a benchmark for university assessment, this participant's results in the remaining tests are not included. The average mark for the remaining 12 participants was 70.92. The average score of the Grammar-

Translation group (GT1) was lower than that of the communicative group (CG1) in the pre-test, but no significant difference was found in *t*-test (p=.531). The GT1 had a standard deviation (SD) of 11.32 and the CG1 had a SD of 18.15. Figure 12 shows the number of students in percentage for each mark range in the GT1 and in the CG1. The CG1 had 40% students achieving 90-100, but none in the range of 80-90. Another 40% distributed evenly in the ranges of 70-80 and 60-70, and the remaining 20% divided evenly between 50-60 and 40-50. The GT1 had none in the highest mark range, but had nearly 42% of the students scoring 70-80. The distribution of the test marks of the two groups also did not show a huge difference in the groups' performance in the pre-test. The pre-test's results indicate that the two groups have similar levels of general knowledge in Chinese language prior to the experiment. It, therefore, gives the experiment a fair and sound start.

Table 8: Mean score of the pre-test in the pilot study

	Group	Ν	Mean	Std. Deviation
Pre-test	Grammar-Translation group	12	70.92	11.32
	Communicative group	10	74.95	18.15

Figure 12: Pre-test mark distribution for native English speakers in communicative group (CG1) and grammar-translation group (GT1)



5.2.2 Immediate test

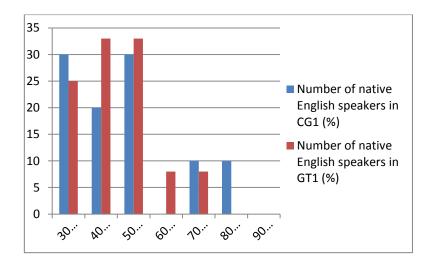
In the intermediate test, the maximum mark for the paper was 100. The translation task counted for 40 marks, 5 marks for each of the 8 sentences. The cloze task represented 45 marks, 3 marks for each of the 15 slots. The picture-description task counted for 15 marks, 3 marks for each picture. The translation task and the cloze task had similar weight in the scores of the whole paper. The writing task had less weight due to the size of the task. The GT1 had a mean (M) score of 47.38 with a

standard deviation of 12.68, and the CG1's was slightly higher (M=51.05) with a standard deviation of 15.71 (see table 9). As in the pre-test, the average marks in the two groups did not have a significant difference (p=.550) in the immediate test.

Table 9: Mean score of the immediate test in the pilot study

	Group	N	Mean	Std. Deviation
Immediate test	Grammar-Translation group	12	47.38	12.68
	Communicative group	10	51.05	15.71

Figure 13: Immediate test mark distribution for native English speakers in communicative group (CG1) and grammartranslation group (GT1)



The distribution of the test's mark is represented in figure 13. It can be seen that both groups had clusters of students in scores ranging from 30 to 60. Each group had three students scoring under 40, but the majority of the groups clustered between 40 and 60. Each group also had two students scoring higher than 60, but the highest mark remained in the CG1. In addition, when comparing the results of the immediate test and the results of the pre-test on a line chart (see figure 14), we can see that the fluctuation of the immediate test results echoes the pre-test results. These findings could be an indication that students' previous knowledge may play a big part in instructed learning. Despite this, some details in each task can still reveal some patterns on how the learners from different groups use Chinese aspect markers. In general, three types of non-native like answers are found. One is the underuse of markers, which means that aspect markers are missing when they are needed. Another is

the overuse of markers, which means that markers are used when they are not needed. The third is the misuse of markers, for which a wrong marker is used when needed. In the following sub-sections, we will analyze the tasks following the order in the test paper, which is the picture-description task first, followed by the translation task and finally the cloze task.

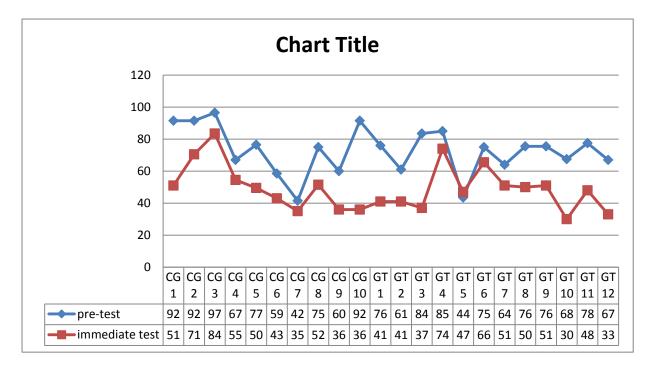


Figure 14: Comparison of results of immediate test and pre-test in the CG1 and the GT1

Picture-description task

Table 10: Mean scores for the picture-description task in the CG1 and GT1

	groups in experiment	Ν	Mean	Std. Deviation
tests' score	Communicative group	10	6.1500	3.35037
	Grammar-Translation group	12	9.3750	2.40383

In the picture-description task, the GT1 had a higher mean mark (M=9.375) than the CG1 (M=6.150), and the mean difference was 3.225. The CG1 had a Std. deviation of 3.35, and the GT1 had a Std. deviation of 2.40 (see table 10). It looks like the GT1's performance in this task is more consistent than the CG1. The results have been run in an independent-samples *t*-test, and it shows a significant difference (p=.016).

As the groups are small, it is possible to examine each candidate's use of aspect markers. This helps to identify individual trends. If a type of behaviour is very frequent in one candidate's production, the

group's average mark can be affected, but the type of behaviour shall not be generalized in the whole group. Table 11 and table 12 list the number of answers used for analysis, the number of acceptable answers and the details of non-native like answers produced by the GT1 and the CG1 respectively. When a candidate omits a picture or produces a sentence with a poor structure, the answer then counts as invalid.

Candidate No. (GT1)	1	2	3	4	5	6	7	8	9	10	11	12
Answers for analysis	5	4	5	5	4	4	5	5	5	5	5	3
Acceptable answers	3	4	3	4	3	1.548	4	3	3	4	3	2
Markers used	None	Zhe SF le VF le	VF le SF le	VF le	VF le Zai	Zhe VF le	VF le SF le	VF le	VF le	VF le SF le Zai	Zhe VF le Zai	None
Underuse	SF le * 1 ⁴⁹ VF le * 1	0	VF le * 1	0	0	0	0	SF le * 1 zai * 1	SF le * 1 zai * 1	0	zai * 1 VF le * 1	VF le * 1
Overuse	0	0	SF le * 1	VF le * 1	0	zai * 2	0	0	0	0	0	0
Misuse	0	0	0	0	zai * 1	zai * 1	zhe * 1	0	0	zhe * 1	0	0

Table 11: Individual performance in the picture-description task by GT1 in the pilot study

Candidate No. (CG1)	1	2	3	4	5	6	7	8	9	10
Answers for analysis	5	5	5	5	5	5	5	5	5	5
Acceptable answers	2	2.5	4.5	2.5	2.5	1	2	0.5	1	2
	SF le	VF le SF le	VF le SF le	VF le Zhe	Zai	VF le	None	VF le	VF le	None

⁴⁸ If a student used one marker native-likely but the other mark inappropriately in describing two events in one picture, the student would get half a point.
⁴⁹ SF *le* * 1 represents that SF *le* is underused once.

Markers										
used										
	VF le *	zai * 1	SF le *		zai * 1		zai * 1	VF le *	zai * 2	zai * 1
Underuse	1	SF le *	зг ю * 1	0	SF le *	0	SF le *	1		SF le *
		1			1		1		SF le *	1
		VF le *			VF le *		VF le *		1	VF le *
		1			1		1			1
Overuse	SF le * 1	0	0	zai * 1	0	zai * 1	0	zai * 2	0	0
	zai * 1							VF le * 1		
Misuse	0	0	0	zhe * 1	0	VF le * 1	0	0	VF le * 1	0
						zai * 1				
						guo* 1				

Compared to the CG1 which gave no invalid answers, the GT1 had invalid answers from four candidates, No. 2, No. 5, No. 6 and No. 12. In an overview of the data from the two groups, everyone made mistakes except for candidate No. 2 in the GT1. However, No. 2 only gave 4 valid answers. For the invalid answer, the student used *zhe* after a noun with a verb missing in the whole sentence. In terms of the acceptable answers, 10 out of 12 GT1 candidates achieved over half of native-like answers. Whereas in the CG1, only 1 candidate (No. 3) had more acceptable answers than non-native like answers and 3 candidates (No. 2, No. 4 and No. 5) had the same amount of acceptable answers as that of non-native like answers. For their acceptable use of markers, candidates No. 1 and No. 12 in the GT1 used none of the markers, and there was no trace of misuse or overuse by these two candidates. It was unclear whether these two candidates had acquired the functions of aspect markers or not by looking at the writing task. Although these candidates scored for native-like zero marking sentences, it is possible that these candidates simply avoided using any markers. This finding, somehow, reveals the hidden obstacles in Performance Analysis (Lightbown 1984). The rest of the group used VF le at least once. In addition, candidates No. 3 and No. 4 in the GT1 showed no signs of using imperfective markers whatsoever. Their understanding of imperfective markers has to be investigated in the other tasks. The CG1, on the other hand, had two candidates No. 7 and No. 10 using no aspect markers. VF le was mostly used by the remainder of the group. Candidates No. 1 and No. 5 used SF le and zai respectively but not VF le..

Regarding the inappropriate answers, every candidate in the two groups displayed one or two types of mistakes, and no one made all three types of mistakes. Two GT1 candidates made two types of mistakes. Candidate No. 3 had one count of underuse of VF *le* and one count of overuse of SF *le*. This student did not use any imperfective markers. Candidate No. 6 had two overuses of *zai* and one misuse of *zai*. It looked like No. 6 struggled to use *zai* properly in the writing task. On the other hand, the CG1 had 6 candidates who made two types of mistakes. These mistakes involved a wider variety of markers including perfective markers and imperfective markers, except for the mistakes by candidate No. 4, who had problems only with imperfective markers. For the remaining candidates who only had problem of underuse, the analysis could not reveal how the learners used the aspect markers, such as candidates No.1 and No.12 in the GT1, and No. 7 and No. 10 in the CG1.

The analysis for individuals has found no extreme case that can affect the group's average mark. The task score for each candidate in the GT1 shows less deviation with a range between 1.5 and 4, than the range of 0.5 to 4.5 in the CG. In addition, all candidates in the GT1 show evidence of native-like using VF *le* except for the two using zero marking, whereas the CG1 has more cases of non-native like use of VF *le*. Moreover, the individual performances also show that the writing task is not sufficient for analyzing learners' use of markers, as some learners can still get a good mark without using any markers. This finding gives further support to Gass and Selinker's (2008) claim that a learner's 'linguistic behaviour' is reflected not only by errors, but by non-errors. The individual performance in other tasks will be further discussed and compared using the results in the picture-description task in later sections.

CG1 and GT1		Pictu	re 1	pictu	re 2	pictu	re 3	pictu	re 4	pictu	re 5	Sum	
		CG	GT	CG	GT								
Number of inappropriate use of aspect markers		3	1	6	1	7	7	6	6	7	6	29	22
underuse	VF le	0	0	0	0	0	0	0	0	6	4	6	4
	SF le	0	0	0	0	4	6	1	0	0	0	5	6
	zai	1	0	2	0	0	0	2	3	0	0	5	3
overuse	VF le	0	0	1	0	0	0	0	0	0	0	1	0
	SF le	0	0	0	1	0	0	0	0	0	0	0	1
	zai	2	1	1	0	1	0	1	1	0	0	5	3
	zhe	0	0	0	0	0	0	0	1	0	0	0	1

Table 13: Distribution of aspect mark	king for each picture in picture-description	task in the pilot study (CG1 and GT1)
---------------------------------------	--	---------------------------------------

misuse	VF le	0	0	1	0	1	0	0	0	0	0	2	0
	SF le	0	0	1	0	0	0	0	0	0	0	1	0
	zai	0	0	0	0	1	1	1	0	0	1	2	2
	zhe	0	0	0	0	0	0	1	1	0	1	1	2
	guo	0	0	0	0	0	0	0	0	1	0	1	0
Acceptable use of aspect n	narkers	7	11	4	10	5	7	4	7	3	6	23	41
VF le		2	5	3	4	0	1	0	3	3	6	8	19
SF le		0	1	0	1	2	3	1	2	0	0	3	7
zai		0	0	0	2	1	1	1	0	0	0	2	3
zhe		0	2	0	0	1	2	0	0	0	0	1	4
Zero marking		5	3	1	3	1	0	2	2	0	0	9	8

Having looked at the individual performance of the candidates, we continue to investigate some trends of using aspect markers in the two groups. Table 13 lists the number of appropriate and inappropriate uses of all aspect markers in each of the five pictures by the two groups.

In the acceptable answers section, both groups used VF *le* most frequently, followed by SF *le*, and then imperfective markers. The GT1 had 19 native-like uses of VF *le* distributing across all five pictures. The CG1, on the contrary, did not have as many native-like uses of VF *le* as the GT1. Especially in picture 3 and picture 4, only a few acceptable uses of VF *le* were found. The native-like use of SF *le* mainly came from picture 3 and pictures. The high frequency of using SF *le* in picture 3 reflected what was found in the other two pictures. The high frequency of using SF *le* in picture 3 reflected what was found in the control group. As for the imperfective markers, one acceptable use of *zhe* was observed in the CG1, but 4 appropriate uses were found in the GT1 -- 2 uses from picture 1 and picture 3 each. Both groups had low native-like uses of the other imperfective marker *zai* as well. On top of the markers, zero marking also had a good accuracy level just below VF *le*. The highest number of zero marking from picture 1 to picture 5 also mirrors that of the control group. The high number of zero marking may show that the learners did not treat perfective markers as tense markers.

To further illustrate the native-like uses of aspect markers by the GT1 and the CG1, Table 14 lists the average number of native-like uses of the markers by one candidate in the two groups as well as that in the control group. The numbers show that the GT1's result is closer to the control group's than the

CG1's. For VF *le*, the GT has the same number as the control group. For SF *le* and *zhe*, the GT1's numbers have less deviation from the control group's than the CG1's. The only marker that the CG1 shows less gap with the control group than the GT1 is *zai*. However, the difference between the groups is subtle. In addition, the GT1 shows the same preference of using markers as the control group. The order of the markers from the most frequent used to the least is VF *le*, SF *le*, *zhe* and *zai*. The CG1 has the same trend, but slightly different in imperfective markers. None of the groups used *guo* in the writing task, the same as the result in Jin, L. and Hendriks (2005).

Table 14: Average number of native-like uses of aspect markers for the GT1, the CG1 and the control group in picture-description task

ID	GT1	CG1	Control group
VF le	1.58	0.80	1.58
SF le	0.58	0.30	0.92
Guo	0	0	0
Zhe	0.33	0.10	0.25
Zai	0.25	0.20	0.17

In the inappropriate use section in table 13, the underuse was the major trend. They mainly included VF *le*, SF *le* and *zai*. The patterns of underusing markers across the groups were very similar. This type of behaviours was observed in different candidates. The underuses of VF *le* all came from picture 5. The sentence was

- (16) Ta guanshang shuilongtou.
 - He close up tap He closed the tap.

Grammatically the sentence was acceptable without a VF le due to the use of a RVC – guanshang (close up). However, in a writing task for a set of pictures when VF le is needed for marking the peak event (Ma, L. 2006), the sentence had a problem of underuse. The discourse function of marker le was not known to either of the groups especially the GT1, since the example sentences used in the GT1's class were not in the format of narration. However, the result still shows that the underuse of VF le at discourse level is a deficiency at beginners' level. The CG1 did not show a tendency of using VF le in the last picture, which indicates that the communicative approach applied to the CG1 does not enhance students' understanding of the discourse function of VF le. In addition, both groups under used SF le in picture 3. The sentence was

(17) **Yi zhi gou paozou*.One CLF dog run awayA dog ran away.

This sentence needed a SF *le* to indicate a change of state of the dog. It looks as if some learners in both groups have not gained understanding of this function of the SF *le*, but we need to further investigate it in the next two tasks. For the aspect marking, like the native speakers most learners in the two groups prefered to view the situations in a perfective way rather than in an imperfective way. Only a few learners described the event of dog's running, the event of drinking and the state of the running tap. However, these descriptions by the participants were devoid of the progressive marker *zai*. Unlike what was found in the case of SF *le*, the CG1 had more cases of underusing *zai* than the GT1. The CG1's underuses spreaded to picture 1, picture 2 and picture 4, whereas the GT1's underuses of *zai* were mainly in picture 4.

The overuse and the misuse, on the other hand, were not as spread as the underuse. The noticeable overuse was the over use of *zai* in both groups. It distributed evenly across the first four pictures. It seemed that *zai* presented more challenges than other markers in the writing task, as it was notably either underused or overused. The over use of *zai* may be caused by the learners' L1 transfer in their interlanguage. An example of the sentences produced by the learners was

(18) *Ta zai paodao shuilongtou.He ZAI run to tapHe is/was running to the tap.

In Chinese *zai* is not compatible with the RVC – *paodao*, but in English the imperfective marking is amicable with achievements. This finding somehow contradicts Andersen's AH about the development of progressive aspect marking. Chen, J. and Shirai (2010: 2-3) point out that :

"...the universal tendencies as predicted by the aspect hypothesis are still valid, but they are mediated by multiple factors: typological factors and input...Concerning the acquisition of the Mandarin aspectual system, only a small number of studies have investigated the acquisition of grammatical aspect and lexcial aspect...In addition, there are no studies that have examined the input systematically. Thus, it is still questionable whether the aspect hypothesis captures the acquisition of the aspectual system in Mandarin'.

In other languages, researchers have also found some discrepancies compared with the AH in L2 learners (e.g. Shirai 1998; Labeau 2005). If the discrepancies are linked with input, we should have found some differences in the two groups. Especially for the GT1, the grammatical rules of incompatibility of *zai* and achievements had been explicitly presented. However, the numbers in table 13 show that the overall trends for overusing *zai* in the two groups are similar. Therefore, it is questionable that the input has more influence in learners' interlanguage than L1 transfer does in the use of *zai*. This needs to be tested in the results of the main study as well.

In terms of misuse, the numbers of misuse for each marker was smaller than those in the underuse section, but it involved more markers in the CG1 than in the GT1. The GT1 misused the imperfective markers, whereas the CG1 misused all. The misuse of *zai* and *zhe* in both groups were very similar. They were mainly used with events with boundaries. An example from the learners' data is shown in sentence (19).

- (19) *Yi zhi mao kanjian zhe shui liu.One CLF cat see ZHE water runA cat saw the water running.
- (20) Yi zhi mao kanjian shui zai liu.One CLF cat see water ZAI runA cat saw that the water was running.

In (19) the durative marker *zhe* is incompatible with the RCV – *kanjian* (see), although it is acceptable when translated into English. The native structure for this compound sentence would be to put the progressive marker *zai* before *liu* (run) to give an ongoing view of the running water as in (20). As for the overuse of the imperfective markers, the misuse is also very likely caused by the learners' L1 transfer.

To sum up, the data above shows that the GT1 displays a mastery of VF le and SF le closer to the control group than the CG1. The good use of VF le and SF le gives the GT1 higher final marks. However, the CG1 and the GT1 have shown similar patterns in using markers. First, both groups have a better command of perfective markers than imperfective markers. Second, the non-native use reveals that underuse is a notable issue in the picture-description task. The GT1 is partial to VF le over other markers, but the learners still underuse it in main events (Ma, L. 2006) in picture 5. The CG1 group, on the other hand, uses VF le and SF le less, but they have slightly more attempts on using the progressive marker *zai*. Third, both groups show the influence of L1 in imperfective markers. It is sure that these candidates were not confident of using aspect markers without assistance. It is, therefore, worth investigating these candidates' performance in the other tasks. For the other candidates, all have use of markers and zero markings. No one used perfective markers in all situations. It may suggest that classroom teaching, independently of the teaching approach, can help learners understand that perfective markers are not tense markers (see section 2.5.2.1).

Translation task

With regard to the translation task, the mean mark for the CG1 was 17 (out of 40) with a standard deviation of 7.15, and it was 15 for the GT1 with a standard deviation of 8.53 (see table 15). The p

value (p=.563) was over .05. Although the CG1 had higher mean mark than the GT1 in this task, both groups showed similar patterns in using the markers.

	groups in experiment	N	Mean	Std. Deviation
tests' score	Communicative group	10	17.0000	7.14920
	Grammar-Translation group	12	15.0000	8.52803

Table 15: Mean marks for the CG and the GT in the immediate test

Out of the 8 translation sentences, the CG1 gave an average of 7.8 answers that can be used for analysis, and the GT1 group had 7.7 answers. The blank answers were not counted as valid answers. The answers used for analysis are categorized into appropriate answers, underuse of markers, overuse of markers, and misuse of markers. In the analysis, we will look at individual performance first, and then move on to the group's performance. The students' individual performance is listed in two tables below. Table 16 shows the numbers of native-like answers and non-native like answers given by the CG1, and table 17 shows the uses of the markers by the GT1.

Table 16: Individual performance in the immediate translation task by the CG1	G1
---	----

ID	Answer for analysis	Native-like use	Underuse	Misuse	Overuse
1	8	3	3	2	0
2	8	6	0	2	0
3	8	5	2	1	0
4	8	4	0	4	0
5	8	4	1	3	0
6	7	1	1	3	2
7	8	1	7	0	0
8	7	4	1	2	0
9	8	3	0	5	0
10	8	4	1	3	0

In the CG1, all candidates gave 8 answers except for candidate No. 6 and candidate No. 8. Candidate No. 6 skipped TS11 testing on *zhe*, and candidate No. 8 skipped TS6. Indeed no one in the CG1 earned marks for TS6 concerning SF *le*. In the native-like use section, candidate No. 6 and candidate

No. 7 had the fewest native-like answers. Candidate No. 6 had just one good use of VF *le* in TS4. This candidate was the only one in the two groups who overused markers. Apart from overuse, this candidate also had one count of underuse and three misuses. Candidate No. 7 had one native-like use of *guo* in TS8, and it was the only marker found in the answers. The candidate had an overwhelming 7 underuses. Candidate No. 4 and candidate No. 9 had high numbers of misuse. Candidate No. 4 had problems in using SF *le*, *zai* and *zhe*. Candidate No. 9 did not do well for SF *le*, *guo*, *zai* and *zhe*. Candidate No. 10 did not use any markers in the writing task, but this candidate managed to score on *guo* and VF *le* in the translation task. Candidate No. 1 and candidate No. 5 both had two counts of native-like use of VF *le* in the translation task, although no use of VF *le* was found in the writing task.

ID	Answer for analysis	Native-like use	Underuse	Misuse	Overuse
1	8	1	2	5	0
2	7	2	1	4	0
3	8	2	2	4	0
4	8	7	1	0	0
5	6	4	1	1	0
6	8	3	1	3	0
7	8	3	3	2	0
8	8	4	1	3	0
9	8	3	0	5	0
10	7	4	0	3	0
11	8	3	2	3	0
12	8	1	2	5	0

Contrary to the CG1, the GT1 had a few more candidates gaining a small number of valid answers. They were candidates No. 1, No. 2, No. 3 and No. 12. No. 1 and No. 12 used no markers in the writing task, their native-like use of markers in the translation task was also the lowest in the group. However, they at least earned marks for using perfective markers VF *le* and *guo*. Candidate No. 3 and candidate No. 4 had no use of imperfective markers in the writing task, but they showed uses in the translation task. Candidate No. 4 even scored for one count of *zhe* and one count of *zai*. The notable mistakes by the GT1 were misuse. There were five candidates having over 4 misuses. These misuses were mainly for SF *le*, *zai* and *zhe*.

The individual performance reveals that all candidates attempted to use aspect markers in the translation task. The one who had the least use of markers was candidate No. 7 in the CG1. Since this candidate had the lowest mark in the pre-test, it was suspected that the avoidance of using markers might link to the student's low level of general knowledge of Chinese. However, it does not seem to be the case in the GT1. Candidate No. 5 in the GT1 had the lowest mark in the pre-test, but this candidate had scored in four sentences in the translation task. It is, therefore, necessary to further trace the performance of these candidates in the cloze task.

After looking at the individual performance, we analyze the groups' performance. Table 18 lists the number of answers given by the two groups. It shows that the overuse was not as widespread as the underuse and the misuse. Only two cases of overuse were found, and both came from the CG1. Therefore in the following, we will focus on the underuse and the misuse.

Sentence ID Marker to be used		Valid aı	answers			Underuse		Overus	Overuse		Misuse	
		CG	GT	CG	GT	CG	GT	CG	GT	CG	GT	
TS2	SF le	10	10	5	5	5	3	0	0	0	2	
TS4	VF le	10	12	9	7	1	2	0	0	0	3	
TS6	SF le	9	12	0	1	3	4	0	0	6	7	
TS7	Guo	10	12	6	8	1	1	1	0	2	3	
TS8	VF le/guo	10	12	9	6	0	3	0	0	1	3	
TS10	Zhe	10	12	2	6	2	1	0	0	6	5	
TS11	Zhe	9	11	2	3	2	1	0	0	5	7	
TS12	Zai	10	11	2	2	2	1	1	0	5	8	
Total		78	92	35	38	16	16	2	0	25	38	
Average		7.8	7.7	3.5	3.2	1.6	1.3	0.2	0	2.5	3.2	

Table 18: Use of aspect markers in each sentence in the translation task (CG1 and GT1)

As for the acceptable answers, both groups did well for TS2, TS4, TS7, TS8, but the CG1 had a slightly higher average level of acceptable answers than the GT1. These sentences tested the uses of the perfective markers SF *le*, VF *le* and *guo*. The sentences TS10 to TS12 with imperfective markers had a very low proportion of acceptable answers in both groups, except for *zhe* in the GT1. The CG1 has 11.4% acceptable use of *zhe* and 5.7% acceptable use of *zai*. The GT1 has 23.7% acceptable use of *zhe* and 5.3% acceptable use of *zai*. The difference between the groups lies in the use of *zhe* in

TS10. The GT1 had half of the group scored in TS10, whereas the CG1 had 2 out of 10 candidates using *zhe* properly. When looking at the materials used in class for presenting the durative marker *zhe*, a sentence similar to TS10 appeared in the GT1 group's handout. The sentence in the class handout was *I am wearing red clothes*, while the sentence in the test was *She is wearing red clothes*. This result indicated an immediateeffect of teaching on the learning of *zhe* in the GT1. In addition, although TS8 (*He bought many Chinese books*) could use either *guo* or *le*, most informants went for VF *le* not *guo*. The CG1 had 6 out of 9 acceptable answers using VF *le*, while the GT1 had 5 out of 6 uses. This slightly differed from the control group where we found the uses of VF *le* and *guo* were the same. The acceptable answers show that VF *le* is definitely best used by the two groups (42.9% in CG1 and 31.6% in GT1). The experiential marker *guo* has slightly lower percentage of acceptable use of SF *le* (14.3%) than *zhe* (11.4%), whereas the GT1 has more acceptable use of *zhe* (23.7%) than that of SF *le* (15.8%).

For the inappropriate use of SF *le*, misuse was the main problem for TS6 (*Have you done your homework*) in both groups, and the underuse was for TS2 (*The shop is closed*) mainly in the CG1. In TS6, each group had 4 misuses SF *le* for other perfective markers VF *le* or *guo*. This finding shows that the candidates have a knowledge of the characteristics of perfective markers, but they have little awareness of using SF *le* to mark perfect aspect in Chinese. The explanation and the exercises of SF *le* in the GT1 does not seem to accelerate the group's understanding on the marker's functions. What the GT1 have done slightly better than the CG1 is that the group has slightly fewer underuses of SF *le* in TS2.

In the misuse section, TS10 to TS12 are troublesome along with TS6. TS10 to TS12 include all the imperfective markers. In TS10 (*She is wearing red clothes*), the most misused answer was the progressive marker *zai* for the durative marker *zhe*. The CG1 had 6 answers used *zai*, and the GT1 had 5. When *zai* is used, the sentence becomes *She is putting on the red clothes* to emphasize the action of dressing. Along the mixture of *zai* and *zhe*, the groups also mixed *zhe* with perfective markers in TS11 (*She walked into the classroom smiling*). This is an example of the VI+ zhe (*NP*) + V2/VP2 structure when two verbal events happen simultaneously. The CG1 had 5 misuses, and the GT1 had 7 misuses. 4 out of the 5 misuses in the CG1 and 4 out of the 7 misuses in the GT1 went for perfective markers. The reason for this result may be that the students cannot associate imperfective marker *zhe* to a sentence where the main event is presented in a perfective view. The low use of the VI+ zhe (*NP*) + V2/VP2 structure suggests that the function of *zhe* in simultaneous events may not be appropriate for beginners' level no matter which teaching approach is applied.

TS12 (*He was watching TV just now*) is an imperfective situation marked by *zai*. However, 6 out of 8 inappropriate answers in the GT1 and 4 out of 5 inappropriate answers in the CG1 had perfective

markers instead of imperfective marker *zai*. The reason causing such high rate of misuses of perfective markers might be the coexistence of past tense with imperfective aspect. It was obvious that the students felt more comfortable in using perfective markers than imperfective markers in this situation, although the uses of perfective markers were not appropriate in TS12. This finding indeed echoes Chinese children's development of aspect markers: perfective markers emerged before imperfective markers (Erbaugh 1978). In addition, this finding goes against one of the claims in the aspect hypothesis (AH) (Andersen and Shirai 1996), which states that perfective marking appears on achievement and accomplishment verbs, then extend to activity and stative verbs. In TS12, 6 learners in the GT1 and 4 learners in the CG1 used perfective markers with activity verb *watch*.

To sum up, the data of the translation task again revealed that the CG1 and the GT1 had similar patterns in using the markers. Students scored the highest for perfective markers VF *le*, followed by *guo*. The native-like use of SF *le* was limited to certain sentences where its mark of the change of state was more obvious. In addition, both groups had low numbers of native-like use of *zhe* for translating simutaneous events. The progressive marker *zai* was the least properly used due to the disruption of past tense. Moreover, the students tended to mix up the two imperfective markers.

Cloze task

	groups in experiment	Ν	Mean	Std. Deviation
tests' score	Communicative group	10	27.9000	8.25227
	Grammar-Translation group	12	21.2500	6.57993

 Table 19: Mean mark of the cloze task by the CG1 and the GT1

In the cloze task, the CG1 has a mean mark of 27.9 (out of 45) with a Std. deviation of 8.25, and the GT1 has a mean mark of 21.25 with a Std. deviation of 6.58 (see table 19). The results have been run in the *t*-test, and it shows a significant difference with a p value of .048.

Candidate No. (CG1)	Number of answers	Number of correct answers	underuse	overuse	misuse
1	15	10	1	3	1
2	15	11	2	0	2
3	15	15	0	0	0
4	14	9	4	1	0

Table 20: Individual performance of the cloze task by the CG1

5	15	9	3	1	2
6	15	10	0	4	1
7	15	8	2	3	2
8	14	9	2	0	3
9	15	6	1	4	4
10	15	5	1	5	4
Total		92	16	21	19

For the individual performance. Table 20 and table 21 list numbers of answers for analysis, acceptable answers, underuses, overuses and misuses by candidate in the CG1 and in the GT1 separately.

In the CG1 (see table 20), two candidates omitted one slot each, and they each gave 14 answers. The remaining of the group all completed the task. Candidate No. 3 scored full marks in this task, while candidate No. 10 only managed one third of the slots. The two main problems with candidate No. 10 were the overuse of markers for most of the zero marking slots and the misuse of markers. This candidate had a problem in underuse in the writing task. Candidate No. 7 had a high number of underuses in the translation task as well. However, this candidate gave correct answers on *zhe*, *guo*, VF *le* and SF *le* in the cloze task. Candidate No. 9 had similar number of overuse and misuse as candidate No. 10, but the performance of these two candidates in the other tasks were not so close. Candidate No. 4 had four underuses of markers including *zai*, *zhe*, *guo* and SF *le*. This candidate did not have notable underuses did not occur often in other tasks. The individual performance of the ZG1 revealed that the cloze task increased the chance of using aspect markers by the CG1 than in the other two tasks, as the total number of underuse (16) was the least among the three types of mistakes. The type of mistakes made by each candidate in the CG1.

Candidate No. (GT1)	Number of answers	Number of correct answers	Underuse	Overuse	Misuse
1	14	9	1	1	3
2	15	8	1	1	5
3	15	6	4	3	2

4	15	9	4	1	1
5	15	6	4	3	2
6	15	7	4	1	3
7	15	8	3	2	2
8	15	7	3	2	3
9	15	9	3	0	3
10	9	1	0	3	5
11	15	8	4	1	2
12	15	7	3	0	5
Total		85	34	18	36

On the other hand, the GT1 had one extreme case in the cloze task (see table 21). Candidate No. 10 only gave 9 answers, and scored for just one answer. The remaining candidates had very close numbers of correct answers. Candidate No. 10 did gain some marks in the writing task and in the translation task for using markers, but this candidate either overused or misused markers in the cloze task. It looked that the context did not help him/her with using the markers. In the GT1, the least common mistake was overuse, which was totally different from that in the CG1. The underuse was as prominent as the misuse. There were five slots that students could possibly underuse markers. Nine GT1 candidates gave at least 3 underuses out of the five slots. The two candidates No. 1 and No. 12 who used zero marking in the writing task, however, showed effort of using markers in this task. The problem for candidate No. 12 was the high frequency of misusing markers. This candidate also had the same problem in the translation task. Candidate No. 2 resembled candidate No. 12 who had notable number of misuses in the cloze task as well as in the translation task. The individual performance of the GT1 showed that the group did not have big gaps between the candidates except for candidate No. 10. The group had steady performance in the cloze task. The type of mistake was consistent for some candidates in different tasks.

Sentence ID	Marker to be used Valid answers		iswers	Correct a	nswers	Under			Misus	e	
		CG	GT	CG	GT	CG	GT	CG	GT	CG	GT
CS1	zai	10	13	4	3	3	8	0	0	3	2

Table 22: Use of aspect markers in the cloze task in the immediate test (CG1 and GT1)

CS2	VF le	10	13	6	5	0	0	0	0	4	8
CS3	Zero marking	10	13	5	5	0	0	5	8	0	0
CS4	guo	10	13	6	7	0	0	0	0	4	6
CS5	SF le	9	13	9	10	0	0	0	0	0	3
CS6	guo	10	13	6	1	3	9	0	0	1	3
CS7	VF le	10	13	6	4	1	4	0	0	3	5
CS8	Zero marking	10	13	7	11	0	0	3	2	0	0
CS9	Zero marking	10	13	7	10	0	0	3	3	0	0
CS10	zhe	9	12	6	3	0	0	0	0	3	9
CS12	zhe	10	12	4	3	5	7	0	0	1	2
CS13	SF le	10	11	6	2	4	9	0	0	0	0
CS15	Zero marking	10	12	5	5	0	0	5	7	0	0
Total		128	164	77	69	16	37	16	20	19	38
Average		12.8	12.6	7.7	5.3	1.6	2.8	1.6	1.5	1.9	2.9

For the group performance, the uses of aspect markers are listed in table 22. The CG1 provided an average of 12.8 answers for analysis, and the GT1 gave 12.6 answers. The CG1 achieved no less than half of correct answers in 11 of the 13 slots. These slots covered markers VF *le*, *guo*, SF *le*, *zhe* and zero marking. The weakest use in the group was the progressive marker *zai* in the first slot (CS1) with four correct answers. Three of the other answers underused *zai* in CS1, and the remaining answers chose the durative marker *zhe*. The other weak use was marker *zhe*. Imperfective marker *zhe* appeared in two slots in this task, CS10 and CS12. Both slots tested the use of the *V1* + *zhe* + *V2* structure. The difference of the two slots was in the optional answers given. In CS10 the optional answers were all aspect markers, but in CS12 one of the options was changed from marker *zai* to a linking word *he* (and). This change of the options lead to half of the group choosing the linking word in CS12. The answers of these two slots indicated that the students in the CG1 were aware of the *V1* + *zhe* + *V2* structure. However, some of them tended to avoid using the structure in favour of a linking word. It might be that this structure did not exist in students' first language. The students, therefore, were not confident in using the structure unless they had no other choice.

Contrary to the CG1, the GT1 did well in only four slots: CS4 for guo, CS5 for SF le, and two zero markings. The notable mistakes included underuses of markers zai in CS1, guo in CS6, zhe in CS12 and SF le in CS13 and misuses of markers VF le and zhe. Both guo and SF le appeared twice in the slots. In the two slots for guo, the group got 7 correct answers in CS4, which was I learned English before, but only 1 correct answer in CS6, which was I had been to the UK. The difference between CS4 and CS6 was in the options. CS4 had three options: *zhe*, VF*le* and *guo*, but CS6 had N/A⁵⁰, VF *le* and guo. In CS6, 9 answers used option N/A instead of aspect markers. The slots for the SF le presented the same problem as the slots for guo. CS5 had 10 correct answers, which appeared in the sentence -- but now (I) have forgotten a lot of (the language); whereas CS13 had only 2 correct answers in the sentence It is going to be noon soon. The options for CS5 included zhe, le and guo, and the options for CS13 were ne^{51} , N/A and le. A number of the mistaken answers to CS13 showed N/A instead of le. The slots for guo and SF le showed that the GT1 understood the functions of guo and SF le, and the students could distinguish perfective markers from imperfective markers. However, they were not confident in using them, especially when non-marking options were in presence. This behavior was very similar to the CG1. Another underused marker was zai in CS1 (Are you reading an English book). It had 8 out of 13 answers using zero marking in a progressive situation. On the other hand, the VF le in CS2 and zhe in CS10 both had big proportions of misuse. In CS2 (I joined an English class), 7 students misused the experiential marker guo for the VF le. In CS10 (many people had sun bath lying on the grass), 6 students used zai by mistake to link the simutaneous events. CS2 and CS10 showed that students in the GT1 struggled to distinguish guo from VF le and zai from zhe within a context.

A notable mistake in the two groups was the overuse of *zhe* or VF *le* in CS3, and the overuse of SF *le* or *zhe* in CS15. Both slots were zero marking ones. The sentence of CS3 was *why do you study English* (21).

(21) Ni weishenme _____xue Yingwen? You why study English Why do you study English?

When the markers were used, the sentence became *why are you studying English* (22) or *why did you learn English* (23).

(22) Ni weishenme zai xue Yingwen?You why ZAI study EnglishWhy are you studying English?

⁵⁰ N/A stands for not applicable or zero marking.

⁵¹ *Ne* is a final particle of a declarative sentence, and it has the function of 'Response to Expectation' (Li and Thompson 1981: 300).

(23) *Ni weishenme le xue Yingwen? You why LE study English Why did you learn English?

It looked that this overuse was influenced by learners' first language, especially for the GT1. The sentence containing CS15 was changed from *I am not hungry* (24) to *I am not hungry any more* (25) or *I am not being hungry* (25) when markers were used.

(24) Wo bu e _____.
I not hungry
I am not hungry.
(25) Wo bu e le.
I not hungry LE
I am not hugry any more.
(26) Wo bu e zhe.
I not hungry ZHE
I am not being hungry.

It was likely that a few learners were not certain of the function of SF *le*, and others were influenced by their native language.

The cloze task revealed that both groups had a better understanding of perfective markers than imperfective markers. However, the CG1 had more correct uses of markers than the GT1 group, when a context was given. In addition, the GT1 group had more cases of overusing markers in zero marking slots and more cases of underusing markers. These mistakes were very likely to be caused by translation from learners' first language as shown above. However, this needs to be tested further in the main study.

To sum up, in the immediate test, the CG1 outperformed the GT1 in the cloze task, but the GT1 outperformed the CG1 in the writing task. It was found that students used the perfective markers better than the imperfective markers in all three tasks. The marker best used was VF *le*. The least was *zai*, and this was very different from the findings claimed by Jin, L. and Hendriks (2005) that durative marker *zhe* was the least to be used. The students were able to distinguish perfective markers from imperfective markers in most cases, but they struggled to differentiate the perfective markers or in the imperfective markers between themselves. In addition, the students understood the basic function of the markers, but their uses of markers were sometimes influenced by their first language, especially for the GT1. It, therefore, showed discrepancies with the AH. The discussions on this will be expanded in the section of research findings. Before we move on to the discussion, we need to have a look at the results of the post-test to see if there is any long-lasting effect of the teaching approaches.

5.2.3 Post-test

Table 23: Mean score of the post-test

	Group	Ν	Mean	Std. Deviation
Post test	Grammar-Translation group	12	45.42	21.794
	Communicative group	10	59.80	22.690

Table 24: number of markers and zero marking used by GT1 in the writing task in the post-test

ID (GT1)	1	2	3	4	5	6	7	8	9	10	11	12	total
Markers used	5	0	3	3	0	0	7	8	4	0	1	2	33
Zero marking	8	0	6	3	0	0	2	4	3	0	0	9	35

ID (CG1)	1	2	3	4	5	6	7	8	9	10	total
Markers used	2	6	9	6	6	0	0	6	5	3	43
Zero marking	7	6	9	1	6	0	0	9	4	5	47

In the post-test, the GT1 group had an overall mean score of 45.42 out of 100, and the CG1 group had a score of 59.80 (see table 23). For the translation task, the writing task and the cloze task, the CG1 group also had higher mean scores than the GT1 group. However, none of these results had statistical significance (p=.146). In fact, the two groups showed very similar patterns of performance in all three tasks. As in the immediate test, students showed greater mastery of the perfective markers than the imperfective markers. In the translation task, the CG1 group used the VF *le* the best, followed by markers *guo*, SF *le* and last *zai*. The GT1 used marker *guo* most correctly, followed by the markers VF *le*, SF *le* and then *zai*⁵². The students in both groups had a tendency to underuse the imperfective marker *zai*, and they did not always distinguish SF *le* from VF *le* in translation. In the cloze task, the main problem was the misuse of the experiential marker *guo* for the VF *le*. A noticeable difference between the groups was in a zero marking slot, where a verb *xihuan* (like) was wrongly used with *zhe* in *We like Beijing the most*. In the immediate test, both groups had similar results for the same language point. However, after a couple of months, everyone in the CG1 group scored on this,

⁵² The durative marker *zhe* was not included in the translation task in the post-test. Since it was a closed-book exam, students could not produce enough words to form a sentence with *zhe*. It had to be left out. However, in the main study the translation task was amended, and *zhe* was added to the task.

whereas the GT1 group did not show any improvement, although it was emphasized explicitly in class that the verb *xihuan* (like) could not be used with durative marker *zhe*. In the writing task, VF *le* was in the highest frequent use, while SF *le* and *guo* were also found. The common problem for both groups was to either overuse or underuse VF *le*. In addition, the students did not use VF *le* to mark all actualized situations. As shown in table 24 and table 25, GT1 had 8 candidates completing the task, the remaining 4 candidates left the task blank, and CG1 had 2 candidates who did not produce any writing. The 8 candidates in GT1 used a total of 33 markers, but 35 zero markings in a native-like manner. The CG1 produced native-like sentences with 43 markers and 47 zero markings in total. A substantial use of zero marking suggested again that the students did not consider perfective markers as tense markers.

5.2.4 Discussion on pilot study

In this section, we will test the hypotheses using the data from the pilot study.

The Grammar-Translation approach leads to higher accuracy levels in using aspects than the Communicative approach in grammatical tasks.

Table 26: Average number of native-like use of markers by the CG1 and the GT1 in the translation task in the pilot study

ID	VF le	guo	SF le	zhe	zai
CG	8	5	3	2	2
GT	6	5	3	5	2

In both translation tasks in the immediate test and the post-test, the GT1 group had lower average scores than the CG1 group. The explicit exposition of grammar did not seem to enhance the form-function mappings in students' interlanguage in the GT1 in translation tasks. In fact, these two groups showed some similar patterns in using the markers in both tests. In the immediate test, the students showed understanding of VF *le* and *guo* the most, followed by SF *le*, *zhe* and finally *zai*. Table 26 shows the average number of acceptable uses of the markers by the two groups. It can be seen that the VF *le* has the highest number in both groups, and the progressive marker *zai* has slightly lower number than the durative marker *zhe* in the GT1. This order supported the finding of VF *le* and SF *le* in Wen, X. (1995) that VF *le* came before SF *le*. However, it was slightly different from the finding of *zai* and *zhe* in Jin, L. and Hendriks (2005), which stated that the progressive marker *zai* appeared before *zhe*. The table also shows that the learners have done better in perfective markers VF *le* and *guo* than imperfective markers. In the post-test, a similar acquisition order showing that perfective markers came before imperfective markers was found again. The findings in both tests were in line with some research findings in L2 acquisition of Chinese aspects (Jin, L. and Hendriks 2005) and in other languages, such as in Spanish (Leeman *et al* 1995; Salaberry 2000) and in French (Bergström

1995; Salaberry 1998). In the experimental teaching session, the experiential marker guo was introduced after imperfective markers, but the use of guo was more accurate than that of zai and zhe. This finding suggests that the instruction order of the markers may not influence the acquisition order of the markers. It supported a statement by Bardovi-Harlig (1995: 153) that 'the acquisitional sequences in the interlanguage of instructed learners can be attributed to natural patterns rather than instruction.' However, the table also shows a discrepancy in SF le. In the GT1, the number of SF le is lower than that of *zhe*. This finding may indicate that in L2 Chinese not all perfective markers came before imperfective markers under different instructions. However, this needs to be further tested in the main study. Regarding the mistakes in the translation task, the research results showed that the misuse and the underuse of markers were quite outstanding in both groups, but the misuse was more prominent in the GT1 group than in the CG1 group. Although the majority of learners could distinguish perfective markers from imperfective markers, they tended to mix up the three perfective markers or the two imperfective markers. Moreover, it was found that at beginners' level, students could only use SF le when translating sentences with very basic structures. It seemed that learners struggled to extend the use of SF le to perfect situations. In addition, students struggled to associate SF le with achievements in spite of explicit teaching in the GT1 group, which was against a statement in Andersen's AH (1991) that perfective marking appeared on achievements first. The misuse of the markers and the use of SF le at basic level could be a common phenomenon that all learners needed to deal with in acquisition. However, could the misuse of the markers be a result of intensive teaching? As in the pilot study, all five markers were introduced to learners in the one-hour session. For the GT1, the learners in this group were spoon fed with a pool of linguistic terminologies and rules. It is very challenging for people to intake all five markers at the same time. Cooper (1998) points out that learners use long-term memory and working memory in the process of information. Working memory (Baddeley 2003: 189) is 'the temporary storage and manipulation of information that is assumed to be necessary for a wide range of complex cognitive activities'. Working memory is limited to a few pieces of information at a time (Sweller, VanMerrienboer and Paas 1998). Too much information at the same time reduces the effectiveness of learning outcomes (Swell et al. 1998). Therefore, the researcher suspects that the intensive teaching has led to counterproductive results. Could a change of the teaching session reduce the misuse of the markers? It was, therefore, worth tracing changes in results, when the intensive teaching session was broken down into small sessions in the main study.

The Communicative approach leads to a better use of aspects than the Grammar-Translation approach in comprehension tasks.

The cloze task in the immediate test showed a significant difference between the CG1 and the GT1. Nonetheless, the gap disappeared in the post-test, when no teaching sessions on aspect markers were given after the experiment. In the immediate test, both groups performed better in perfective markers than in imperfective markers as in the translation tasks. However, the CG1 showed more confidence

in using markers than the GT1 in the cloze task, even though the GT1 overtook the CG1 in using VF *le* in the writing task. The GT1 had more misuses of perfective markers *guo* and VF *le*, and imperfective markers *zai* and *zhe*, which could be the side effect of grammar teaching. Moreover, the GT1 showed more signs of L1 transfer than the CG1 group in the cloze task. It might be caused by the translation exercises, which sent students messages to refer to their native languages when learning a new language. However, the evidence for using VF *le* as a past tense marker was vague in this research, which differed from the claim by Duff and Li, D. (2002) and Wen, X. (1995).

The pilot study has shed some light on the learning and teaching of Chinese aspect markers. It attests that learners follow a natural acquisition order irrespective of the teaching approaches (Bardovi-Harlig 2000: 405): perfective markers before imperfective markers. However, different teaching approaches do have marked effects on using aspect markers, such as better performace of *zhe* than SF *le* in the GT1 in the immediate test. The communicative approach showed a notable immediate effect in the cloze task, but no significant advances were found in the writing tasks. On the contrary, the Grammar-Translation approach did not appear to strengthen accuracy in translation tasks, but the GT1 group performed better in the picture-description task. The descriptive analysis showed that the GT1 had more steady and similar performance throughout the tasks than the CG1. Last but not least, it is open to discussion whether the intensive teaching of the aspect markers, especially for the GT1, has affected the learning of L2 Chinese aspect markers at beginners' level. The effect, however, needs to be further attested in the main study.

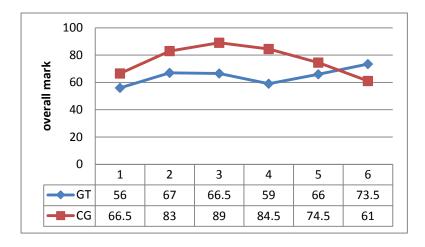
5.3 Main study

In the main study, the number of students for each group was smaller than in the pilot study due to the spread of teaching sessions on aspect markers. As a reminder, the teaching of aspect markers was divided into two separate sessions in two consecutive weeks. Some students only attended one of the sessions. Therefore, they are not considered eligible for the experiment. We only take the data from students who participated in all the teaching sessions and took at least the pre-test and the immediate test. In total, we recruited six L1 English speakers for each group. The test results are discussed below.

5.3.1 Pre-test

	Group	N	Mean	Std. Deviation
Pre-test	CG2	6	76.4167	11.01552
	GT2	6	64.6667	6.25833

Figure 15: The pre-test result of each candidate in the CG2 and in the GT2 in the main study



In the pre-test, the CG2 had a mean mark of 76.42 with a Std. deviation (SD) of 11.02, and the GT2 had a mean mark of 64.67 with a SD of 6.26 (see table 27). Everyone had passed the 40 benchmark. The results were run in the *t*-test, and it showed a significant difference with p= .046. The individual mark of each candidate is listed in figure 15. The red line indicates the results of the CG2, and the blue line is for the GT2. It can be seen that the CG2 has three marks in the range of 80 to 100, whereas the GT2 has none. The remaining three in the CG2 group fall into the mark range of 60 to 80, which are also high marks. However, for the GT2, the best mark is 73.5, which is even lower than the mean mark of the CG2.

The researcher assigned the teaching approach to the groups randomly. There was no intention to put students with high marks in the CG2. Since some students in the GT2 with high marks in the pre-test did not attend the teaching sessions on aspect markers, their exam results could not be included. Therefore, the better results of the CG2 in the pre-test may gave the group a good start in learning the aspect markers comparing to the GT2. If the results in the immediate test for the CG2 are still better than the GT2 group's, it will be difficult to tell which teaching approach is more effective. However, if the CG2 group's results are significantly lower than the GT2 group's, it is worth investigating how the Grammar-Translation approach works in teaching Chinese aspects.

5.3.2 Immediate test

	Group	Ν	Mean	Std. Deviation
Immediate test	CG	6	28.0833	7.55259
	GT	6	42.0000	6.92820

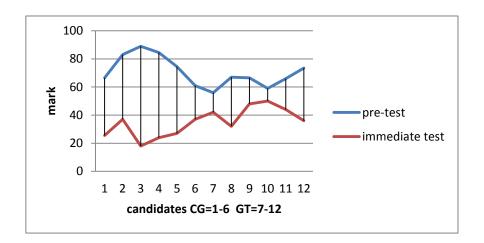


Figure 16: Comparison of results in the pre-test and in the immediate test in the main study

The results of the immediate test showed that the GT2 (M=42.00, SD=6.93) had a higher mean mark than the CG2 (M=28.08, SD=7.55) (see table 28). The *t*-test result also showed a significant difference (p=.008) between the groups in the immediate test. When we processed the data of each task in SPSS, it was found that in the translation task, the p value of the results was less than .05, which means the performance of the GT2 in the translation task is significantly better that of the CG2. However, in the other two tasks, no significant difference was found between the two groups. In the following, we will first look at the data of the translation task, and then the other two tasks, as it is the order of the tasks in GT's test paper. In addition, in the pilot study, the immediate test results showed similar fluctuation to the pre-test's results in both groups. It was assumed that the general knowledge of Chinese might help with the learning of aspect markers. In the main study, the two sets of results were also compared. In figure 16 the top line indicated the marks of the pre-test and the bottom line was for the immediate test. Candidates 1 to 6 were from the CG2 and candidates 7 to 12 were from the GT2. Contrary to the finding in the pilot study, the bottom line did not follow the fluctuation of the top line. Both groups had candidates who achieved high marks in the pre-test getting low marks in the immediate test (e.g. candidate No. 3 and candidate No. 8). The gap between the two tests in the CG2 was much larger than that in the GT2. Therefore, the assumption that the learning of aspect markers was influenced by learners' general knowledge of Chinese was not supported in the main study.

Translation task

In the translation task, the CG2 had a mean mark of 3.33 with Std. deviation of 5.164, and the GT2 had a mean mark of 15.00 with Std. deviation of 5.477 (see table 29). The results of the two groups had significance with p value of .004.

	Group	Ν	Mean	Std. Deviation
Translation task (IT)	CG2	6	3.33	5.164
	GT2	6	15.00	5.477

Regarding the individual performance, no extreme case that could influence the performance of the whole group was found. The GT2 and the CG2 showed some similar patterns as in the pilot study. However, the GT2 had more attempts at using markers than the CG2 in general. For those having misuse and underuse, the candidates in the GT2 had more misuse than underuse, whereas in the CG2 no such patterns existed.

Table 30: Individual performance of the translation task by the GT2 in the main study

Candidate No.	1	2	3	4	5	6
Answers for analysis	8	8	4	6	8	5
Native-like uses	3	1	3	4	4	3
Underuse	2	3	1	2	0	2
Misuse	3	4	0	0	4	0

Table 31: Markers used by	the GT2 in the t	ranslation task in	the main study
Table ST. Walkers used b	the Giz in the t	ansiation task m	the main study

ID (GT2)	1	2	3	4	5	6
Native-like use	VF le	VF le	VF le	VF le	SF le	VF le
	SFle		Guo * 2	SF le	Zhe * 2	SF le
	Zhe			Guo	Zai	Guo
				Zhe		
Underuse	SF le	SF le	SF le	SF le		Zhe
	Guo	Guo		Guo		
misuse	VF le	Zhe			VF le	SF le
	Zhe	Zai			SF le	
	Zai				Guo	

In the GT2 (see table 30), candidate No. 3 gave the least answers for analysis. The candidate only managed half of the sentences, but he/she managed to score most of the answers. Candidate No. 2 scored the least, and other candidates had similar scores. The underuse spread to 5 candidates, not including No. 5. The misuse concerned candidates: No. 1, No. 2 and No. 5. Comparing underuse to misuse, it looked that underuse spread to more candidates than misuse. However, this was not observed in the pilot study. In order to see how the candidates used the markers, table 31 lists the markers used by each candidate in the group. For candidate No. 1, the student used one count of VF le, SF le and zhe in a native-like manner, but failed to use them properly in other sentences. The student underused SF le for a perfect situation in TS6. He/she misused zai for a perfective situation in TS4, and misused VF le for simultaneous events in TS11. Candidate No. 2 used one count of VF le properly. This candidate had problems in under using perfective markers SF le and guo, and misusing SF le, zai and zhe. Candidate No. 3 scored on two counts of guo and one count of VF le. Like candidate No. 1, candidate No. 4 also scored on one count of VF le, SF le and zhe each, but in addition one count of guo. The underuse of SF le was also for TS6. Candidate No. 5 scored on zhe the most among other markers. Candidate No. 6 did not show any native-like use of imperfective markers. The individual performance showed that all candidates managed to use at least one perfective marker properly, but only half of the group gave native-like uses of imperfective markers. The four counts of underuse of SF le were for TS6, but not TS2.

Candidate No.	1	2	3	4	5	6
Answers for analysis	8	8	8	3	5	6
Native-like use	0	2	0	0	0	2
Underuse	2	2	5	1	5	2
Misuse	6	4	3	2	0	4

Table 32: Individual performance of the translation task by the CG2 in the main study

For the CG2 (see table 32), candidate No. 4 was the only one gave less than half of expected answers. This candidate did not score for any of the answers. Candidates No. 2 and No. 6 were the only ones in the group who managed to score in this task. The remaining of the group had no acceptable uses of markers. They either underused markers or misused markers. Some candidates had more underuse than misuse, and others were reverse. This was very similar to the performance of the CG2 in the pilot study.

ID	TS2		TS4		TS6		TS7		TS8		TS10)	TS1	1	TS12	2
aspect marker to use	SF le	9	VF 1	e	SF le	9	guo		VFle	e/guo	zhe		zhe		zai	
groups	GT	CG	GT	CG	GT	CG	GT	CG	GT	CG	GT	CG	GT	CG	GT	CG
answers for analysis	6	6	6	6	5	5	5	5	6	4	5	4	3	4	3	6
acceptable answers	3	0	4	0	1	0	1	1	4	2	3	0	1	0	1	1
underuse	2	5	0	2	4	3	3	3	0	1	1	2	0	0	0	1
overuse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
misuse	1	1	2	4	0	2	1	1	2	1	1	2	2	4	2	4

Table 33: Number of markers used in the translation task by the GT2 and the CG2 in the main study

Table 33 lists the number of markers used by the CG2 and the GT2. It shows that the two groups have less native-like answers towards the end of the translation task. The GT2 had no less than half of acceptable answers in TS2, TS4, TS8 and TS10. These sentences concerned SF *le*, VF *le*, *guo* and *zhe*. This result was in line with the GT1's result in the pilot study except for TS7, which involved *guo*. The CG2, on the contrary, had much less acceptable answers in all sentences. This differed completely from the CG1's result in the pilot study. In the pilot study, the CG1 gave a good number of native-like answers in SF *le*, VF *le* and *guo*. For the inappropriate answers, the overuse was not observed. The underuse was slightly more spreading than the misuse. The common underuse in the two groups was for TS6 and TS7. The big number of underuse of SF *le* in TS2 by the CG2 in the main study matched that in the pilot study. The misuse of *zhe* in TS11 and *zai* in TS12 by the CG2 was also found in the pilot study. The most different finding from the pilot study was the misuse of VF *le* in TS4 by the CG2. In the misuse in TS4, two counts of *zhe*, one count of *guo* and one count of SF *le* were observed. In TS11 and TS12, a few perfective markers were also used for the imperfective situations. It looked that the CG2 in the main study made attempts at using the markers, but they showed little understanding of the markers in translation.

Picture-description task

	Group	Ν	Mean	Std. Deviation
Writing task (IT)	CG2	6	3.7500	2.64102
	GT2	6	5.5000	1.22474

In the writing task, neither of the groups did well in using markers. The GT2 had a slightly higher mean mark than the CG2 (see table 34). The *t*-test did not show significant difference in the results for this task (p=.172).

ID (GT2)	P1	P2	P3	P4	Р5
1	zhe	0	zhe	0	0
2	VF le	VF le	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0

Table 35: Use of aspect markers in the picture-description task by the GT2 in the main study

Table 36: Use of as	spect markers in the	picture-description ta	ask by the CG2 in	the main study
10010 30. 030 01 0.	speet markers in the	picture-acounption to	isk by the COZ in	the man study

ID (CG2)	P1	P2	P3	P4	P5
1	guo	guo	guo, guo	VF le, guo	0
2	guo	guo, guo	guo	guo, guo	guo
3	0	guo	0	0	guo
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0

The use of markers by the two groups was listed in table 35 and table 36. One was for the GT2 and the other was for the CG2. The tables clearly show markers used by each candidate for each picture. It looked that at least half of each group did not use any marker. In the GT2, candidate No. 1 tried imperfective marker *zhe*, but misused it. No other markers were spotted in the writing. Candidate No. 2 had two successful uses of VF *le* in the first two pictures, but not in other pictures especially towards the end. The rest of the group made no attempts at using markers. The CG2, on the other hand, had three candidates using *guo* for almost every event. There was only one acceptable use of VF *le* observed in picture 4 by candidate No. 1. No use of imperfective markers was identified in the group.

The results of the writing task from the two groups were completely different from the results in the pilot study. Both groups had a high percentage of students making no attempts at using markers. For those who used markers, they would rather stick to one marker. This marker might be the one they felt most comfortable to use in a task without much clues on markers. When looking back at their performance in the translation task, the GT2 showed attempts at all markers. Each candidate in the GT2 scored for at least two markers except for candidate No. 2 who only scored for VF *le*. This candidate's use of other markers needed to be traced in the cloze task. The CG2, on the contrary, had fewer candidates who tried both perfective markers and imperfective markers. Candidate No. 4, candidate No. 5 and candidate No. 6 in the CG2 had no uses of markers at all. Their performance in the cloze test should also be further investigated.

The findings suggest that the change in delivering sessions has affected the students' performance on the writing task, when comparing the groups' performance in the pilot study to the groups' in the main study. The teaching of aspect markers seems to have a very short-term effect on learners' use of markers in the task without contextual or sentential reference. The change in results shows that learning should not be treated as a one-time event, if learners want to go to the level of independent production. This will be further expanded in the discussion of findings. In addition, although the session for imperfective markers was closer to the immediate test than the session for perfective markers.

Cloze task

	Group	Ν	Mean	Std. Deviation
Cloze task (IT)	CG2	6	21.00	4.243
	GT2	6	21.50	4.416

Table 37: Mean mark of the cloze task in the immediate test in the main study

For the cloze task, the two groups had very close mean marks (see table 37). The GT2 had a mean mark of 21.50, which was only half a point higher than the CG2.

In terms of individual performance, no one has extreme high or low marks that would influence the group's average performance (see table 38 and table 39). The GT2 had one candidate (No. 3) who made three mistakes in underuse. Although this candidate scored 7 correct answers, 4 of them were zero marking situations. The correct answers were for *guo*, VF *le* and *zhe*. This candidate only gave four answers in the translation task, and he/she did not use any markers in the writing task. Candidate No. 2, candidate No. 5 and candidate No. 6 had big numbers of misuses. The same problem for candidate No. 2 and candidate No. 5 was also observed in the translation task. The native-like uses of

markers by candidate No. 2 were VF *le* and SF *le*. Candidate No. 5 scored for two counts of *guo* and two counts of SF *le*. Candidate No. 6 scored for two counts of VF *le* and one count of *zhe*. The student did not have the same problem in the translation task. Candidate No 3 and candidate No. 4 both scored on *guo*, VF *le* and *zhe*. The overuse concerned three candidates: No. 1, No. 5 and No. 6.

Candidate No. (GT2)	1	2	3	4	5	6
correct answers	6	5	7	6	4	3
underuse	1	2	3	2	1	2
misuse	1	5	3	3	4	4
overuse	4	1	0	2	4	4

Table 38: Individual performance in the cloze task by the GT2 in the main study

Table 39: Individual performance in the cloze task by the CG2 in the main study

Candidate No. (CG2)	1	2	3	4	5	6
correct answers	6	7	3	4	5	6
underuse	3	3	4	3	4	1
misuse	2	2	5	4	4	4
overuse	2	1	1	2	0	2

The candidates in the CG2 did not have notable overuses. Their common mistakes were underuse and misuse. In the CG2, only candidate No. 6 did not have a big number in underuse, but this candidate had problems in misuse. This problem was also found in the answers in the translation task. This candidate had native-like use of *zhe*, VF *le* and *zai*. The misuse was mainly for *zhe*, *guo* and SF *le*. For candidate No. 3 and candidate No. 5, underuse was their main problem, and it appeared in the translation task as well. Candidates No. 3 to No. 6 showed attempts of using markers, but they mostly misused them. For the correct answers, candidate No. 3 scored on all slots with zero markings. Candidate No. 5 only managed one count of SF *le*, but four counts of zero marking. Candidate No. 4 used one count of *zai* in a native-like manner, but three counts of zero marking.

The uses of the markers by the two groups are further listed in table 40. It can be seen that all candidates gave full answers in this task except for one omission in the GT2. The CG2 did well in five slots, CS1 for *zai*, CS5 for SF *le*, and CS3, CS8 and CS9 for zero marking. The GT2, on the other hand, did well in six slots, CS2 and CS7 for VF *le*, CS4 for *guo*, CS5 and CS13 for SF *le*, and CS3 for

zero marking. The range of correct answers showed that the GT2 had more candidates scoring in VF *le* and *guo* than the CG2. Neither of the groups had shown better use of imperfective marker *zhe* in this task. However, GT2 had 4 candidates scored on *zhe*, whereas CG2 had none. In the inappropriate answer sections, the two groups showed similar patterns in underuse. The underuse was mainly for *guo* in CS6, *zhe* in CS12 and SF *le* in CS13. The underused markers in the GT2 were the same as the GT1's in the pilot study, but the CG2 in the main study had more underused markers than the CG1's in the pilot study. Regarding the overuse, the GT2 had more overuse than the CG2. Most candidates in the GT2 overused markers in the four zero marking slots, whereas the CG2 only overused markers in CS15. For the misuse, the GT2 had perceptible misuses in CS1, CS2, CS4 and CS10, while the CG2 had misuses mainly in CS2, CS4, CS6, CS7 and CS10. The slots with a high number of uses in the GT2 in the main study were almost the same as the ones in the GT1 in the pilot study. The GT1 in the pilot study had misuses mainly in CS2, CS4 and CS10. The CG2, however, did not have any similarities in misuse observed in the two experiments. What is for sure is that the performance of the CG2 in the cloze task in the main study has receded.

sentence	marker to be	answers analysis		correct	answers	underuse	2	overuse		misuse	
ID	used	CG	GT	CG	GT	CG	GT	CG	GT	CG	GT
CS1	zai	6	6	4	1	2	2	0	0	0	4
CS2	VF le	6	6	2	3	0	0	0	0	4	3
CS3	Zero marking	6	6	4	3	0	0	2	3	0	0
CS4	guo	6	6	1	3	0	0	0	0	5	3
CS5	SF le	6	6	4	4	0	0	0	0	2	2
CS6	guo	6	6	1	1	3	3	0	0	2	2
CS7	VF le	6	5	1	3	2	0	0	0	3	2
CS8	Zero marking	6	6	6	2	0	0	0	4	0	0
CS9	Zero marking	6	6	4	2	0	0	2	4	0	0
CS10	zhe	6	6	1	2	0	0	0	0	5	4
CS12	zhe	6	6	1	2	5	4	0	0	0	0
CS13	SF le	6	6	0	3	6	3	0	0	0	0
CS15	Zero	6	6	2	2	0	0	4	4	0	0

Table 40: Use of aspect markers in cloze task in the immediate test (CG2 and GT2) in the main study

	marking										
Total		78	77	31	31	18	12	8	15	22	20
Average		6	5.9	2.4	2.4	1.4	0.9	0.6	1.2	1.7	1.5

Summing up the two groups' performance, misuse was the most common mistake in the cloze task. The GT2 had more candidates overusing markers, whereas the CG2 had more candidates underusing markers. The individual behaviour did not resemble those in the pilot study, where the CG1 had more cases of overuses and the GT1 had more underuses. In addition, both groups had done well for the perfective markers VF *le* and SF *le*. The GT2 had a good use of *guo* in one slot (CS4) but not in the other (CS6). These findings were in line with those in the pilot study. The CG2, on the other hand, scored more marks for *zai* than for *zhe*. In the pilot study, the CG1 scored more marks for *zhe* compared to *zai*. Nevertheless, the CG2 showed good use of at least one imperfective marker in the two experiments. The GT2, however, did not achieve high scores for any of the imperfective markers, just the same as the results in the pilot study.

To conclude the immediate test in the main study, the test results of the GT2 significantly differ from the results of the CG2. The gap mainly comes from the translation task but not the other two tasks. Comparing the results in the main study to the results in the pilot study, the change in the teaching sessions has affected the groups' results in the writing task the most. Both groups have sizable underuse of markers in the writing task. Each group has a couple of candidates who tried out one or two markers in their writings, but many of them are misuses. The GT2 in the main study has shown some similar patterns to the GT1 in the pilot study in using aspect markers in the cloze task and in the translation task. However, the performance of the CG2 in the main study has receded considerably compared to the results in the pilot study. It looks that the two GTs have consistent and steady performance in the translation task and in the cloze task in the two experiments, whereas the CGs do not have such consistency in their performance. In addition, a good level of Chinese knowledge does not seem to help with the learning of aspect markers as shown in the pilot study. Even through the mean mark of the CG2 in the pre-test is much higher than that of the GT2, the CG2 have not shown better performance in the immediate test than the GT2. This finding may indicate that the learning ability plays an instant role in learning, but the effect on learning aspect markers does not last for over two weeks. This needs to be further discussed in the last section.

5.3.3 Post-test

In the post-test, each group has one student absent for the exam. In the GT2, it is candidate No. 2, and in the CG2, it is candidate No. 6. It thus leaves five candidates in each group. The marks for the

absentees are zero. As a formal exam, the test paper and the answers are verified by an external examiner. It, therefore, does not have a control group. Statistically, the test results show that the CG2 (M=52.17, SD=26.78) has higher mean overall marks than the GT2's (M=32.00, SD=16.46), but with a p value of .451. In the three tasks, the GT2 has higher mean score (M=3.75, SD=2.02) in the cloze task than the CG2 (M=2.00, SD=1.10), whereas the CG2 has higher mean scores (M=3.66, SD=2.94) in the translation task than the GT2 (M=2.00, SD=2.09). In the post-test, none of the variables has significance at less than .05. The writing task has a p value of .283, the translation task has a p value of .329, and the cloze task's p value is .717. Comparing each group's performance in each task to their overall results in the post-test, the GT2 still shows benefits from the explicit teaching of aspect markers. The CG2 has higher overall marks than the GT2, but in terms of aspect marking, the CG2 does not have significant advantages over the GT2. Since the length of the tasks is shorter than that in the immediate test, it is easier to look at both groups' data at the same time under each task. In the sub-sections below, the analysis follows the order of the tasks in the exam paper, which is translation the first, cloze task the second and writing task the last.

5.3.3.1 Translation task

In the analysis, the focus is on the translation of the aspectual situations, but not on the accuracy of words. In other words, full marks are awarded for translating aspectual views correctly, even if the words used are inappropriate.

In this section, the details of the right and wrong answers reveal some similarities in performance as well as differences between the two groups. The first sentence used SF le for current relevance (27).

(27) Wo kanjian na ge shangdian le.I see that CLF shop LEI have seen that shop.

In the GT2, none of the students translated the sentence correctly. Two of them translated it into a past event, e.g. *I saw the shop*, and the remaining translated it into a present event, e.g. *I see (look at) the shop*. The CG2 had the same problem as the GT2. No acceptable answer was found.

The second sentence had the durative marker *zhe* in it, and it used the V1 + zhe + V2 structure. Sentence (28) had two actions, one was to go to the post office, which was a main action, and the other was to take the little sister. In the GT2, two students translated the aspectual view, although the translation of *dai* (take) was inappropriate. In the CG2, three students translated the sentence into *she takes her little sister to the post office*. Although the translation was semantically acceptable, it shifted the focus of the main action from *go to post office* to *take the little sister*. Therefore, these answers were given half of the marks. (28) Ta dai zhe meimei qu youju.She take ZHE younger sister go post officeShe goes (went) to the post office with her little sister.

The third sentence used VF *le* for the actualization of the event (29) of ordering soup. If translating into a present tense, it would have no sense of actualization. Three students in the GT2 used present tense for their translation, and two students used past tense. In contrast, the CG2 all scored in this translation, except for one blank answer.

(29) Ta dian le yi ge jirou tang.He order LE one CLF chicken soupHe ordered a chicken soup.

The next sentence (30) had a progressive situation requiring *zai*. All students in both groups managed to translate the event semantically, but no one translated with proper aspect. Some students translated the event into *bought a ticket* using VF *le*, one gave an answer like *going to buy a ticket*, some used *buy a ticket*, and the last one was *would like a ticket*.

(30) Wo zai mai qu Beijing de huoche piao.I ZAI buy go Beijing DE train ticketI am buying (a) train ticket to Beijing.

The last sentence was a use of the experiential marker guo. Two answers from the GT2 and four answers from the CG2 translated as in (31) but without the adverb *once*. When the adverb was not used, it would not deliver the sense of experience. The answers showed that the students acquired the perfective function of guo, but they might not get the experiential function of it.

(31) Wo gei mama mai guo yi tiao weijin.I for Mum buy GUO one CLF scarfI bought my mum a scarf (once).

In the translation task, the CG2 slightly outperformed the GT2 in two sentences, TS3 and TS5. To investigate further, the numbers of the acceptable answers are listed in table 41. The table shows that both groups, each having 5 candidates, scored for TS2, TS3 and TS5. These sentences included markers VF *le*, *guo* and *zhe*. The GT2 scored equally for the three sentences, but the CG2 had better performance in TS3 for VF *le* than in TS2 for *zhe* and TS5 for *guo*. For the durative marker *zhe*, the acceptable answers given by the GT2 showed lasting effect of the teaching approach. For perfective markers VF *le* and *guo*, the CG2 had improved in comparison to their performance in the immediate test, but the CG2 could not distinguish perfective markers from imperfective markers in translation. Contrary to the CG2, the GT2 did not show much improvement on the markers. In addition, both

groups in this task used markers SF *le* and *zai* poorly. The better use of some perfective markers indicated that the grammar rules given to the CG2 group in the following week helped them gain better understanding of aspect markers. However, the materials given to the GT2 after the immediate test did not seem to bring out better results in students' learning.

ID (total)	TS1 SF le	TS2 zhe	TS3 VF le	TS4 zai	TS5 guo
CG2 (5)	0	1.5	4	0	2
GT2 (5)	0	2	2	0	1

Table 41: Number of native-like answers in the translation task in the post-test

5.3.3.2 Cloze task

In the cloze task, six slots were used to test the aspect markers, and the other four were distracters. The distracters have no aspect markers involved. In the analysis, only the slots linked to the markers were considered. These slots were CS1 to CS3, CS5, CS6 and CS8. Four markers, VF *le*, *guo*, *zai* and *zhe*, and zero marking (N/A) were used in the options. The SF *le* was not tested in this task, as it was very difficult to fit it into the context, which was about a journey in China.

The first slot CS1 was given VF *le*, N/A and *zhe* as options. The sentence is shown in (32). Since the sentence had a telic event, and it had been actualized, a VF *le* should be used. For this slot, the GT2 had four correct answers, and the CG2 had five. Their results were very close.

(32)...Wo he mama qu <u>le</u> Beijing he Guangzhou.
 I and mum go LE Beijing and Guangzhou
 Mum and I went to Beijing and Guangzhou.

The second slot was an example of zero marking situations. VF *le*, N/A and *zhe* were options in this slot. In (33) the event of taking a train was a form of transportation, which was atelic and unbounded. The sentence had no indication of an ongoing or a durative event either. Therefore, no markers were needed for this slot. The GT2 gave two correct answers, and the CG2 gave one. The most chosen answer was the VF *le*, which indicated that the students in both groups did not consider the telic and bounded function of the VF *le*.

(33) Women zuo <u>N/A</u> huoche xian dao Guangzhou,...
We take train first arrive Guangzhou
We took train to Guangzhou first.

The third slot (34) was another zero marking situation, which had the same sentence pattern as the sentence (*I like the UK very much*) in the cloze task in the immediate test. The CG2 scored all the points for the slot in the immediate test. However, in the post-test they only managed two correct answers. For the GT2, the students did not perform well for the same slot in the immediate test, nor for this time. As for the CG2, it had two correct answers, and the remaining candidates went for the durative marker. When comparing the answers to slot 2 and slot 3, it reveals a pattern in both groups' use of aspect markers. Slot 2 and slot 3 were both zero marking situations with exactly the same options. In slot 2, most candidates went for the VF *le*, but in slot 3, they chose the durative marker *zhe*. The different choices might result from the different types of verbs used. The sentence of slot 2 had an activity verb *zuo* (take), whereas in the sentence of slot 3 it had a stative verb *xihuan* (like). The students showed preference for using VF *le* with an activity verb, and used the durative marker with a stative verb. This finding supports Andersen's claim on the use of stative verbs in imperfect for early stages of L2 learning, but it is not in line with his claim that the perfective extends to activity verbs at later stage.

(34) Women zui xihuan <u>N/A</u> Beijing.
We most like Beijing We like Beijing the most.

Slots CS5 and CS6 were both for telic and bounded events. These two slots had the same options: *guo*, VF *le* and N/A. For slot CS5, each group had three correct answers. The other answers went to the experiential marker *guo*. For slot CS6, both groups failed to score it, except for one correct answer in the CG2. The most incorrect answer given was *guo* in both groups. It looked that the students were aware of the use of perfective markers as shown in (35), but they could not further distinguish the VF *le* from the experiential marker.

(35) Women qu <u>le</u> changcheng, pai <u>le</u> henduo zhaopian.
We go LE the Great Wall, take LE many photo
We went to the Great Wall, and took many photos.

The last slot had VF *le*, *guo* and *zai* as options. The correct answer was VF *le* as shown in (36). This slot only had one correct answer from the GT2. Half of the students used *guo* and the other half chose *zai*. The option *zai* should be excluded easily by its syntactical position in a sentence, as it was supposed to be in front of a verb. If the number of students using *zai* was very small, it could be that this answer was only a guess. Conversely, two answers in the GT2 group and three answers in the CG2 group used the progressive marker *zai*. It was thus possible that the students intended to use an imperfective marker for a durative situation, and they had mistaken the progressive marker *zai* for *zhe*.

Nonetheless, one thing for sure was that these students had acquired neither the syntactical function of *zai* nor the grammatical functions of it.

(36) ..., zhu <u>le</u> si tian. stay LE four day ..., stayed for four days.

In the cloze task, the two groups showed similar patterns in using aspect markers. To further illustrate the patterns, table 42 lists the numbers of correct and incorrect answers by the two groups for each slot. It can be seen that the groups have the same number of correct answers, and similar numbers of incorrect answers. For each slot in the correct answer section and in the incorrect answer section, the numbers from both groups are very close. CS2 and CS3 have a problem of overuse, and CS5, CS6 and CS8 have a problem of misuse. The underuse occurs with limited numbers, although the N/A option appears in almost all the slots. In addition, the students did take verbs or verbal events into consideration when choosing aspect markers. They had an understanding of the perfective function of VF *le* and *guo* as well as the durative function of imperfective marker *zhe*, but nothing concerning *zai*. In addition, the students still could not distinguish VF *le* from *guo*, and they tended to mix up *zai* with *zhe*.

	ID (total)	CS1	CS2	CS3	CS5	CS6	CS8	total
correct answers		VF le	0	0	VF le	VF le	VF le	
	CG (5)	5	1	2	3	1	0	12
	GT (5)	4	2	2	3	0	1	12
			VF le	zhe	guo	guo	zai	
incorrect answers	CG		3	2	2	3	3	13
	GT		2	3	2	3	2	12

Table 42: Distribution of answers given by the CG2 and and GT2 in the cloze task in the post-test in the main study

5.3.3.3 Writing task

The writing task has no additional information to remind students to use aspect marking. The marks given follow the marking criteria for written assignments, which consider content, accuracy, and structure of the essay. The total mark for this task is 25. The overall mark shows students' general performance in this task. The uses of markers are investigated separately. The overall results showed that the CG2 performed better overall in the writing task (M=14.33, SD=7.84) than the GT2 (M=8.33,

SD=4.32). The highest mark in the CG2 was 22, and the lowest was 12. In the GT2, the highest mark was 12, and the lowest was 8. As in the pre-test, the CG2 again showed better general knowledge of Chinese in this task than the GT2. In the analysis below, however, the focus moves to the use of markers. The GT2 group's data is processed first, and the CG2 group's data comes after it.

Table 43 lists the numbers of aspect markers used by the GT2. In the table, the total sentences produced by the GT2 are 37, and 20 markers are used. The numbers of markers used are fewer than the sentences produced. It indicates that not every sentence contains a marker, which again proves that students did not treat perfective markers as tense markers. In total, there are 15 zero marking sentences and all these sentences are none-marking examples. As shown in the table, every candidate had produced at least one of these sentences. For the use of markers, the GT2 had 11 native-like uses, 2 underuses, 4 overuse and 5 misuses. The native-like uses were from four candidates, excluding candidate No. 6 who did not use any markers in the writing. Going through the work of this candidate in other tasks, it showed that he/she had similar results to others, which did not put him/her at disadvantage when using aspect markers. Coming back to his/her writing, the content was short but comprehensible. The only problem found in his/her work was the under use of VF *le* in bounded events. A sample of underuse was quoted in (37), where a VF *le* should be used behind *mai* (buy).

(37) *Wo gei wode baba mai yi tiao lingdai.I for my father buy one CLF tieI bought my father a tie.

candidate								
ID		number of	number of markers	Native-like				70*0
(GT2)	results	sentences	used	use	under use	over use	misuse	zero marking
1	11	9	8	5	0	2	1	1
2	0							
3	10	4	2	1	1	1	0	1
4	8	7	4	3	0	0	1	3
5	12	11	6	2	0	1	3	5
6	9	6	0	0	1	0	0	5
total	50	37	20	11	2	4	5	15

Table 43: Results and numbers of aspect markers used in the writing task in the post-test in the main study (GT2)

To continue investigate the uses of markers in the GT2, the writing included four counts of native-like uses of VF *le*, four counts of SF *le* and one count of *zhe*. The underuse and the overuse were not prominent, but the misuse was slightly more troublesome. The underuse accounted mainly for the absence of VF *le* in bounded events. The overuse included a use of VF *le* in an unbounded event (38) and two uses of the progressive marker (39). The sentence in (39) was not syntactically or semantically wrong, but it did not fit into the context, when the events were in perfective situations.

(38) *Wo qu le shangdian gei mama mai. I go LE shop for mum buy

I went to shop(s) to buy for Mum.

(39) Wo zai mai qu Lundun de huoche piao.I ZAI buy go London DE train ticket I was buying a ticket to London.

The misuses were mainly for perfective markers guo and VF le. The first type of misuse was that the students used the experiential marker guo in describing actualized situations. For example, sentence (40) was acceptable, but it was not appropriate for actualized events. The second type of misuse was the use of VF le in unbounded events. In (41), the use of VF le would be correct if a boundary was given to the event by adding a measure word, such as *a bowl of/a plate of*.

(40) Wo gei mama mai guo yi tiao weijin.
I for mum buy GUO one CLF scarf
I bought a scarf for my Mum (once).
(41) *Wo chi le niurou he dianxin.
I eat LE beef and dim sum
I ate beef and dim sum.

In the writing task, the GT2 gave a number of native-like uses of VF *le* and SF *le* and one use of *zhe*. The problem for VF *le* was that students either used it in unbounded events or underused it in bounded events. The problem of mixing up the VF *le* with the experiential marker *guo* was also found in this task, although it only showed in two pieces of work.

Compared with the GT2, the CG2 produced 74 sentences in total, which doubled the number of sentences by the GT2 (see table 44). In these sentences, 29 uses of aspect markers were found. The same as the GT2, the CG2 also showed some knowledge in zero marking situations. The number of zero marking sentences was 42. However, out of the 29 uses of markers, only nine uses were native-like. The inappropriate uses included 5 overuses and 15 misuses along with 3 underuses. Both the underuse and the overuse were for VF *le*. The problem was that students were not sure when to use

VF *le*. In the CG2, only one student had both overuse and underuse, the others either overuse or underuse of the VF *le*. The misuse was very prominent in the answers, but it mainly came from three candidates. It included 10 counts of the VF *le*, 3 counts of the experiential marker *guo* and 1 count of the progressive marker *zai*. The inappropriate uses of *guo* and VF *le* were the same as that in the GT2. The inappropriate use of *zai* for an actualized situation in (42) was found only in the CG2. In the immediate test, a case of *zai* used in an experiential situation was found in the translation task. However, the same mistake was made by different candidates. Therefore, it was not a common problem for the CG2.

(42) *Wo zhu zai er tian. I stay ZAI two day I stayed for two days.

ID (CG2)	results	number of sentences	number of markers used	native-like use	underuse	over use	misuse	zero marking
1	16	18	7	2	1	1	4	10
2	16	16	11	1	0	3	7	5
3	20	14	3	2	0	1	0	11
4	22	17	2	2	1	0	0	14
5	12	9	6	2	1	0	4	2
6	0							
total	86	74	29	9	3	5	15	42

To sum up the writing task, the GT2 and the CG2 had again shown similar patterns in using aspect markers. About the use of aspect markers, both groups had more problems with the misuse of markers than that with the underuse and with the overuse. The VF *le* had a high frequency of use, but the students often used it in unbounded/itelic events or mixed it up with another perfective marker *guo*. The numbers of the native-like uses of markers in these two groups were very close. However, the GT2 had higher percentage of native-like uses out of the total markers used (56%) than the CG2 (31%). The difference between the groups was that the GT2 made more attempts at using markers other than the VF *le* than the CG2 did. In terms of zero marking situations, all candidates in both groups demonstrated some conscious control over the markers. There were many cases when the students did not use VF *le* in unbounded/itelic event (e.g. *London is big and beautiful*) or use *zhe* with words indicating psychological feelings (e.g. *I like London*). This was an improvement from the

writing task in the immediate test, where the students did not show much knowledge of aspect markers.

The analysis above shows that the teaching has longer effect on the GT2 than the CG2. The GT2 has a much lower mean mark in the overall results in the post-test than the other group, but it has a higher mean mark in the close task than the CG2 both in the immediate test and in the post-test. In addition, the GT2's handout given to the CG2 after the aspect teaching sessions leads to the improvements of the CG2's use of markers in the post-test. The improvement includes more attempts at using the aspect markers in all three tasks, and signs of discrimination between the imperfective markers and the perfective markers. Moreover, the CG2 shows similar patterns in using the markers as the GT2. All these findings indicate that the explanation of the grammar rules of the markers and the translation exercises given to the CG2 group afterwards do enhance their learning outcome. This result indeed echoes Leeman *et al*'s (1995) claim that communicative instruction combined with tasks or techniques on forms enhance the use of specific forms. With regard to the uses of certain markers in both tests, the GT2 has similar performance in the post-test as in the immediate test. The group shows some native-like uses of VF *le* and SF *le*, and they have some basic knowledge of markers *guo* and *zhe*, but not much in *zai*. The CG2, on the contrary, shows more native-like uses of VF *le* and *zai*.

5.4 Discussion

In the sections above, we have analyzed three sets of data. One is from the control group, one is from the pilot study, and another is from the main study. Now we need to test the hypotheses proposed in chapter 4.

5.4.1 Test on hypotheses one

Hypothesis One: The Grammar-Translation approach leads to higher accuracy levels in using aspects than the communicative approach does in grammatical tasks.

In the immediate test in the main study, the GT2 outperformed the CG2 in the translation task, which led to a significant difference in the overall results. The two groups had similar results for the other two tasks.

The data of the translation task in the immediate test indicates that the GT2 performed better than the CG2 group in all markers, especially perfective markers VF *le*, *guo* and SF *le* and imperfective marker *zhe*. To further illustrate this, a table with numbers of native-like uses of markers by each candidate in the two groups in the immediate translation task is drawn (see table 45). The table shows that the GT2 has a spread of native-like use of SF *le* and VF *le*, *guo and zhe*, whereas the CG2 has a total score of zero in using SF *le*, *zhe* and *zai*. The total number of native-like use of VF *le* and *guo* is

also low, which is not over half of the CG2 group. However, in the GT2, candidate No. 5 is the only one who did not use VF *le* properly. The GT2 also has 4 candidates who managed to use SF *le* in a native-like manner. For *guo* and *zhe*, each has three candidates who used them properly. The only marker that does not show preferences by the candidates is *zai*. The CG2, on the contrary, only has limited native-like answers in VF *le* and *guo* but nothing else. One candidate (No. 6) managed to use VF *le* appropriately, and two candidates (No. 2 and No. 6) scored on the experiential marker *guo*.

Candidate No. VF le SF le zhe zai guo CG CG GT CG CG GT GT GT GT CG Total

Table 45: Number of native-like use of markers by each candidate in the GT2 and in the CG2 in the translation task in the immediate test

ID	VF le	guo	SF le	zhe	zai
CG1	9	5	2.5	2	2
GT1	5	5.5	3	4.5	2
CG2	0.7	1.3	0	0	1
GT2	3.3	2.7	2	2	1

Comparing the results to those in the pilot study, it shows some similar findings and differences. It is clearer to put the average number of acceptable answers of the translation task in a table. Table 46 shows that the groups (CG1 and GT1) in the pilot study have a similar pattern as GT2 and CG2 in the main study. All these groups show a more proper use of perfective markers than imperfective markers. For the perfective markers, VF *le* and *guo* have higher average numbers than SF *le*. For the imperfective markers, *zhe* has more average native-like answers than *zai* except in the CG2. These findings are in line with the findings by Wang, L. (2012) who did a longitudinal study and a cross-sectional study of the acquisition of Chinese aspect markers by different levels of L2 Chinese learners. In terms of the acquisition order of the markers, Wang, L. (2012) argued that which marker was

learned first was not decided by instruction input but the transparency of the morphology. However, Wang failed to explain further how the transparency of form-meaning association works in Chinese aspect acquisition. Wang continued to claim that the more accurate use of *le* and *guo* was due to their lack of grammatical or semantic equivalents. This explanation, however, is not very convincing, since the experiential marker *guo* can be replaced by an adverbial *cengjing* (once) as shown in the work of the control group. If what Wang said about the effect of instruction input was true, then the performance of the groups in both the pilot study and the main study in this research should be consistent. However, the results have shown that only the two GTs' performance is consistent in terms of properly using markers except for the numbers of *zhe* and SF *le*. GT1 has higher number of native-like use of *zhe* than that of SF *le*, but GT2 has the same number of native-like use of *zhe* and SF *le*. The CG2 in the main study differs from the CG1 in the pilot study in a way that the CG2 shows no sign of acquisition of SF *le* and *zhe* in the translation task. The marker best used by the CG2 is *guo*, followed by VF *le*. It looks that the change of the teaching sessions has caused the change of the results in the translation task in the communicative group.

In addition, the immediate test in the pilot study also shows that learners can use SF *le* with simple sentence structures. This finding is observed in the GT2 in the main study, but not in the CG2. Indeed, the CG2 gives no acceptable answers in the sentences with SF *le*. The findings from the translation task in the immediate test show that teaching has effect on learning aspect markers. Both teaching approaches can help learners understand Chinese aspect markers as shown in the pilot study. When things are still fresh in the learners' mind, the effect of the two teaching approaches on the translation task is indistinguishable. However, when the learning is stretched to a longer period - in this research three weeks, the communicative group starts to show drawbacks; whereas the Grammar-Translation approach gives a slightly longer effect to the learning group.

The translation task in the immediate test in the main study adds credit to the hypothesis. However, in the post-test the groups did not show significant difference in the translation task. The CG2 had a higher mean mark than the GT2 in the post-test. The CG2 not only improved in translation, but they had similar performance to the GT2's. Both groups scored in perfective markers VF *le* and *guo* and imperfective marker *zhe*, but none in perfective marker SF *le* and imperfective marker *zai*. In addition, each group had one candidate who gave non native-like answers. The disappearance of the gap between the two groups in the post-test seems to resemble Harley's (1989) research findings. Unfortunately, Harley did not explain what caused the difference in the immediate test and in the post-test. However, in this study, we will try to find out the reasons that lead to this result.

In the immediate test, the CG2 only had two candidates who gained marks in the translation task, but in the post-test, only one candidate did not get any mark (see table 47). The other candidate No. 6 got zero for absence in the exam. The GT2, on the contrary, dropped slightly in the translation task. In the

immediate test, the GT2 showed preference for perfective markers, whereas in the post-test the mark for SF *le* was zero. Why has the GT2 not achieved the same improvement in the post-test as the CG2? If we go back to the experiment procedure, we may be able to find the answer. The CG2 was given the grammatical rules and did the translation exercises after the immediate test in class. This practice may give the learners some hints in grammar. However for the GT2, despite going through the CG2's materials with the GT2, the group did not show any improvement in the post-test.

Candidate No. (CG2)	1	2	3	4	5	6
immediate test	0	2	0	0	0	2
post-test	2.5	2.5	2.5	0	1.5	0

Table 47: number of native-like uses by the CG2 in the immediate test and in the post-test in the main study

In addition, if we look at the overall exam results in the post-test of the groups, it reveals more details on learners' performance. In table 48, all candidates in the CG2 scored much higher than those in the GT2 when not considering the absentees. The mean mark for the CG2 is 62.6, while the mean mark for the GT2 is 38.4. However, if we look at the score on aspect markers, especially when we put each candidate's score on aspect markers to the overall result into percentage, the number reveals a different picture. It can be seen that the CG2's score on aspect markers to the overall result weighs around 12% on average, while the GT2's is round up to 17% on average. Therefore, comparing the scores on aspect markers to the overall score of the post-test, the GT2 is not behind the CG2 in terms of using aspect markers.

	ID	1	2	3	4	5	6
Overall result	CG2	63.5	65.5	74.5	59.5	50	0
	GT2	30.5	0	43.5	34.5	42	41.5
Score on aspect markers	CG2	10	9	11.5	5	9.5	0
*	GT2	10	0	5.5	12.5	8.5	4
percentage of score on aspect markers	CG2	15.75	13.74	15.44	8.40	19.00	0
to overall result (%)	GT2	32.79	0	12.64	36.23	20.24	9.64

Table 48: Individual overall result and score on aspect markers in the post-test for the CG2 and the GT2 in the main study

Furthermore, the behaviour in using the markers in the post-test also reveals some details. In the answers for the durative marker *zhe* in the translation task, the GT2's translation was in line with the functions of the marker, but the CG2's translation showed some discrepancies. Although the GT2's translation of the sentence with the SF *le* in the translation task was not very good, the GT2 had a few native-like uses of SF *le* in the writing task, whereas the CG2 had no attempts at using SF *le*. The slightly backward performance of the GT2 group on perfective markers SF *le* in the translation task may be due to students' decline in their general performance, since many of them have very low overall marks in the post-test.

A difference found between the groups was the acquisition order of the markers. In the CG2 in the post-test, the students almost fully scored for the sentence with VF *le*, followed by the sentence with experiential marker *guo*, and then the sentence with durative marker *zhe*. Unlike the CG2, the GT2 scored almost equally for the three markers. Comparing the translation task in the post-test in the main study to that in the pilot study, the results in the main study give more details on the acquisition of *zhe*. It again proves that learners are inclined to acquire *zhe* earlier than *zai*, as shown by the results in the immediate test. In the perfective markers, the results in both tests show that SF *le* is the last to be acquisition order (Kong 1993, refer to Jin, L. and Hendriks (2005)), and it is different from the acquisition order by L2 Chinese learners discovered by Jin, L. and Hendriks (2005) as well. For Chinese children, Kong (1993) found that SF *le* appeared before VF *le*. For L2 Chinese learners, Jin and Hendriks found that SF *le* and *zai* appeared before *zhe*. So what has caused the difference?

With regard to the difference to L1 Chinese children, the results reveal a segment of learners' L1 influence. In English, suffix -ed and -ing are often used after a verb for marking perfective or imperfective aspect. In Chinese, VF *le*, *guo* and *zhe* are all used after a verb, but SF *le* is used at the end of a sentence and *zai* is used before a verb. Therefore, the syntactical position of VF *le*, *guo* and *zhe* is similar to the suffix in English. The syntactical position of SF *le* and *zai*, however, does not exist in learners' L1 for marking aspect. Carson (1990) specifies three principal components for positive L1 transfer: 1) the cognitive processes in L1 and L2; 2) the shared structures in L1 and L2; 3) the mechanism that allows the processes and structures to transfer across languages. The markers VF *le*, *guo* and *zhe* fit into the components listed above, and they indeed are acquired earlier than the other markers.

For the difference to the findings in Jin, L. and Hendriks (2005), we need to look at the participants in the research. In this research, we selected complete beginners in Chinese for the experiment, but Jin and Hendriks chose learners with higher level of Chinese skills who could manage story-telling task independently. The learners at higher language efficiency level may have different preference in using

markers. As this research has not investigated learning of aspect markers at higher levels, it is difficult to tell the reason that has caused the difference.

Regarding the non native-like uses of the markers in translation tasks, this research results have revealed that apart from the underuse and the overuse mentioned in some research (e.g. Yang *et al.* 1999, 2000; Duff and Li, D. 2002; Jin, L. and Hendriks 2005), another type is also causing problems in L2 Chinese aspect learning. This type is called misuse in this research. It is found that learners at beginners' level tend to mix up the imperfective markers and the perfective markers, and sometime they use imperfective markers for perfective situations or use perfective markers for imperfective situations. For example, in the sentence *He was watching TV just now* where a progressive marker *zai* is needed, but half of the group in CG1, 9 out of 12 candidates in GT1, 4 out of 6 candidates in CG2, and 2 out of 6 candidates in GT2 (3 candidates left the answer blank) used other markers *le, guo* or *zhe*.

ID	VF le	SF le	guo	zhe	zai
CG1	0	3	1.5	5.5	5
GT1	1.5	4.5	3	6	8
CG2	2	1.5	0.7	3	4
GT2	1	0.5	2	1.5	2

Table 49: Average number of misuse of markers in immediate translation task by the CG and the GT in the pilot study and in the main study

For the non native-like uses, we focus on the data in the immediate test. Since the immediate test is not amended in the main study, we can compare two sets of data collected. Table 49 lists the average numbers of misuse of the markers in the pilot study and in the main study. In the table, CG1 and GT 1 are the two groups in the pilot study, and CG2 and GT2 are from the main study. It looks that all the markers have been misused by the learners. Among them, the imperfective markers have relatively high numbers of misuse. Between the two imperfective markers, *zai* is more likely to be misused than *zhe* in all groups. In the perfective markers, SF *le* seems to have the biggest number in three groups, except for GT2. The less misuse of SF *le* in GT2 does not mean that the group have no problem with this marker. Indeed, this group has a tendency of underusing SF *le*. In the following, the underuse of markers is illustrated.

Apart from misuse, underuse is another conspicuous obstacle found in translation tasks. Table 50 provides average numbers of underuse of the markers in the immediate translation task in the pilot study and in the main study. It can be seen clearly that SF *le* has the highest number of underuse in all groups. Another marker *guo* seems to have slightly higher number of underuse than other markers in

three groups except for CG1. Although the CG2 and the GT2 have lower number of underuse in *zai* and *zhe*, they have high numbers of misuse instead.

ID	VF le	SF le	guo	zhe	zai
CG1	0.7	4	0.7	2	2
GT1	1.5	3.5	1.5	1	0.5
CG2	1	4	2.7	1	0.5
GT2	0	3	2	0.5	0

Table 50: Average number of underuse of markers in immediate translation task by the CG and the GT in the pilot study and in the main study

Differ from Jin, L. and Hendrik's (2005) finding that VF *le* is overused at lower level, our data shows that the overuse of markers does not happen often in the translation task. There are only one case of overuse of *guo* and one case of *zai* found in the CG1 in the pilot study.

To sum up, the results of the translation tasks suggest two things. One is that when the lesson using the Grammar-Translation approach is not intensive, it does have better immediate effect than the communicative approach does on grammatical tasks in learning Chinese aspect markers. As the teaching and the immediate test are stretched to three week in the main study, the Grammar-Translation approach seems to have slightly longer effect than the communicative approach in this research. However, without follow-up treatment, none of the teaching approaches shows long-lasting effects. The other is that the Grammar-Translation approach shows immediate effects on the two GTs in the pilot study and the main study in terms of using the aspect markers in grammatical tasks. The analysis above shows that GT groups in the pilot study and in the main study have shown similar patterns in their productions. The communicative approach, on the contrary, does not have the same effect in the pilot study as in the main study. The CG1 in the pilot study performed better than the CG2 in the main study in the immediate translation task, when the test is closer to the teaching session. The results may suggest that the Grammar-Translation approach is more reliable than the communicative approach for learners to do grammatical tasks.

5.4.2 Test on hypothesis two

Hypothesis Two: *The communicative approach leads to better use of aspects than the Grammar-Translation approach does in comprehension tasks.*

To test this hypothesis, we need to look at the writing tasks and the cloze tasks. Strictly speaking, the cloze tasks are in between the grammatical tasks and the comprehension tasks. It is because that the cloze tasks need comprehension and they test grammar as well.

In the writing task of the immediate test in the main study, none of the groups did well in terms of using markers. The GT2 only used 4 counts of markers, but the CG2 used 15 counts. However, many of the uses from the CG2 were non native-like, such as the frequent overuse of perfective marker *guo* by candidate No. 2. Out of the 15 counts of uses in the CG2, 14 uses are either overuse or misuse. In addition, many markers were produced by certain candidates, mainly candidate No. 1 and candidate No. 2 in the CG2 and candidate No. 1 and candidate No. 2 in the CG2 and candidate No. 1 and candidate No. 2 in the CG2 tended to stick to one marker *guo*, and used the same marker in many situations if not all. Although some zero marking sentences made the candidates score, it was unknown whether the learners had acquired the markers or not if the writing task was the only way of assessment.

Comparing the groups' behaviour in the immediate test in the main study to that in the pilot study shows different results. In the pilot study, each group had two candidates using no markers at all, but in the main study, both groups had half of the groups using zero marking. Table 51 shows the average number of markers and number of zero marking used in the immediate writing task in the groups in the pilot study and in the main study. It can be seen that CG1 and GT1 (pilot groups) have more markers used and more native-like uses than CG2 and GT2 (main study groups). However, in the zero marking section, the groups in the main study have bigger numbers than the groups in the pilot study. The average number of markers used in GT1 is almost six times of that in GT2. The reason that causes the difference in the experiments may come from the gap between the teaching sessions and the test. It seems that the time gap leads to poor performance for both groups in the writing task. This finding may suggest that the teaching approaches have influence on the learners' language production within a period, if not long-term. In the long term, the learners' comprehension ability and their form and function mapping on Chinese aspect markers may be the least affected by teaching approaches without reinforcement.

ID	CG1	CG2	GT1	GT2
markers used	3.6	2.5	4.2	0.7
native-like uses	2.3	0.3	3.4	0.3
Native-like	2.5	3	1.5	5
zero marking used				

Table 51: Average number of markers used and zero marking used in the immediate writing task by the CG and the GT in the pilot study and in the main study

In the writing task in the post-test, the GT2 demonstrated more attempts in using aspect markers in a native-like manner. Table 52 shows that the CG2 and the GT2 have produced almost the same percentage of native-like sentences (for raw numbers of tokens see table 43 and table 44). However, the native-like sentences include native-like use of markers and native-like zero marking sentences. In

the CG2, native-like sentences with markers are 12% of the sentences produced, which is less than a quarter of the percentage of native-like zero marking sentences. The GT2, on the other hand, has a higher percentage of native-like use of markers than the CG2. The ratio of native-like use of markers to native-like zero marking sentences is rounded up to 1:1.5. The similar ratio of native-like sentences produced in the two groups indicates that the CG2 does not have significantly better results than the GT2 group in the writing task in the post-test. Neither the picture-description task in the immediate test nor the free writing task in the post-test gives credit to the communicative approach in better use of aspect markers comparing to the Grammar-Translation approach.

Table 52: Distribution of native-like use of markers and native-like zero marking sentences in the writing task in the post-test

ID	native-like sentences	native-like use of markers	native-like zero marking
	(%)	(%)	(%)
GT2	69	12	57
CG2	70	29	41

Despite the poor performance in the immediate writing task, the immediate cloze task showed that the learners are aware of the aspect markers. The results of the cloze tasks in both tests showed that the GT2 and the CG2 did not have significant difference. Indeed the GT2 and the CG2 had very similar scores. In the immediate test, the GT2 was only 0.5 ahead of the mean mark of the CG2. In the posttest, the two groups had the same number of correct answers.

Table 53: Distribution of correct answers in the immediate cloze task in the main study

ID	GT2	CG2
perfective markers	17	9
imperfective markers	7	8
zero marking	7	14
total	31	31

In terms of using the markers, the GT2 again showed more confidence in choosing the markers in the immediate cloze task than the CG2. As shown in table 53, the GT2 scored 17 points for the perfective markers, which is nearly double the score of the CG2. The CG2, on the other hand, gained 14 points from three zero marking slots out of the total 31 correct answers, from where the GT2 only managed 7 points. For the imperfective markers, however, the two groups had very similar results.

In the cloze task in the post-test, both groups had similar performance patterns. The CG2 showed better use of VF le in the post-test than the use in the immediate test. In the immediate test, the CG2 managed 3 out of 12 (25%) answers in the slots for VF le, but in the post-test, the group gained 12 out

of 20 (60%) points for VF *le*. The change in the behaviours of the CG2 in the main study may be caused by the introduction of the grammar of the markers after the immediate test. It is unknown whether the motivation plays a part in the change of behaviour as well. Zafar and Meenakshi (2012) (see also Skehan (1989)) listed a few factors affecting second language learning including age, sex, aptitude, motivation, learning styles, learning strategies and personality. Age and sex do not concern the research too much, since all the learners were at similar age and all groups have mixed gender. As for the learners' learning abilities, such as aptitude and other factors linking to learners' L2 development, it should not be the main factor causing the change. If the learners' aptitude and learning strategies were the main factors in learning Chinese aspect, the difference should have shown in the immediate test. However, the results of the cloze task and the writing task in the immediate test did not have much difference between the groups. As this research is not designed to test on motivation, we cannot make any conclusion on the motivation factor.

ID	underuse	overuse	misuse
GT1	CS1, CS6, CS12, CS13	CS3, CS15	CS2, CS4, CS10
GT2	CS6, CS12, CS13	CS3, CS8, CS9, CS15	CS1, CS2, CS4, CS10
CG1	CS12	CS15	
CG2	CS6, CS12, CS13	CS15	CS2, CS4, CS6, CS7,
			CS10

Table 54: Distribution of slots to three types of mistakes in immediate cloze task by the CG and the GT in the pilot study and in the main study

Another point worth discussing is that the two GTs in the pilot study and in the main study are found to have similar patterns in non-native use of markers in the cloze task, while in the two CGs, no such patterns are observed. Table 54 lists three categories of non-native uses found in the immediate cloze task in the pilot study and in the main study. Each catergory includes slots having half or over half of the groups making this type of mistake. As we can see that GT1 and GT2 have three common slots in underuse, two common slots in overuse and three in misuse. The difference between GT1 and GT2 in non-native uses is the first slot for *zai*. In GT1, *zai* has been underused, but it is misused in GT2. Also GT2 has more overuses in CS8 and CS9, which are zero marking slots, than GT1. On the contrary, CG2 has more slots in each category than CG1, especially in the misuse section. As a reminder, the immediate test in the main study happened two weeks later than the immediate test in the pilot study. It looks that the time gap has caused a dramatic drawback in the performance of the CG2, but it has not shown much side effect in the GT2. From this prospect, the Grammar-Translation teaching seems to have steadier effect than the communicative approach.

ID	underuse		overuse		misuse	
	CG	GT	CG	GT	CG	GT
Cloze task (IT)	18	12	8	15	22	20
Cloze task (PT)	0	0	5	5	8	7
Writing task (IT)	12	17	7	1	7	1
Writing task (PT)	3	2	5	4	14	5

Table 55: Number of non-native uses in cloze tasks and in writing tasks in the immediate test and in the post-test by the CG and the GT

In the immediate translation task, we have found a number of misuses and underuses but limited overuses in the two sets of data. In the writing tasks and the cloze tasks, more overuses are identified. However, underuse and overuse do not appear to be the most prominent problem in the non-native uses as found by Jin, L. and Hendriks (2005) and Duff and Li, D. (2002) and many others (Sun, D. 1993; Wen, X. 1995, 1997; Zhao, L. 1996; Teng, S. 1999; Yang *et al* 1999, 2000). Table 55 shows that all tasks have the highest number in misuse in both groups except for the writing task in the immediate test (IT). In that task, underuse seems to be the major problem for both groups. However, in the writing task in the post-test (PT), underuse becomes the least, but overuse has slightly more cases than underuse. This trend matches Duff and Li, D.'s (2002) finding that learners first underuse *le* and then overuse it. As misuse is not mentioned in Jin, L. and Hendriks (2005) and Duff and Li, D. (2002), it is possible that misuse is a side effect of teaching when all aspect markers are presented to students in a short period of time. As Ellis (2006: 169) argues that 'learners tend to focus on only one cue at a time...after having tracked the use of this first one, they add a second cue to the mix and begin to use the two in combination, and, as development proceeds, so additional cues are added if they significantly help reduce errors of understanding'.

To sum up the discussion on hypothesis two, the analysis shows that the communicative approach does not work better than the Grammar-Translation approach in the comprehension tasks. However, in the pilot study the results of the cloze task have shown a significant difference between the CG and the GT. The difference in the findings may suggest that the communicative approach has some instant effect on learners' learning of aspect markers. However, the effect does not last longer than a couple of weeks.

Overall, the results of the translation tasks give evidence for the first hypothesis, but the results of the writing tasks and the cloze tasks cannot provide enough ground for the second hypothesis. The communicative approach shows that the learners can use aspect markers in context, but it may not be as effective as the Grammar-Translation approach in class where the contact hours are limited.

5.5 Conclusion

In this chapter, we have tested the research hypotheses. Our research shows that teaching approaches do affect students' learning of Chinese aspect. In the immediate test, the GT2 showed some acquisition patterns as suggested in previous studies, whereas the CG2 did not show any. The explicit teaching of aspect markers had positive effect even in the post-test, where the GT2 had higher mean marks than the CG2 in all three tasks. Apart from this, all the learners show awareness and uses of zero marking under explicit teaching. On the contrary, implicit teaching may not have a stable effect on the learning of Chinese aspect. If the grammar rules and the translation exercises of the markers had not been given to the CG2 after the immediate test, the results could reveal more of the long lasting effect of the communicative approach. However, the idea is not feasible due to the ethical issue in teaching.

On top of the hypotheses, an acquisition order of the Chinese aspect markers was identified for beginners' learners. In the teaching sessions, the markers were introduced to learners following the acquisition order found in L2 Chinese learners (Wen, X. 1995; Jin, L. and Hendriks 2005). The order was VF *le* first, followed by SF *le*, *zai*, *zhe* and *guo*. The experiential marker *guo* was presented at the end due to its low usage in Jin and Hendriks' research data. Our research confirms the finding that VF *le* is acquired at the earliest time. However, our research cannot prove that imperfective markers appear after perfective markers, our data shows a different acquisition result. In the two tests, students show more awareness of *zhe* than *zai*, although *zai* has a distinctive syntactical position in a sentence from other markers. It is also suspected that learners may mix the two imperfective markers *guo*. The results indicate that the acquisition of *guo* is almost at the same level as imperfective marker *zhe*. The students can distinguish *guo* from imperfective markers, but always mix it up with VF *le*.

Concerning the accuracy of the markers, the findings of our research correspond to the finding in Jin, L. and Hendriks (2005) that lower level learners overuse or underuse VF *le*. In addition to this, our research also finds that learners at beginners' level struggle to distinguish between perfective markers and between imperfective markers, which has caused a number of misuses.

Apart from these, we also need to reflect on the assessment methods, since it is the first time these tasks are used for testing the effectiveness of teaching approaches in Chinese aspect markers. As a reminder, the three tasks used in the immediate test and in the post-test are a translation task, a cloze task and a writing task. All three tasks together provide a full picture of the acquisition of Chinese markers. None of the tasks on its own can fulfil the mission. The translation task is based on individual sentences, as opposed to a whole text. It thus has the flexibility to equally assess each one of the markers. In other words, all markers have the same chance of being tested in semantically non-

related sentences. However, the problem of this task is that it uses less comprehension skills. The cloze task, on the contrary, needs good comprehension skills, but it may not be good if used alone to test teaching methods in learning Chinese aspect because the options and context may assist learners in their decisions. Sometimes the answers can give false information on the acquisition of the markers. For instance, the CG2 gained more marks on zero marking slots than the GT2 in the immediate test, but it did not reflect how the CG2 would use the markers independently. Without the translation task and the writing task, the cloze task could give false interpretation in learning the markers. Another problem with cloze tasks for assessing the markers is that it is limited to the style of the writing and learners' knowledge of the target language. In a narrative context, it is difficult to integrate all markers into a coherent piece with the same number of occurrences. The most used markers in narration are normally perfective markers. The chances of having imperfective markers in the task are very low, especially at low language proficiency level when learners have acquired limited variety of verbs and sentence structures. As in the post-test, the cloze task is about a trip to China, which is linked to topics learned in class. The most used marker is the VF le in the text. The other markers have to be used as distracters in the options. However, the high frequency of the VF le can be avoided in the immediate test. Since the immediate test is not a summative assessment, the researcher has more flexibility in choosing the genre and the content, to include all aspect markers more evenly. Therefore, at higher language proficiency level, the cloze task in the post-test may assess all aspect markers more equitably. Like the cloze task, the writing tasks mostly assess the perfective marker VF le at beginners' level due to the nature of narration. The imperfective markers and the perfective marker guo are rarely used by learners (Jin, L. and Hendriks 2005). Even the native speakers' writing in the immediate test does not contain many of these markers. For that reason, the writing task cannot be used on its own to assess the use of all markers neither. Nonetheless, the limitations of the tasks have helped developing the teaching of Chinese aspect in this research, which is that comprehension tasks are the most appropriate at lower language level for VF le.

Last but not least, the teaching approaches do not seem to have a long-term effect on learning Chinese aspect without further treatment. It is, therefore, worth investigating in the future, which of the two approaches works better in the learning of aspect, if contact hours are extended and the teaching of the markers is more frequent.

Chapter 6 Conclusion

In this research, we aimed at investigating how different teaching approaches influence the learning of Chinese aspect markers. We chose the Grammar-Translation approach and a communicative approach, and we proposed two hypotheses in relation to those two teaching approaches and their impact on learning outcomes. We assessed the learning outcomes using three tasks: a translation task, a cloze task and a writing task. The research findings tested the hypotheses and revealed a couple of main issues, namely 1) the influence of the teaching approach on learning Chinese aspect markers in instructed setting; 2) the acquisition order of Chinese aspect markers by L2 learners. The findings also brought a couple of other issues into attention, such as L1 transfer. Although L1 transfer is not the focus of this research, if leave untouched, it may influence the conclusion of this research. Therefore, in this chapter, we will discuss the issues raised in this research first, and then look at the main issues. As a result of the discussion, a cyclic teaching of Chinese aspect markers *le*, *guo*, *zai* and *zhe* is introduced. Towards the end, the limitation of this study will be explained.

6.1 Discussion on issues raised in the research

In the analysis of the data collected, we have found traces of L1 transfer in L2 Chinese aspect markers' learning. Some researchers (Wen, X. 1995, 1997; Duff and Li, D. 2002; Jin, L. and Hendriks 2005) argue that L1 transfer plays a part in the acquisition of Chinese aspect markers. In this research, we need to seek the answers to two questions below:

1. Would different teaching approaches instigate different levels of L1 transfer?

2. What has caused the discrepancy between the learning of Chinese aspect markers and the claims in AH, teaching or learners' L1 transfer?

Would different teaching approaches instigate different levels of L1 transfer?

Apart from studies on L2 Chinese (Wen, X. 1995, 1997; Duff and Li, D. 2002; Jin, L. and Hendriks 2005), studies on L2 tense and aspect acquisition in other languages also observed L1 transfer (e.g. Jarvis and Pavlenko 2000). As all candidates in this study are native English speakers, one of the notable L1 influences in aspect would be to use perfective markers to mark tense, since in English past tense and perfective aspects are correlated. In Chinese, the perfective marker VF le is likely to be overused by learners to mark past tense according to Wen, X.'s (1995) study. Another L1 influence is that learners tend to underuse markers when they feel it is difficult to link them to their native language semantically and syntactically. An example of Chinese perfective marker is the underuse of SF le (Wen, X. 1995). In the immediate test, the translation task had one sentence (TS5) in the past tense but did not need perfective marker VF le. For this sentence, each group had two thirds overusing VF le. For the two sentences TS2 and TS6 in relation to SF le, the CG2 had at least half of the answers underusing the marker in both sentences, and the GT2 group had over half of the underuse in

one sentence. Another two examples TS11 and TS12 also indicated L1 transfer. TS11 was a past tense sentence, but needed the V + zhe + V structure instead of perfective markers in Chinese. TS12 had a progressive situation in past tense. For each of these sentences, the CG2 had half of the answers using perfective markers instead of imperfective markers. However, this was not found in the GT2. The results of these sentences showed that L1 English had less influence to the GT2 than to the CG2 in translation task. Does this suggest that the Grammar-Translation approach can reduce L1 influence in learning? To answer this question, we need to examine the other tasks.

In the cloze task of the immediate test, four slots were for zero marking situations. C3 and C15 were not in the past tense, but the other two C8 and C9 were. All these slots had the perfective marker le as options. In C3 and C15, neither of the groups had more than two answers using perfective markers. For C8 and C9, the GT2 had 3 answers in C8 and 4 answers in C9 using the experiential marker guo, but not the VF le. To further investigate whether these students used guo as a tense marker, we need to look at slots C6 to C10. These slots were in one paragraph talking about events in the past, and they all had VF le as options. If students used VF le and guo in all these slots, it would be likely that they treat the markers as tense markers. Going through the answers in the GT2, none of the students used perfective markers in all five slots. Therefore, the inappropriate use of markers in C8 and C9 was not caused by L1 influence. For the use of SF le, two slots - C5 and C13 - can test it. In C5, the N/A option was not available, and both groups had over half of the correct answers. C13 had a zero marking option, and almost everyone in the CG2 went for the zero marking instead of the SF le. C12 tested the V + zhe + V structure. It had a distraction of a linking word he (and) as the option. For this slot, both groups had big numbers of answers going for the distracter instead of the durative marker. This clearly shows the influence of L1 English on learners' choice at this point in both groups, but a few more cases of L1 transfer are found in the CG2 than in the GT2.

Nonetheless, the L1 influence does not happen in all situations. In the cloze task in the post-test, VF *le* appeared in all slots that tested aspect markers. The content was a description of past events. None of the candidates used VF *le* for any of these slots. In the zero marking slots C2 and C3, three students in the CG2 chose VF *le*. However, they did not use the marker in the next slot.

In the other tasks, the translation task in the post-test could not trace evidence of L1 transfer, since it was to translate from Chinese into English. The writing task in the immediate test did not show many uses of markers. There was only one student in the CG2 who used perfective marker *guo* to mark all sentences. For the writing task in the post-test, both groups used VF *le* the most. Only a few uses of other markers were found in their works. The overuse of VF *le* was very limited in the two groups. There was 1 count of overuse in the GT, and 5 counts in the CG2. Compared to the number of sentences they produced, the overuse was not significant at all.

In general, the data show that L1 transfer does influence learners' aspect acquisition. However, under instructed learning it does not come across as a main hindrance to learners' understanding of aspect markers. The CG2 has more signs of L1 transfer than the GT2 in different tasks. It suggests that when grammatical rules are not presented to learners, they may rely more on their first language. Therefore, the Grammar-Translation approach may reduce the rates of L1 transfer slightly more than the communicative approach.

What has caused the discrepancy between learning Chinese aspect markers and the claims in AH, teaching or learners' L1 transfer?

Since the AH is not the focus of this research, the experiment is not especially designed to test all of the claims. The stative verbs used in the tests are much fewer than the other categories of verbs, considering the limited general knowledge of the learners at beginners' level. It is, therefore, difficult to examine the correlation between grammatical aspect and lexical aspect. However, the research findings do provide some support to the claim that imperfective appears later than perfective (Andersen & Shirai 1994, 1996). Indeed this claim responds to the acquisition order of Chinese aspect markers. In spite of this, the findings in this research show that the AH is over-generalized in L2 Chinese, when the learning is under instruction. The test results have shown that the learners process both perfective markers and imperfective markers in all tasks. The learners may have preference for the perfective markers over imperfective markers, but not SF le at all time. However, the learners have shown progress in mastering the imperfective marker *zhe*. The findings suggest that learning of L2 Chinese aspect does not need to be in a linear acquisition order as suggested by Andersen and Shirai (1996). As discussed above, learners' L1 may play a role in the acquisition order of L2 Chinese aspect markers, regardless of teaching approaches. It is believed that adult learners have developed a very competent L1 system, which could influence the L2 learning. McLaughlin (1987) claimed that learners' first language could either slow or modify the learning of a second language, so he disagrees with Krashen's (1985) claim on natural order in learning. Instead, he argued that L2 learning should consider learners' individual variations. Therefore, we can see that instructed learners follow a slightly different pattern in learning Chinese aspect from the acquisition order predicted in the AH, since the learners' first language has played a role in the acquisition order. Base on the discussion of L1 transfer, we can move on to the main issues of this research.

6.2 The influence of teaching approach on Chinese aspect markers' learning

For the teaching approach and its impact on the learning of aspect markers, the results show that the Grammar-Translation approach and the communicative approach both can have immediate effect on learners' use of the markers. However, the Grammar-Translation approach has a more stable effect on different groups, while the communicative approach does not have the same effect. The results also show that the Grammar-Translation approach has a slightly longer lasting effect in learning Chinese

aspect markers than the communicative approach, although the effect does not last for more than three weeks. The non-lasting effect of teaching in post-test also showed in Harley's (1989) research. It is assumed that the teaching approach can affect learners' working memory (Baddeley 2003), but not long-term memory. When the markers are not repeatedly introduced in class, the effect of the teaching can recede. In the long term, the learners, no matter which group they come from, eventually follow a similar development pattern in using the Chinese aspect markers: perfective markers over imperfective markers. This result responds to the different opinions by Salaberry (2000) and Bardovi-Harlig (1995) on instruction and learners' development patterns. Bardovi-Harlig (1995) argued that instruction would not change the learners' natural pattern of aspect learning, whereas Salaberry (2000) believed that classroom learning could change the natural pattern. This research has provided ground for both claims. Both of the claims would be sound and reasonable with a prerequisite, which is the frequency of the input (Ellis 1990). Although this research cannot provide evidence of continuous input of the markers in class, the immediate effects do show the difference in the learning outcomes imposed by the teaching approaches. If the input could be more frequent, the effect might be able to last for a longer period. Conversely, without further input from the teacher, the learners did not have much difference in using the markers when the teaching effect faded.

In addition, the findings of this research alongside other researches (Chang, S. 2011, Mondal 2012) add more credit to the Grammar-Translation approach in teaching Chinese aspect markers in an era when L2 classrooms are dominated by Communicative Language Teaching (CLT). The research shows that the Grammar-Translation teaching is as effective as the communicative teaching, or may be even better than the communicative approach in teaching grammar, if teachers do not present too much information at a time. The communicative approach, on the other hand, can have immediate effect on learners' comprehension, but the effect is neither consistent nor long-lasting.

Furthermore, the research reveals that learners' general knowledge of Chinese and learners' learning abilities have little impact on the learning of Chinese aspect markers under classroom instruction. In the main study, the GT2 had much lower scores in the pre-test, but their performance on aspect markers exceeded the other group in the immediate test. This finding further approves the value of the Grammar-Translation approach. What is more, the research findings also confirm that teaching of Chinese aspect markers should not be a one-off procedure or a linear procedure, since the post-test showed that the teaching effect did not last for long time. Lightbown (1985: 177) states that '...acquisition is not simply linear or cumulative, and having practiced a particular form or pattern does not mean that the form or pattern is permanently established'. Labeau (2005) also questions L2 French learners' linear development of tense/aspect morphology as claimed in AH. She states that on top of the linear dimension from verbs to sentences 'there may be a cyclic aspect in the reliance on base forms before a new form is mastered (Labeau 2005: 230). Reflecting on the learning procedure, teaching, therefore, needs to be cyclic and repetitive to help learners reinforce their aspect learning.

As the cyclic learning procedure proposed by the researcher in chapter 3, teaching and self-study both contribute to learners' interlanguage in instructed L2 learning. The outcome of learning should reflect on the effect of teaching. Teachers then need to make adjustments to their teaching approaches for the follow-up input for the same language point.

6.3 Acquisition order of Chinese aspect markers le, guo, zai and zhe

Regarding the acquisition order of the Chinese aspect markers, the research findings show that the learners generally follow the tendency claimed by Andersen that perfective comes before imperfective. However, their learning of Chinese aspect markers is not limited to the trend. We have found that one of the imperfective markers *zhe* appears early in the learners' interlanguage, and one of the perfective markers SF le may develop at later stage. The divergence to Andersen's AH could be caused by learners' L1 influence as shown in 6.1. Since the mature learners are competent in their L1 (English), they may not have the same acquisition order in their L2 Chinese as L1 Chinese children. Therefore, the teaching of L2 Chinese aspect markers should not necessarily be in the same order as that which is found in Chinese children (Erbaugh 1982, 1992; Kong 1993). In addition, L2 Chinese learners at different levels show slightly different preference in using aspect markers. It thus gives a mixed picture in the acquisition order, such as the acquisition order of zai and zhe (Jin, L. and Hendriks 2005; Wang, L. 2012). This research, however, aims at beginners' level and it monitors input. It, therefore, reduces variables in analyzing data. The research finding shows that at lower level, L2 Chinese learners acquire *zhe* before *zai*. Furthermore, the acquisition order found in this research also shows a dilemma of Krashen's (1985) input hypothesis at some point. We agree that the input of Chinese aspect markers needs to be progressive, since the results show that the beginners of L2 Chinese cannot manage all aspect markers at the same time. Indeed, we have found in this research that the learners tend to mix up the perfective markers or the imperfective markers. In the immediate test in the pilot study and in the main study, the misuse in both groups has higher average number than the underuse and the overuse, mainly in translation task and cloze task. Table 56 shows the average number of underuse, overuse and misuse in all tasks in the immediate test in the pilot study and in the main study. It can be seen that in translation task and cloze task, all groups have higher average number of misuse than underuse and overuse. However, this does not apply to the picture-description task, where the underuse appears more than the misuse. It is assumed that the misuse is the problem of intensive input of the perfective markers and the imperfective markers, yet this assumption may only concern the Grammar-Translation group. As shown in the table, GT1 has an average of 3.2 overuses in the translation task and 2.9 overuses in the cloze task. The number drops to 1.8 in the translation task and 1.5 in the cloze task in the GT2, when the teaching of the markers is divided into two sessions. The communicative groups, on the other hand, do not shown a drop of misuse in the translation task. The average number of misuses in the pilot study is 2.5, but it is slightly higher (3.1) in the main study. The average numbers of misuse in the cloze task for CG1 (1.9) and CG2 (1.7) are very close. This

result responds to the question emerged in section 5.2 on whether a change of the teaching session can reduce the misuse of the markers. It looks that the change of the teaching sessions has some effect on the GTs, but not on the CGs in terms of misusing the markers. With respect to the learning and teaching of the markers, the perfective markers and imperfective markers do not need to be in a linear order that perfective markers before imperfective markers. As discussed in chapter 5, learners' performance on *zhe* is not inferior to that on SF *le*. Therefore, imperfective marker *zhe* can be arranged before perfective marker SF *le*.

Table 56: Average number of underuse, overuse and misuse in all tasks in the immediate test in the pilot study and in the main study

ID	T	ranslation			Cloze		Picture-description		on
	Underuse	Overuse	Misuse	Underuse	Overuse	Misuse	Underuse	Overuse	Misuse
GT1	1.3	0	3.2	2.8	1.5	2.9	0.8	0.3	0.3
CG1	1.6	0.2	2.5	1.6	1.6	1.9	1.7	0.6	0.5
GT2	1.7	0	1.8	0.9	1.2	1.5	2.8	0	0.3
CG2	2.8	0	3.1	1.4	0.6	1.7	2	1.2	1.2

6.4 Cyclical teaching of Chinese aspect markers

Based on the discussion of the research findings, the researcher presents a framework for teaching Chinese aspect markers here. In this research, we have obtained two sets of data to compare the learning outcomes of the Grammar-Translation approach and the communicative approach. One set comes from the pilot study and the other is from the main study. Neither set of data alone can provide a solid ground for testing the research hypothesises on the teaching approaches, due to the lack of research record in teaching L2 Chinese aspect markers. When comparing the two sets of data, a few points have come to light. First, the Grammar-Translation approach brings steadier learning outcome than the communicative approach does. In the pilot study, the communicative group has higher mean mark than the Grammar-Translation group in the pre-test, the immediate test and the post-test. If we make conclusions merely on the data of the pilot study, the research will be in favour of the communicative teaching in the learning of L2 Chinese markers. However, the data from the main study questions the reliability or the steadiness of the communicative teaching to different groups of learners. The divided two teaching sessions in the main study lead to a noticeable drop of performance in the CG group, especially in the immediate test. It makes us question how long the effect of the communicative teaching can last. As oppose to the communicative approach, the Grammar-Translation approach shows similar patterns of native-like use and even non-native like use in the two GT groups, despite of the change of teaching sessions. However, neither of the teaching approaches shows long lasting effect in two months time. In that case, which teaching approach is suitable for learning L2 Chinese aspect markers? With regard to the communicative teaching, it shows positive

effect immediately after the teaching in the pilot study, but the effect does not show in the main study. For the Grammar-translation approach, the effect lasts longer than the communicative approach, in this case for at least two weeks. Second, comparing the design of the communicative teaching to that of the Grammar-Translation teaching, the GT is less restricted by learners' communication abilities at lower language efficiency level than the CG. The learning content in the communicative class is offered in texts with native-like uses. It is difficult to integrate non-native-like uses into the texts. It is argued that the non-native-like uses can be done through negotiation. However, the negotiation relies on learners' negotiation abilities (Ellis 2008). At lower language efficiency level, learners' negotiation abilies are confined to simple sentences and a small range of vocabulary in the target language. The GT groups, however, get feedback for mistakes in the translation exercises without demand on speaking skills. Third, for the learning of the markers, the results have revealed that perfective markers VF le, guo and imperfective marker zhe have more native-like uses than the other markers. They may be introduced first to learners at beginners' level. The order of the markers can be VF le first, followed by guo, and then zhe. The other markers zai and SF le may have to wait for learners to get familiar with the first three markers, since the combined introduction of all markers has caused confusion to learners on when to use which marker. However, it is worth investigating when is the best time to introduce SF le and zai in future research.

As a result of the discussion, at beginner's level, the Grammar-Translation approach seems a better way to introduce Chinese aspect markers than the communicative approach, in that it brings out steadier outcomes for different learning groups and it does not rely on learners' speaking skills and communication skills. The teaching of the markers needs to follow the learning order shown in this research. However, we suggest that the teaching of the markers needs to be in a cycle of two weeks until the markers integrate into learners' interlanguage.

6.5 Limitation of the study

This study is limited to a few realistic issues. First, it is the size of the experimental groups. As a newly uprising foreign language, a Chinese course cannot offer a large cohort for research in one university. Wen, X. (1995) studied 14 English native speakers in an American college. Duff and Li, D. (2002) recruited 9 native English speakers in a university in their research. Jin, L. and Hendrik (2005) chose 30 L1 English speakers for three Chinese levels in a university. The number of candidates in our research is similar to these previous researches. In addition, the learners' attendance of a Chinese course is on a voluntary base in this research. It is thus difficult to control the presence of the learners especially in the main study when the teaching and the immediate test were scheduled in a span of three weeks. To reduce the side effect of small sample size, in this research we have collected two sets of data: one from a pilot study and the other from a main study. These data allow the researcher to

identify similarities and differences in the behaviours of the CG groups and the GT groups. The longitudinal study provides more evidence for discussion on teaching approaches.

Second, due to learners' low proficiency level, the teaching of aspect markers is designed to suit the learners' language level and the format of assessment is limited to writing but not speaking. This research has to adapt the Communicative approach in order to carry out the experiment. The approach applied has not followed the traditional understanding of the Communicative approach (Richards 2006), where many people would avoid the use of L1 in teaching. This research, however, advocates Cook's (2001) arguments that the use of L1 in instructions or communication/discussion in group-tasks does not prohibit L2 learning. Therefore, the communicative approach in this study is still within the notion of communication and interaction. The experiments' results have shown that aspect can be delivered at lower language level, and it does not need to be incidental (Doughty and Williams 1998a). For the format of assessment, writing tasks are in favour of both the CG group and the GT group. As the Grammar-Translation approach does not focus on learners' speaking skills, a speaking test will be biased towards the CG group.

Third, the contact hours for teaching Chinese aspect markers are limited. The research is integrated into normal teaching hours, which is two hours per week. It thus has a very rigid time schedule for teaching Chinese aspect markers. In the pilot study, all five markers are arranged in one teaching session, and it causes misuses in some tasks in both groups. In the main study, the big teaching session of the markers is divided into two smaller teaching sessions delivered in two weeks. As a result, the number of misuse has dropped in the immediate test in the GT group but not in the CG group. It suggests that intensive teaching may not reduce the misuse rate in the communicative group, but it affects the performance of the Grammar-Translation group.

Finally, the research only looks at performance of L2 beginners Chinese. It is unknown how these learners would use the aspect markers at higher proficiency level. Since the course is optional for all levels, some of the learners do not choose to continue with Chinese at intermediate level. The lack of samples makes the research into higher levels infeasible at Aston University now. Other studies for L2 Chinese aspect acquisition (e.g. Wen, X. 1995) are all cross-sectional. It, therefore, leaves a blank space for longitudinal study in the area of L2 Chinese aspect acquisition at higher level. However, in the future, we may carry out a collaborative research with other institutions for further tests at beginners' level and at higher proficiency level.

Reference:

Allen, L. Q. (2000) Form-meaning connections and the French causative: An experiment in processing instruction. *Studies in Second Language Acquisition*, 22, 69–84.

Allen, P., Swain, M., Harley, B., & Cummins J. (1990) Aspects of classroom treatment: Toward a more comprehensive view of second language education. In B. Harley, P. Allen, J. Cummins, & M. Swain (Eds), *The development of second language proficiency*, Cambridge, UK: Cambridge University Press: 57-81.

Al-Shormani, M. Q. (2013) Fossilization and Plateau Effect in Second Language Acquisition. *Language in India* 13.2.

Andersen, R. W. (1986) El desarrollo de la morfología verbal en el español como segundo idioma. In Meisel, J.
M. (ed.), *Adquisición de lenguaje/Aquisição da linguagem*. Frankfurt, Germany: Vervuert.

Andersen, R. W. (1988) Models, processes, principles, and strategies: second language acquisition in and out of the classroom. *IDEAL*, 3, 111-138

Andersen, R. W. (1989) The theoretical status of variation in interlanguage development. In Grass, S., Madden, C., Preston, D., & Selinker, L. (eds.) *Variation in second language acquisition, Vol II, Psycholinguistic issues*. Philadelphia, PA: Multilingual Matters Ltd. 46-64.

Andersen, R. W. (1991) Developmental sequences: the emergence of aspect marking in second language acquisition. In Huebner, T. and Ferguson, C. A. (ed.) *Crosscurrents in second language acquisition and linguistic theories*. Amsterdam: John Benjamins.

Andersen, R. W. and Shirai, Y. (1994) Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition, 16*: 133-156.

Andersen, R. W. and Shirai, Y. (1996) The primacy of aspect in first and second language acquisition: the pidgin-creole connection. In Ritchie, W. and Bhatia, T. (ed.) *Handbook on language acquisition*. New York: Academic Press.

Anthony, E. M. (1963) Approach, method and technique. English Language Teaching 17: 63-57.

Baddeley, A. D. (2003) Working memory: Looking back and looking forward. *Nature Reviews Neuroscience*, *4*, 829–839.

Bardovi-Harlig, K. (1994) Reverse-order reports and the acquisition of tense: beyond the principle of chronological order. *Language learning* 44, 2, 243-282.

Bardovi-Harlig, K. (1995) The interaction of pedagogy and natural sequences in the acquisition of tense and aspect. In Eckman, F. R., Highland, D., Lee, P. W., Mileham, J., Weber, R. R. (ed.) *Second language acquisition theory and pedagogy*. Routledge.

Bardovi-Harlig, K. (2000) Tense and aspect in second language acquisition: Form, meaning, and use. Wiley-Blackwell.

Bardovi-Harlig, K. (2002) Analyzing aspect. In R. Salaberry & Y. Shirai (Eds.), *Tense-aspect morphology in L2 acquisition* (pp. 129-154). Amsterdam: John Benjamins.

Bardovi-Harlig, K. (2013) Developing L2 pragmatics. Language Learning, 63(s1), 68-86.

Beretta, A. & Davies. A. (1985) Evaluation of the Bangalore Project. ELT Journal 39: 121-7.

Bergström, A. (1995) *The expression of past temporal reference by English-speaking learners of French.* Unpublished Ph.D. Dissertation, The Pennsylvania State University.

Binnick, I. R. (1991). Time and the verb. Oxford University Press.

Cadierno, T. (1995) Formal instruction from a processing perspective: An investigation into the Spanish past tense. *Modern Language Journal*, 79: 179-193.

Cadierno, T., Glass, W., Lee, J. and VanPatten, B. (1991) Processing Tense in Second Language Input: Lexical Cues Versus Grammatical Cues. The University of Illinois at Urbana-Champaign.

Carlson, G. (2012) Habitual and Generic Aspect. In Binnick, R. (ed.) *The Oxford handbook of tense and aspect*. Oxford University Press.

Carson, J. E. (1990) Reading-writing connections: toward a description for second language learners

[A]. In Kroll, B. (ed). *Second language Writing Research Insights for Classroom [C]*. Cambridge University Press.

Celce-Murcia, **M.** (1991) Language and communication: A time for equilibrium and integration. In J. E. Alatis (Ed.), *Georgetown University Round Table on Language and Linguistics 1991*, pp. 223–237. Washington, DC: Georgetown University Press.

Chang, S.C. (2011) A contrastive study of grammar translation method and communicative approach in teaching English grammar. *ELT*, 4(2): 13-24.

Chang, V. (1986). *The Particle LE in Chinese Narrative Discourse*. Gainesville, FL: Unpublished University of Florida Ph.D dissertation.

Chao, Y. R. (1968) A Grammar of Spoken Chinese, University of California Press, Berkeley.;

Chaudron, C. (1988) *Second Language Classrooms: Research on Teaching and Learning*. New York: Cambridge University Press.

Chaudron, C. (2001) Progress in language classroom research: Evidence from The Modern Language Journal, 1916-2000. *The Modern Language Journal*, 85(i), 57-76.

Chen, J. and Shirai, Y. (2010) The development of aspectual marking in child Mandarin Chinese. *Applied Psycholinguistics*, 31: 1-28.

Chen, X. H. (2010) Lun "le2" bu du xian (The discussion of the none solely appearance of sentence final *le*). *Chinese Language Learning*, No. 3: 54-63.

Cheng, A. C. (1995) *Grammar instruction and input processing: The acquisition of Spanish ser and estar.* (Doctoral dissertation, the University of Illinois at Chicago, 1995) ProQuest.

Digital Dissertations, AAT 9543553.

Chief,L.(2005)SerializationofsimultaneityinMandarin.http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.120.5893&rep=rep1&type=pdf(accessed on08/09/2010).

Chomsky, N. (1957) Syntactic Structures. Place ?: Mouton de Gruyter.

Chu, C. (1987) The semantics, syntax, and pragmatics of the verbal suffix - Zhe. Journal *of the Chinese Language Teachers Association*. Vol. 22, No. 1, pp 1-41.

Comrie, B. (1976). Aspect. Cambridge University press, Cambridge.

Comrie, B. (1985) Tense. Cambridge: Cambridge University Press.

Cook, H. (2001) Why can't learners of JFL distinguish polite from impolite speech styles? In Rose, K. and Kasper, G. (eds.) *Pragmatics in language teaching*. Cambridge, UK: Cambridge University Press. Pages?

Cook, V. (2001) Using the first language in the classroom. *Canadian Modern Language Review/La Revue canadienne des langues vivantes* 57, 3: 402-423.

Cooper, G. (1998) Research into cognitive load theory and instructional design at UNSW. *Retrieved August*, *8*, 2003.

Corder, S. (1974) Idiosyncratic Dialects and Error Analysis. In Richards, J. (ed.) *Error analysis: Perspectives on Second Language Acquisition*. Essex: Longman.

Dai, T. (1881) *Liu shu ku*. A.A. Marcal. Translated by Hopkins, L. C. (1954) *The six scripts or the principles of Chinese writing*. Cambridge University Press.

Day, E. and Shapson, S. (1991) Integrating formal and functional approaches in language teaching in French immersion: An experimental study. *Language Learning*, 41(1): 25-58.

Dahl, Ö. (1987) Comrie's Tense: Review Article. Folia Linguistica, 21: 489-502.

De Haan, F. (2010) Typology of tense, aspect, and modality systems. In Song, J. J. (ed.) *The Oxford handbook of linguistic typology*. Oxford University Press; 445-464.

Dekeyser, R. (1998) Beyond focus on form: Cognitive perspectives on learning and practicing second language grammar. In Doughty, C. & Williams, J. (eds.) *Focus on form in classroom second language acquisition*. New York: Cambridge University Press.

DeKeyser, R. (2000) The robustness of critical period effects in second language acquisition. *SSLA*, 22, 499 – 533.

DeKeyser, R. & Sokalski, K. (1996) The differential role of comprehension and production practice. *Language Learning*, 46, 613–642.

de Swart, H.E. (2012) Verbal aspect across languages. In Binnick, R. (ed.) *The Oxford handbook of tense and aspect*. Oxford: Oxford University Press.

Derwing, T. M. (1996) Elaborative detail: Help or hindrance to the NNS listener? *Studies in Second Language Acquisition,* 18: 283-297.

Doughty, C. (2001) Cognitive underpinnings of focus on form. In Robinson, P.(ed.) *Cognition and second language instruction*. Cambridge, England: Cambridge University Press.

Doughty, C. J., & Long, M. H. (Eds.) (2003) *The handbook of second language acquisition*. Oxford: Blackwell.

Doughty, C. and Williams, J. (1998) Pedagogical choices in forcus on form. In Doughty, C. and Williams, J. (ed.) *Focus on form in classroom second language acquisition*. Cambridge, UK: Cambridge University Press.

Dowty, D.R. (1972) Studies in the Logic of Tense and Aspect in English, University of Texas dissertation.

Dowty, D. R. (1979) Word meaning and Montague Grammar. Dordrecht: Reidel.

Dowty, D. R. (1986) The effects of aspectual class on the temporal structure of discourse: semantics or pragmatics? *Linguistics and Philosophy* 9: 37-61.

Dowty D.R. (1991) Thematic Proto-Roles and Argument Selection. Language 67: 547-619.

Duff, A. (1989) Translation. Oxford: Oxford University Press.

Duff, P. & Li, D. (2002) The acquisition and use of perfective aspect in Mandarin. In Salaberry, R. & Shirai, Y. (eds.) *The L2 acquisition of tense-aspect morphology*. Philadelphia: Benjamins.

Dulay, H., Burt, M. and Krashen, S. (1982). Language two. New York: Oxford University Press.

Ellis, N. C. (2006)_Selective Attention and Transfer Phenomena in L2 Acquisition: Contingency, Cue Competition, Salience, Interference, Overshadowing, Blocking, and Perceptual Learning. *Applied Linguistics*, 27 (2), 164-194.

Ellis, R. (1984) Classroom Second Language Development. Oxford: Pergamon.

Ellis, R. (1990) Instructed second language acquisition. Oxford: Blackwell.

Ellis, R. (2001a) Investigating Form-Focused Instruction. In Ellis, R. (ed) *Form-Focused Instruction and Second Language Learning*. Malden, MA: Blackwell.

Ellis, R. (2001b) Investigating form-focussed instruction. *Language Learning* 51: Supplement 1, 1-46. Ellis, R. (2012) *Language Teaching Research and Language Pedagogy*. Hoboken: Wiley-Blackwell.

Ellis, R. (2005) Analyzing Learner Language. Oxford: Oxford University Press.

Ellis, R. (2008) The Study of Second Language Acquisition (2nd edition). Oxford: Oxford University Press.

Ellis, R. (2012) Language Teaching Research and Language Pedagogy. Hoboken: Wiley-Blackwell.

Erbaugh, M. S. (1978) Acquisition of temporal and aspectual distinctions in Mandarin. *Papers and Reports on Child Language Development* 15: 30-37.

Erbaugh, M. S. (1982) *Coming to order: Natural selection and the origin of syntax in the Mandarin-speaking child.* PhD dissertation, University of California.

Erbaugh, M. S. (1992) The acquisition of Mandarin. In Slobin, D. (ed.) *The crosslinguistic study of language acquisition*. Vol. 3. Hillsdale NJ: Lawrence Erlbaum.

Filip, H. (2001) Nominal and verbal semantic structure: analogies and interactions. *Language Sciences*. Vol. 23, Issues 4-5, 453-501.

Filip, H. (2011) Aspectual class and Aktionsart. In Maienborn, C. Heusinger, K. & Portner, P. (eds.) *Semantics: An international handbook of natural language meaning*. De Gruyter Mouton.

Filip, H. (2012) Lexical Aspect. In Binnick, R. (ed.) *The Oxford handbook of tense and aspect*. Oxford University Press.

Filip, H. and Carlson, G. (1997) Sui Generis Genericity. *Penn Working Papers in Linguistics*, Vol. 4 (Proceedings of the Twenty-First Annual Penn Linguistics Colloquium), 91-110. Philadelphia: University of Pennsylvania. Available on www.semanticsarchive.net.

Foster, P. (1998) A classroom perspective on the negotiation of meaning. Applied linguistics, 19(1): 1-23.

Fotos, S. (1993) Consciousness raising and noticing through focus on form: grammar task performance versus formal instruction. *Applied Linguistics* 14/4, 126-41.

Fotos, S. (2005) Traditional and grammar translation methods for second language teaching. In Hinkel, E. (eds.) *Handbook of research in second language teaching and learning*. Lawrence Erlbaum Associates, Inc.

Fotos, S. & Ellis, R. (1991) Communicating about grammar: A task-based approach. *TESOL Quarterly*, 25, 605–628.

García, E. & vanPutte, F. (1988) The value of contrast: contrasting the value of strategies. IRAL 26: 263-281.

Gass, S. M. (1990) Second and foreign language learning: same, different or none of the above? In Vanpattern, B. and Lee, J. F. (ed.) *Second language acquisition: foreign language learning*. Multilingual Matters Ltd.

Gass, S. M. (1995) Learning and teaching: the necessary interaction. In Eckman, F. R., Highland, D., Lee, P. W., Mileham, J., Weber, R. R. (ed.) *Second language acquisition theory and pedagogy*. Routledge.

Gass, S. M. & Selinker, L. (2008) Second language acquisition: an introductory course. Routledge.

Hamayan, E. V. & Tucker, G. R. (1980) Language input in the bilingual classroom and its relationship to second language achievement. *TESOL Quarterly* 14 (4): 453-468.

Hammond, R. M. (1988) Accuracy versus Communicative Competency: The Acquisition of Grammar in the Second Language Classroom. *Hispania*, *71*: 408-417.

Han, Z. (2000). Persistence of the implicit influence of NL: The case of the pseudo-passive. *Applied Linguistics*, 21(1), 78-105.

Han, Z. (2004) Fossilization: Five central issues. International Journal of Applied Linguistics 14 (2): 212–242.

Harley, B. (1989) Functional grammar in French immersion: A classroom experiment. *Applied Linguistics* 10 (3): 331-359.

Harley, B. & Swain, M. (1984) The interlanguage of immersion students and its implications for second language teaching. In A. Davies, C. Griper and A.P.R. Howatt (eds) *Interlanguage* (pp. 291-311). Edinburgh: Edinburgh University Press.

Hendriks, H., Hickmann, M. and Liang, J. (1998) The use of temporal-aspectual devices by Chinese children: semantic and discourse determinants. *Studia Linguistics Serica*. Hong Kong: City University of Hong Kong. 225–42.

Honeyfield, J.G. (1987) Word frequency and the importance of context in vocabulary learning. In: Long, M.H., Richards, J.C. (Eds.), *Methodology in TESOL: A Book of Readings*. Harper & Row, Publishers, pp. 318–324.

Housen, A. & Pierrard, M. (2005) (eds.) *Investigations in instructed second language acquisition*. Mouton de Gruyter.

Hu, J, Pan, H & Xu. L. (2001). "Is there a finite vs. nonfinite distinction in Chinese?". *Linguistics 39*, 1117-1148.

Huebner, T. (1979) Order-of-acquisition vs. dynamic paradigm: A comparison of method in interlanguage research. *TESOL Quarterly*, 13: 21-48.

Huebner, T. (1983) A Longitudinal Analysis of the Acquisition of English. Ann Arbor: Karooma Publishers.

Iljic, R. (1990) The Verbal Suffix -guo in Mandarin Chinese. Lingua 81: 301-26.

Jarvis, S, & Pavlenko, A (2000) *Conceptual restructuring in language learning: Is there an end state?* Paper presented at SLRF 2000, Madison, WI.

Jin, L. & Hendriks, H. (2005) The development of aspect marking in L1 and L2 Chinese. *Working Papers in English and Applied Linguistics* 9, 69-99.

Johnson, K. (1999) Analytic/synthetic teaching strategies. In Johnson, K. and Johnson, H. (eds.) Encyclopedic Dictionary of Applied Linguistics, Blackwell Publishing.

Kang, J. (1999) *The Composition of the Perfective Aspect in Mandarin Chinese*. Boston, MA: Boston Univertiry dissertation.

Klein, W. (1994) Time in language. Routledge, London.

Klein, et al. (2000). Aspect and assertion in Mandarin Chinese. Natural Language & Linguistic Theory. Vol. 18, No. 4. 723-770.

Krashen, S. D. (1981) Second language acquisition and second language learning. Pergamon Press Ltd.

Krashen, S. D. (1985) The input hypothesis: issues and implications. Longman (London and New York).

Krashen, S. D. (1993) The effect of formal grammar teaching: Still peripheral. *TESOL Quarterly*, 26 (2): 409-411.

Labeau, E. (2005) *Beyond the aspect hypothesis: tense-aspect development in advanced L2 French*. Peter Lang AG.

Lado, R. (1957) Linguistics across cultures. Ann Arbor: Michigan University Press.

Larsen-Freeman, D. (1976) An explanation for the morpheme acquisition order of second language learners. *Language Learning* 25: 125-135.

Laufer, B. (2006) Comparing focus on form and focus on formS in second-language vocabulary learning. *Canadian Modern Language Review*, 63, 149-166.

Lee, S.-K., & Huang, H. T. (2008) Visual input enhancement and grammar learning: A metaanalytic review. *Studies in Second Language Acquisition*, 30(3), 307–331.

Leeman, J., Artegoitia, I., Fridman, B., & Doughty, C. (1995). Integrating attention to form with meaning: Focus on form in content-based Spanish instruction. In Schmidt, R. (ed.), Attention and awareness in foreign language learning. Honolulu, HI: Second Language Teaching and Curriculum Center, University of Hawai'i at Manoa.

Leeman, J. (2003). Recasts and second language developement. SSLA, 25, 37-63.

Levin, B. (2000) Aspect, lexical semantic representation, and argument expression. BLS 26: *General session and parasession on aspect*, 413-429.

Li, C. & Thompson, A. S. (1976) The meaning and structure of Complex Sentences with -zhe in Mandarin Chinese. *Journal of the American Oriental Society*. Vol. 96, No. 4, pp 512-519.

Li, C. & Thompson, A. S. (1981). Mandarin Chinese. University of California Press.

Li, J. X. (1924) Xinzhu Zhongguo wenfa (Chinese grammar on the national language). Beijing: The commercial press.

Li, P. (1990) Aspect and aktionsart in child Mandarin. PhD dissertation, University of Leiden.

Li, Y. A. (1992) Indefinite wh in Mandarin Chinese. Journal of East Asian Linguistics 1:125–155.

Li, P. & Bowerman, M. (1998) The acquisition of lexical and grammatical aspect in Chinese. *First Language* 18: 311-350.

Li, P. & Shirai, Y. (2000) The acquisition of lexical and grammatical aspect. Berlin: Mouton de Gruyter.

Li, D. & Duff, R. (1998) *The development of aspectual distinctions in Mandarin as a second language*. Paper presented at the annual meeting of the American Association for Applied Linguistics, Seattle, WA.

Lin, J. (2000) On the Temporal Meaning of the Verbal -le in Chinese. Language and Linguistics, 1: 109-33.

Lin, J. (2003) Temporal Reference in Mandarin Chinese. Journal of East Asian Linguistics, 12: 259-311.

Lin, J. (2006) Time in a Language Without Tense: The Case of Chinese. Journal of Semantics, 1: 1–53.

Lin, J. (2007) Predicate restriction, discontinuity property and the meaning of the perfective marker Guo in Mandarin Chinese, *Journal of East Asian Linguistics*, 16: 237-257.

Lin, Z. (2003) *"le1": cong wanzheng tiji dao shibiao tiji* (Verb final le: from perfective marker to tense marker). Presented at Chinese tense and aspect system international seminar, Shanghai.

Littlewood, W. (1981) Communicative Language Teaching: An Introduction. Cambridge: Cambridge University Press.

Liu, X. (1988) Xiandai Hanyu Ciwei 'le' de Yufa Yiyi (The grammar of suffix '-*le*' in Modern Chinese). *Zhongguo Yuwen*, 5: 321-30.

Liu, X. (2002) *Hanyu zuowei di er yuyan jiaoxue jianlun* (Chinese as a second language teaching). Beijing Language and Culture University Press.

Liu, X. et al. (2002) New practical Chinese reader. Vol. 2 Beijing Language and Culture University Press.

Lightbown, P. M. (1983) Exploring relationships between developmental and instructional sequences in L2 acquisition. In Seliger, H. & Long, M. (eds.) *Classroom-oriented research in second language acquisition*. Rowley, MA: Newbury House.

Lightbown, P. M. (1984) Input and acquisition in second language classrooms. *TESL Canada Journal* 2: 55-67. Lightbown, P. M. (1998) The importance of timing in focus on form. In Doughty, C. and Williams, J. (eds.) *Focus on form in classroom second language acquisition*. Cambridge, UK: Cambridge University Press.

Lightbown, P.M., & Spada, N. (1990) Focus-on-form and corrective feedback in communicative language teaching: Effects on second language learning. *Studies in Second Language Acquisition*, 12: 429-448.

Littlewood, W. (1981) Communicative language teaching: An introduction. Cambridge University Press.

Liu, X. *et al.* (2002) *Hanyu zuowei dier yuyan jiaoxue jianlun* (Introduction to teaching Chinese as second language). Beijing Language and Culture University Press.

Ljungqvist, M. (2007) Le, guo and zhe in Mandarin Chinese: a relevance-theoretic account. *Journal of East Asian Linguistics* 16(3): 193-235.

Long, M. H. (1981) Input, interaction and second language acquisition. In Winitz, H. (ed.) *Native language and foreign language acquisition*. *Annals of the New York Academy of Sciences*, 379: 259-78.

Long, M. H. (1988) Instructed interlanguage development. In Beebe, L. (ed.) *Issues in second language acquisition*. New York: Newbury House.

Long, M. H. (1990) Task, group and task-group interactions. In Anivan, S. (ed.) *Language teaching methodology for the nineties*. Singapore: Regional English Language Center/Singapore University Press.

Long, M. H. (1991) Focus on form: A design feature in langauge teaching methodology. In de Bot, K., Ginsberg, R. & Kramsch, C. (eds.) *Foreign language research in cross-cultural perspective*. Amsterdam: John Benjamins.

Long, M. H. (1997). Construct validity in SLA: A response to Firth and Wagner. *Modern Language Journal* 81 (3): 318-23.

Long, M. H. & Robison, P. (1998) Focus on form: Theory, research, and practice. In Doughty, C. & William, J. (eds.) *Focus on form in classroom second language acquisition*. Cambridge, England: Cambridge University Press.

Long, M. H. & Sato, C. J. (1983) Classroom foreigner talk discourse: Forms and functions of Teacher's Questions. *TESOL Quarterly* 15: 26-30.

Loschky, L. (1994) Comprehensible Input and Second Language Acquisition, *Studies in Second Language Acquisition* 16: 303–323.

Loschky, L. & Bley-Vroman, R. (1993) Grammar and task-based methodology. In G. Crookes & S. Gass (Eds.), *Tasks and language learning: Integrating theory and practice*. Clevedon: Multilingual Matters.

Lü, S. X. (1942) Collected works of Lü Shuxiang. Précis of Chinese Grammar (Zhongguo wenfai yaolue), Vol. 1. Commercial Press, Beijing.

Lü, S. X. (1980) 800 Grammatical Words in Modern Chinese. Beijing: Shangwu Press.

Lyons, J. (1968) Introduction to Theoretical Linguistics. Cambridge: Cambridge University Press.

Lyster, R. (1994) The effect of functional-analytic teaching on aspects of French immersion students' sociolinguistic competence. *Applied Linguistics* 15 (3): 263-287.

Lyster, R. (1998) Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*, 48, 183-218.

Lyster, R. (2001) Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*, 51(1), 265-301.

Lyster, R. & Ranta, L. (1997) Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, 19, 37-66.

Ma, L. (2006) Acquisition of the perfective aspect marker Le of Mandarin Chinese in discourse by American college learners. PhD dissertation, University of Iowa.

MacFarland, T. W. (1998) Wilcoxon Matched-Pairs Signed Ranks Test http://www.nyx.net/~tmacfarl/STAT_TUT/wilcoxon.ssi (access on 19/12/2010).

Matsuzaki, T. (1998) Review: Doughty, C., & Williams, J. (1998) Focus on Form in Classroom Second Language Acquisition. New York: Cambridge University Press." *Online Submission*.

Meisel, J., Clahsen, H., & Pienemann, M. (1981) On determining developmental stages in natural second language acquisition. *Studies in Second Language Acquisition* 3, 109-135.

McLaughlin, B. (1987) Theories of second language acquisition. London: Edward Arnold.

Newport, E. (1990) Maturational constraints on language learning. Cognitive Science, 14 (1), 11-28.

Mitchell, R. & Meyers, F. (1998) Second language learning theories. London: Arnold.

Moens, M. (1987) Tense, aspect and temporal reference, Ph.D. thesis, University of Edinburgh.

Mondal, K.N. (2012) English language learning through the combination of grammar translation method and communicative language teaching. *Academia Arena*, 4(6): 20-24. Available from www.sciencepub.net.

Montague, R. (1970) Universal grammar. Theoria 36, 373–398.

Mourelatos, A.P.D. (1978) Events, processes and states. *Syntax and Semantics 14. Tense and Aspect*. New York: Acadmic Press.

Nassaji, H. & Fotos, S. (2004) Current Developments in Research on the Teaching of Grammar. *Annual Review of Applied Linguistics* 24, 126-145.

Nikolov, M. and Mihaljevi'c Djigunovi'c, J. (2006) Recent research on age, second language acquisition and early foreign language learning. *ARAL* 26, 234–260.

Norris, J. M., & Ortega, L. (2000) Effectiveness of L2 instruction: A research synthesis and quantitative metaanalysis. *Language Learning*, *50*, 417-528.

Olsen, M. B. (1997) A semantic and pragmatic model of lexical and grammatical aspect. Garland Publishing, Inc.

Palmer, A. (1979). Compartmentalized and integrated control: An assessment of some evidence for two kinds of competence and implications for classroom. *Language Learning* 29, 169-180.

Pan, H. (1993) Interaction between Adverbial Quantification and Perfective Aspect. In Stvan L. S. (ed) *Proceedings of the Third Annual Linguistics Society of Mid-America Conference*. Bloomington: Indiana University Linguistics Club.

Pan H. & Lee, P. (2004) The role of pragmatics in interpreting the Chinese perfective markers *-guo* and *-le*. *Journal of Pragmatics*, 36, 441-466.

Paradis, M. (2004) A neurolinguistic theory of bilingualism. Amsterdam: John Benjamins.

Park, E. S. (2005). Constraints of implicit focus on form: Insights from a study of input enhancement. Colombia University Working Papers in TESOL and Applied Linguistics 4.2, 1-30.

Partee, B. H. (2001) Montague Grammar. In Neil J. S. and Paul B. B. (eds.) *International Encyclopedia of the Social and Behavioral Sciences*. Oxford: Pergamon/ Elsevier Science.

Peters, M. O. (1934). An Experimental Comparison Of Grammar- Translation Method And Direct Method In The Teaching Of French. The Modern Language Journal 18 (8): 528-542.

Pica, T. (1991) Classroom interaction, participation, and comprehension: Redefining relationships. *System*, 19, 437-452.

Pica, T. (1996) The essential role of negotiation in the communicative classroom. JALT Journal, 18, 241-268.

Pica, T., Young, R., & Doughty, C. (1987) The impact of interaction on comprehension. *TESOL Quarterly*, 21: 737-758.

Poole, A. (2005) The kinds of forms learners attend to during focus on form instruction: A description of an advanced ESL writing class. *Asian EFL Journal*, 7(3), 58-92.

Prabhu, N.S. (1987) Second language pedagogy. Oxford: Oxford University Press.

Reichenbach, H. (1947) Elements of Symbolic Logic. Berkeley: University of California Press.

Ren, F. (2008) Temporal meaning of *-le* in Chinese. Proceedings of the 20th North American Conference on Chinese Linguistics, Volume 2. Edited by Marjorie K.M. Chan and Hana Kang. Columbus, Ohio: The Ohio State University. 789-800.

Richards, J.C. (2006) Communicative language teaching today. USA: Cambridge University Press.

Richard, J. C. (2010) *Communicative language teaching today*. <u>http://www.professorjackrichards.com/pdfs/communicative-language-teaching-today-v2.pdf</u> (access on 12/10/2010).

Richards, J. & Rodgers, T. (2001) *Approaches and methods in language teaching* (2nd ed.) Cambridge University Press.

Ritz, M. E. (2012) Perfect tense and aspect. In Binnick, R. (ed.) *The Oxford handbook of tense and aspect*. Oxford: Oxford University Press: 881-907.

Salaberry, R. (1997) The role of input and output practice in second language acquisition. *Canadian Modern Language Review* 53, 422-451.

Salaberry, R. (1998) The development of aspectual distinctions in classroom L2 French. *Canadian Modern Language Review* 54, 4: 504-542.

Salaberry, R. (2000) The development of past tense morphology in L2 Spanish. John Benjamins B. V.

Samuda, V. (2001) Guiding relationships between form and meaning during task performance: The role of the teacher. In M. Bygate, P. Skehan, & M. Swain (Eds.), *Researching pedagogic tasks, second language learning, teaching and testing* (pp. 119–40). Harlow: Longman.

Sato, C. (1986) Conversation and interlanguage development: Rethinking the connection. In R. Day (ed.) *Talking to Learn* 23–45. Cambridge: MA: Newbury.

Sato, C. (1990) The syntax of conversation in interlanguage development. Tübingen: Narr.

Savignon, S. J. (1972) *Communicative competence: An experiment in foreign language teaching.* Philadelphia: Center for Curriculum Development.

Schmidt, R. (1990) The role of consciousness in second language learning. Applied Linguistics, 11 (2): 17-46.

Schmidt, R. (2001) Attention. In Robinson, P. (ed.) *Cognition and second language instruction. Cambridge*. England: Cambridge University Press.

Selinker, l. (1972) Interlanguage. IRAL, 10: 209-231.

Sharma, D. and Deo, A. (2009) *Contact-based aspectual restructuring: a critique of the aspect hypothesis.* http://webspace.qmul.ac.uk/dharbour/QMOPAL-12-Sharma-Deo.pdf (access on 02/09/2010).

Sharwood Smith, M. (1993) Input enhancement in instructed SLA: Theoretical bases. *Studies in Second Language Acquisition* 15, 165–179.

Sheen, Y. (2006) Exploring the relationship between characteristics of recasts and learner uptake. *Language Teaching Research*, *10*, 361-392.

Shi, Y. (2002) *The establishment of modern Chinese grammar- The formation of the resultative construction and its effects.* John Benjamins B. V..

Shirai, Y. (1991) *Primacy of aspect in language acquisition: simplified input and prototype.* Unpublished doctorial dissertation, University of California, Los Angeles.

Shirai, Y. (1998) The emergence of tense-aspect morphology in Japanese: Universal predisposition? *First Language*, 18, 281-309.

Simard, D. (2009). Differential effects of textual enhancement formats on intake. System, 37, 124–135.

Skehan, P. (1989) Individual differences in second-language learning. London: Edward Arnold.

Smith, C. (1997). The parameter of aspect (2nd ed). Dordrecht: Kluwer Academic Publishers.

Smith, C. & Erbaugh, M. S. (2005) Temporal Interpretation in Mandarin Chinese. *Linguistics*, 43 (4): 713-756.

Snow, C. & Hoefnagel-Hohle, M. (1982). The critical period for language acquisition: evidence from second language learning. In Krashen, S., Scarcell, R. and Long, M. (Eds.), *Issues in second language research*. London: Newbury House.

Soh, H. L. & Gao. M. (2004) Change of state, presupposition and the meaning of Mandarin sentential –le. Manuscript, University of Minnesota, Twin Cities.

Soh, H. L. & Gao. M. (2006) Perfective aspect and transition in Mandarin Chinese: an analysis of double *-le* sentences. In Proceedings of the 2004 Texas Linguistics Society Conference, Pascal Denis *et al.* (ed.). Somerville, MA: Cascadilla Proceedings Project.

Spada, N., & Lightbown, P. M. (1993) Instruction and the development of questions in L2 classrooms. *Studies in Second Language Acquisition*, *15*, 205–224.

Stephany, U. (1981) Verbal grammar in modern Greek early child language. In Dale, P. and Ingram, D. (ed.) *Child language: an international perspective*. Baltimore: University Park Press.

Stern, H. H. (1990) Analysis and experience as variables in second language pedagogy in Harley, Allen, Cummins, and Swain 1990.

Stoddart, J. (2000) *Teaching Translation*. Retrieved on 20 December 2011 from www.britishcouncil.org/portugal-inenglish-2000apr-teaching-through- translation.pdf.

Sun, D. (1993) Waiguo liuxuesheng xiandai hanyu le de xide guocheng chubu fenxi (Initial analysis of the acquisition of le by foreign students). *Yuyan Jiaoxue yu Yanjiu (Language Teaching and Research)* 2: 166-177.

Swain, M. (1985) Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In Gass, S. & Madden, C. (eds.) *Input in second language acquisition*. Rowley, MA: Newbury House.

Swain, M. (1991) French immersion and its offshoots: Getting two for one. In Freed, B. F. (ed.) *Foreign language research and the classroom.* Lexington, MA: D. C. Heath.

Swain, M. & Lapkin, S. (2001) Focus on form through collaborative dialogue: Exploring task effects. In Bygate, M., Skehan, P. & Swain, M. (eds.) *Researching pedagogic tasks: Second language learning, teaching and testing.* London, UK: Longman.

Sweller, J., Van Merrienboer, J. J., & Paas, F. G. (1998) Cognitive architecture and instructional design. *Educational psychology review*, *10*(3), 251-296.

Tai, J. (1984). Verbs and times in Chinese: Vendler's four categories. Chicago Linguistic Society 20: 289-296.

Takahashi, S. (2005). Noticing in task performance and learning outcomes: A qualitative analysis of instructional effects in interlanguage pragmatics. *System, 3,* 437–461.

Teng, S-H. (1999) The acquisition of le in L2 Chinese. *Shijie Hanyu Jiaoxue (World Chinese Language Teaching)* 1: 56-63.

Tenny, C. (1994) Aspectual roles and the syntax-semantics interface. Dordrecht: Kluwer.

Thompson, G. (1996) Some Misconceptions about Communicative Language Teaching. *ELT Journal* 50 (1), 9-15.

Tomasello, M. & Herron, C. (1988) Down the Garden Path: inducing and correcting overgeneralization errors in the foreign language classroom. *Applied Psycholinguistics*, 9, 237-246.

Trahey, M. & White, L. (1993) Positive evidence and preemption in the second language classroom. *Studies in Second Language Acquisition, 5,* 181-204.

Truscott, J. (1998) Noticing in second language acquisition: A critical review. SLA Research 14, 103-135.

VanPatten, B. (1986) Second language acquisition research and the learning/teaching of Spanish: some research findings and their implications. Hispania 69, 202-216.

VanPatten, B. (1990) Theory and research in second language acquisition and foreign language learning: on producers and consumers. In Vanpattern, B. and Lee, J. F. (ed.) *Second language acquisition: foreign language learning*. Multilingual Matters Ltd.

VanPatten, B. (1993) Grammar instruction for the acquisition rich classroom. *Foreign Language Annals, 26,* 433–450.

VanPatten, B. (1996) Input processing and grammar instruction: Theory and research. Norwood, NJ.

VanPatten, B. (2002) Processing instruction: an update. Language Learning, 52(4), 755-803.

VanPatten, B. (2004) Input processing in second language acquisition. *Processing instruction: Theory, research, and commentary*, 5-31.

VanPatten, B. & Cadierno, T. (1993) Explicit instruction and input processing. *Studies in Second Language Acquisition*, 15, 225-241.

Van Valin, R.D. and LaPolla, R.J. (1997) *Syntax: structure, meaning and function*. Cambridge University Press, Cambridge.

Vendler, Z. (1957) Verbs and Times. The Philosophical Review, 66: 143-60.

Verkuyl, H. J. (1972) On the compositional nature of the aspects. Vol. 15, Foundations of language, supplementary series. Dordrecht: Reidel.

Verkuyl, H. J. (1989) Aspectual classes and aspectual composition. Linguistics and Philosophy, 12: 39–95.

Verkuyl, H.J. (1993) *A theory of aspectuality: the interaction between temporal and atemporal structure.* Cambridge University Press, Cambridge.

Vet, C. and Vetters, C. (1994) Tense and aspect in discourse. Berlin: Mouton de Gruyter.

Wang, L. (2012) Second Language Acquisition of Mandarin Aspect Markers by Native Swedish Adults. Acta Universitatis Upsaliensis. Studia Linguistica Upsaliensia 12. 148 pp.

Wen, X. (1995) Second language acquisition of the Chinese particle *le. International Journal of Applied Linguistics*, Vol. 5, (1): 45-62.

Wen, X. (1997) Acquisition of Chinese aspect: An analysis of the interlanguage of learners of Chinese as a second language. *ITL: Review of Applied Linguistics*, 5, 45-62.

White, J. (1998). Getting the learners attention: A typographical input enhancement study. In Doughty, C. & Williams, J. (Eds.), *Focus on form in classroom second language acquisition* (pp. 85-113). Cambridge: Cambridge University Press.

White, L. (1991) Adverb placement in second language acquisition: Some positive and negative evidence in the classroom. Second Language Research, 7 (2), 133-161.

Wilkins, D. (1976) Notional syllabuses. Oxford, Oxford University Press.

Williams, J. (2005) Form-focused instruction. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning*, pp. 671-691. Mahwah, NJ: Erlbaum.

Williams, J. & Evans, J. (1998) What kind of focus and on which forms? In Doughty, C. & Williams, J. (Eds.), *Focus on form in classroom second language acquisition* (pp. 139-155). Cambridge: Cambridge University Press.

Willis, J. (1996) A Framework for Task-based Learning. Harlow: Longman.

Wu, Z. X. (2000) *Grammaticalization and the Development of Functional Categories in Chinese*. Doctoral Dissertation, University of Southern California.

Xiao, R. & McEnery, T. (2004) Aspect in Mandarin Chinese. John Benjamins B. V.

Xing, J. Z. (2006) *Teaching and learning Chinese as a foreign language: A pedagogical grammar.* Hongkong University Press.

Yang. G. W. (2007) *The semantics of Chinese aspects: Theoretical descriptions and a computational implementation.* Peter Lang GmbH.

Yang, S. Huang, Y. & Cao, X. (1999) Huanyu zuowei di er yuyan de tibiao ji xide (The acquisition of aspect markers in L2 Chinese). *Journal of the Chinese Language Teachers Association* 34/1: 31-54.

Yang, S. Huang, Y. & Cao, X. (2000) Hanyu tibiao ji xide guocheng zhong de biaozhu buzu xianxiang (The phenomenon of underuse in the acquisition of L2 Chinese). *Journal of the Chinese Language Teachers Association* 35/3: 87–116.

Yip, P. C. & Don, R. (1997) Chinese: An essential grammar. Routledge.

Yip, P. C. & Don, R. (1998). Intermediate Chinese: A Grammar and Workbook. Routledge.

Zafar, S. and Meenakshi, K. (2012) Individual learner differences and second language acquisition: A review. *Journal of Language Teaching and Research*, *3*(4), 639-646.

Zhang, Q. (2008) The acquisition of resultative verb compounds in Mandarin by English speakers. Proceedings

of the 9th Generative Approaches to Second Language Acquisition Conference.

Zhao, L. (1996) Waiguo liuxuesheng shiyong "le" de qingkuang diaocha he fenxi (Investigation into and the analysis of the usage of le by foreign students). In *The Collection of Papers from Beijing Language and Culture University at the Fifth International Seminar on Chinese Language Teaching*. Beijing: Beijing Language and Culture University Press.

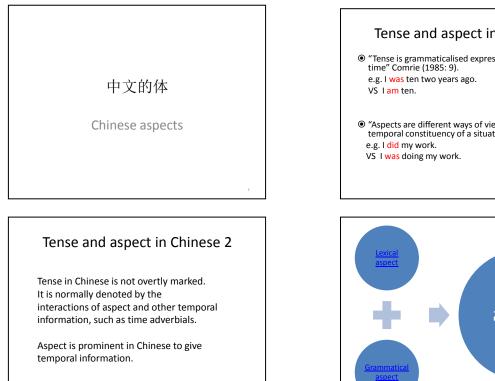
Zhao, Y. R. (1968) Grammar of spoken Chinese. Berkeley: University of California Press.

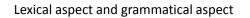
Zhu, D. (1982) Yufa Jiangyi (Lecture Notes on Chinese Grammar). Commercial Press, Beijing.

Appendices

Appendix 1

Chinese aspect markers for Grammar-Translation group





- "Lexical aspect...refers to the characteristics of what is inherent in the lexical items which describe the situation"
- e.g. drink VS drink up
- "grammatical aspect ... refers to aspectual distinctions which are marked explicitly by linguistic devices, usually auxiliaries and/or inflectional and derivational morphology" (Li and Shirai, 2000: 3).
- e.g. drinks VS is drinking

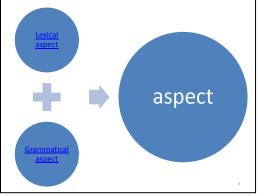
CHINESE GRAMMATICAL ASPECT

Perfective aspect: 'Perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation' (Comrie, 1976: 16).

Imperfective aspect: Imperfectivity has 'explicit reference to the internal temporal structure of a situation, viewing a situation from within' (ibid: 24).

e.g. I read a book. VS I am reading a book.

Tense and aspect in Chinese 1 "Tense is grammaticalised expression of location in time" Comrie (1985: 9). "Aspects are different ways of viewing the internal temporal constituency of a situation" Comrie (1976: 3).





TRANSLATION EXERCISES

Appendix 2

Translation exercises for the Grammar-Translation group

Translation exercises: translate the following English sentences into Chinese. The Chinese vocabulary is given under the English words to assist you in completing the tasks. Not every sentence needs aspect markers.

film.

Task 1 The use of verb final le

- I like grapes and reading books. 1.
 - Wo xihuan putao he kan shu
- I was poor five years ago. 2.
- Wo shi qiong wu nian qian
- 3. I got up at 6am.
- wo qichuan liudian
- 4. I ate a bowl of rice.
- Wo chi yi wan fan
- 5. He took ten minutes to school by bus.
- Ta yong shi fenzhong qu xuexiao zuo che
- 6. read a book in school. He
- Ta du yiben shu zai xuexiao friends came to see me in the afternoon. 7. My
- Wode pengyou lai kan wo xiawu 8. I took Xiaohong to the park to play.
- Wo dai qu gongyuan wan 9.
 - We went to the cinema to watch a
- Women qu dianyingyuan kan yichang dianying 10. I watched the film till 8pm.
- Wo kan dianying dao badian 11. He gave me a call to ask me to go home.
- Ta gei wo yige dianhua jiao wo hui jia
- 12. Mum came home at 10pm. Mama hui jia shidia shidian
- 13. I enjoyed today. Wo yukuai jintian

Task 2. The use of sentence final le

- 1. The fish died.
 - Yu si
- The dog is getting old. 2. Gou bian lao
- 3. He is drunk.
- Ta he duo
- 4. The child is asleep.
 - Haizi shuizhao
- I can speak Chinese now. 5 Wo hui shuo zhongwen

Task 3. The use of progressive marker zai

- 1. I am drinking water.
- Wo he shui
- 2. I am winning.
- Wo ying 3. I am reading (a) book.
- Wo du shu
- I am in my bedroom reading books/a book. 4.
- Wo zai wode woshi du shu
- 5. The river is running.
 - Heshui liu

Task 4. The use of durative marker *zhe*

- 1. I am wearing red clothes.
- Wo chuan hong yifu
- 2. I have been walking for ten minutes. Wo zou shi fenzhong
- 3. A clock hangs on the wall.
- Yige zhong gua qiangshang 4. I am winning.
- 4. I am winning. Wo ying
- 5. He came in crying. Ta jinlai ku

Task 5. The use of experiential marker guo

- 1. I ate Beijing duck (in the past). Wo chi Beijing kaoya
- 2. I lived in Beijing for three years. Wo zhu zai Beijing san nian
- 3. I have known it.
 - Wo zhidao ta
- 4. I was young once.
 - Wo nianqing congqian

Appendix 3

Chinese aspect markers for the communicative group



















Illustration removed for copyright restrictions



Illustration removed for copyright restrictions



Illustration removed for copyright restrictions

conversation

Use of sentence final *le, guo* and *zai*





Illustration removed for copyright restrictions





Appendix 4

Immediate test

Task one Translate the following sentences into Chinese. You may write in pinyin. Equivalent Chinese words are given under the English words to assist you in completing the task (30 marks).

- 1. Flowers are in bloom.
 - Hua kai
- 2. The shop is closed. Shangdian guanmen
- 3. I do not have any more money. Wo mei you qian
- 4. I drank a glass of water.
- Wo he yi bei shui
- 5. He came to see me on Sunday.
- Ta laikan woxingqitian6.Have you doneyour homework?
- Ni zuowan nide zuoye
- 7. Have you seen Beijing opera?
- Ni kan jingju
- 8. He bought many Chinese books (in the past). Ta mai henduo zhongwen shu
- 9. I was once a teacher. Wo dang laoshi
- 10. She is wearing red clothes.
- Ta chuan hong yifu
- 11. She walked into the classroom smiling.
- Ta zou jin jiaoshi xiao
- 12. He was watching TV just now.
- Ta kan dianshi gangcai
- 13. I have been walking for forty minutes. Wo zou sishi fenzhong
- 14. I read a book listening to music.Wo du shu ting yinyue
- 15. The clock hangs on the wall. Zhong gua qiangshang

Task two Talk about the pictures, and describe pictures 1 to 5 in pinyin. A vocabulary list is given below to assist you in completing the task (30 marks).



http://www.91118.com/composition/photo/write_221.html

Task three Fill in each blank with the proper word. There are three possible answers given for each blank. Circle the one you choose. Equivalent English words are given under the Chinese words to assist you in completing the task (30 marks).

Scenario: Person A and person B are both Chinese students at Shanxi University. Person A met person B in the library, and went to talk to B. Person A found out that person B wanted to study in the UK. Person A had studied in the UK before, so person A talked about the life in the UK to person B.

A: Lǐ nà, nǐ (1) kàn yīngwén shū ma?	(1)	A zai	B zhe	C N/A			
You read English book ?							
B: Shì de. Wǒ cānjiā (2) yí gè yīngwén bān.	(2)	A zhe	B guo	C le			
Yes. I join one English class							
A: Nǐ wèishénme xué (3) yīngwén?	(3)	A zhe	B le	C N/A			
You why study Chinese?							
B: Yīnwei wõ xiǎng qù yīngguó dúshū. Wõ yǐ qián xué (4) yīngwén,	(4)	A zhe	B le	C guo			
Because I want go UK study. I before study English,							
kěshì xiànzài hěnduō dōu wàng (5) 。	(5)	A zhe	B le	C guo			
But now many all forget .	(6)	A N/A	B le	C guo			
A: Wǒ qù (6) yīngguó, wǒ zài Aston dàxué xuéxí (7) yì nián。	(7)	A N/A	B le	C zhe			
I go UK, I in university study one year.	(8)	A N/A	B le	C guo			
Wŏ hĕn xĭhuan (8) yīngguó。Yīngguó yŏu (9) hĕnduō gōngyuán。	(9)	A N/A	B le	C guo			
I very like UK. UK has many parks							
Tiānqì hǎo deshíhou, hěnduō rén zài cǎodì shàng tǎng (10) shài tàiyáng. (10) A zai B zhe C le							
Weather good when, many people are grass on lie bath sun							
B: Zhème shuō, nǐde yīngyǔ yídìng hěn hǎo。 Nǐ néng bāng wǒ xué yīngyǔ	u <u>(11)</u> ?	(1) A 1	N/A B	ma C le			
In that case, your English must very good. You can help me study English ?							
A: Néng. Búguò xiànzài bùxíng. Xiàwǔ sāndiǎn, nǐ zài zhèr zuò <u>(12</u>)	děng w	лŏ。 (12) А	he B	zhe C le			
Yes. But now not possible. Afternoon 3 o'clock, you at here sit	wait m	e.					
B: Hǎode. Xiànzài kuài zhōngwù $(\underline{13})$, nǐ qù chī zhōngwùfàn $(\underline{14})$?	(13) A	A ne	B N/A	C le			
Ok. Now nearly noon , you go eat lunch ?	(14)	A le	B N/A	C ma			
A: Wǒ bù è $\underline{(15)}$, nǐ xiān qù.	(15)	A le	B zhe	C N/A			
I not hungry , you first go.							

Appendix 5

Tasks for aspect markers in the post-test in the main study

Task 3. 请将下列句子翻译成中文。(10分) / Translate the following sentences into Chinese, you can use either pinyin or characters. (10 marks).

- 1. He ordered a portion of pork fried noodles.
- 2. I have tried Beijing roast duck (before).
- 3. She is buying a train ticket to Beijing.
- 4. Do you want to buy a few scarves for your wife?
- 5. We have been to school today.

Task 8. 完形填空。(15 分)/ Fill in the blanks with an appropriate word, you can circle the word from three options. (15 marks)

Jīnnián bāyuè, wõ hé māma qù (1) Běijīng hé Guǎngzhōu. Wǒmen zuò (2) fēijī xiān dào Guǎngzhōu, cóng Guǎngzhōu dào Běijīng. Wǒmen zuì xǐhuan (3) Běijīng. Běijīng hěn dà, (4) hěn měi. Wǒmen qù (5) chángchéng, pāi (6) hěnduō zhàopiàn. Dànshì Běijīng hěn rẻ, rén yě hěnduō. Wǒmen bù xǐhuan Běijīng de tiānqì. Wǒmen zhù (7) eijīng fàndiàn, zhù (8) sìtiān. Zhège fàndiàn (9) Běijīng shìzhōngxīn. Fàndiàn hěndà yĕ hěn guì. Wǒmen míngnián hái (10) qù Běijīng.

(1) a	. le	b. N/A^{53}	c. zhe
(2)	a. le	b. N/A	c. zhe
(3)	a. le	b. N/A	c. zhe
(4)	a. ye	b. dou	c. shi
(5)	a. guo	b. le	c. N/A
(6)	a. guo	b. le	c. N/A
(7)	a. le	b. zai	c. guo
(8)	a. le	b. guo	c. zai
(9)	a. zai	b. zhe	c. shi
(10) a	. bu	b. yao	c. you

Task 10. 请用一百个左右汉字写一小段话。内容是关于你的一次去餐厅吃饭的经历。例如你去了哪儿,和谁去的,你(们)吃了什么,喝了什么,花了多少钱,等等。请写在下面空白处。(25 分)/ Write a short passage with about one hundred characters about your dining in a restaurant. You may include information such as where you went, who you went with, what you ate and drank, and how much you spent, etc. (25 marks).

⁵³ N/A stands for no answer, which means to leave it blank.