

CHAPTER FOUR

TENSE IN CHINESE

As mentioned in Chapter One, it is generally believed that Chinese requires some additional information such as time adverbials to specify the time of action in a sentence. For example,

- | | | | |
|-----|----|------------------------|--|
| (1) | a. | Tā qù Běijīng | lit. 'He go Beijing.' |
| | b. | Tā míngtiān qù Běijīng | 'He will go to Beijing tomorrow.' |
| | c. | Tā qùle Běijīng | 'He has gone to Beijing.' |
| | d. | Tā qùle Běijīng le | 'He had gone to Beijing.' |
| | e. | Tā qù Běijīng le | 'He <u>is</u> going to Beijing (as compared to an earlier decision that he refused to go to Beijing).' |

Sentence (1a) provides no clue on 'when' he will go to Beijing. The meaning is only clear after time adverbial *míngtiān* 'tomorrow' or the marker *le* is added to the sentence as shown in (1b) to (1e).

Hence, Chinese is often regarded as tenseless or has no tense markers (Chao, 1968; Rohsenow, 1978a; Smith, 1991; Binnick, 1991), as it lacks inflectional endings like those obligatorily used for verbs in many Indo-European languages. Only a few linguists, including Comrie (1976, 1985) and Lin (2000, 2002), have claimed that the language has some features of tense. For instance, the verbal suffix *le* is found to

convey the meaning of past tense or/and relative tense. It can also be deduced from discussions in Chapter One that, many linguists believe that if there is tense in Chinese, it entails aspect but not all aspectual expressions imply tense. These are misconceptions.

We believe that there is tense in Chinese. In this Chapter, we will conduct a preliminary investigation of the tense system in Chinese, and identify the syntactic properties of the set of tense markers that are associated with the system. The hypothesis is that, if Chinese has a well-established grammatical category of tense, the following conditions will hold:

- (i) A well-formed sentence may express tense without the co-occurrence of any adverbial of time;
- (ii) The set of markers selected for this study will denote tense; and
- (iii) The markers form an integral and coherent system.

In other words, if it is proven that sentences in Chinese do not necessarily depend on time adverbials and so on to express the temporal setting of the events, and the markers that have long been regarded as aspect markers in Chinese are tense markers as well and if we can capture the regular behaviour of the tense markers, our investigation will be a significant finding in this field of study.

This chapter will begin with an account of some general theories on tense, with emphasis on the schema of time representation advocated by Reichenbach (1947), and some definitions of tense by Comrie (1985) (Section 4.1). Basic understanding about the reference points in Chinese will be introduced in Section 4.2. Section 4.3 will discuss and examine the tensal properties of all the markers selected for this study,

namely, *le*₁, *le*₂, *guo*₁/*guole*, *guo*₂, *zhe* and *zài* using two criteria: (a) their co-occurrence with time adverbials, and (b) their syntactic grammaticality based on the theory of Lexicase. The tests will not only justify the identity of these markers as tense markers, but also verify the acceptability and the conditions for the existence of such markers in Chinese. Based on observations derived from the tests, we will propose a schematic representation of tense for Chinese and show that the markers can be integrated into a coherent system (Section 4.4). In addition, using the same schematic representation, we will argue that there is only one type of tense in Chinese, namely, the Extended Absolute-Relative Tense. This type of tense is a complex form of the Absolute-Relative Tense (henceforth A-R Tense) defined by Comrie (1985). It will also be shown how tense in Chinese can be explained graphically. Finally, a concluding remark on the findings on tense in Chinese will be provided in Section 4.5.

We shall begin this chapter with the assumption that only the bounded aspect markers, that is, the two *le* and the two *guo*, are past tense markers that contain the features of [+past], while *zhe* and *zài* are [-past]. Therefore, we will set aside aspect temporarily and focus mainly on the properties of tense in our analysis. But, this does not mean that we are trying to distinguish tense from aspect. Tense and aspect are closely correlated in linguistics, as seen in the following quotations from a couple of established linguists:

The different temporal locations of an event – past, present, and future – are inherently correlated with differences in mood and aspect. ... An event that is ongoing at the speech moment has not been completed. Hence there is a correlation between present tense and incomplete (imperfective or progressive) aspect and, by implication, between past tense and complete (perfective or non-progressive) aspect. A

consequence of these correlations is that temporal distinctions may be expressed by morphosyntactic categories that have wider modal or aspectual functions. (Chung and Timberlake, 1985: 206)

Comrie (1985:9) defines tense as a “grammaticalised expression of location in time”. He elaborates further the notion of tense in 1999:

First, from a formal point of view, tense is a grammatical category, usually expressed overtly on the verb. Second, from a semantic viewpoint, tense serves to locate situations (events, states, processes, actions) in time... Location in time is one of the two main facets of the general notion of temporality in language... temporality has another side, namely the internal structure of a situation, this is the area covered by the grammatical category of aspect and the lexical category of *aktionsart*. (1999: 363)

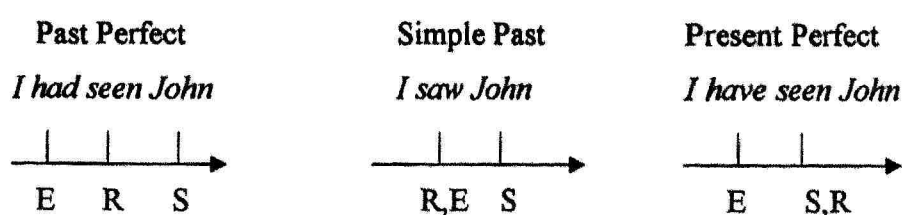
4.1 General Theories on Tense

Tense is concerned with deictic temporal relations. It relates the time of an event to another already established or designated time. But time itself does not have any inherent topological feature that one can locate in a situation; hence, it becomes necessary to select a reference point of time or a tense locus (term used by Chung and Timberlake), relative to which the situation can then be located.

Cross-linguistically, the most natural reference point is the present moment, especially when no reference point is given contextually. In general, there are two types of tenses commonly found in human languages namely, absolute tense and relative tense. Absolute tense uses the present moment as the reference point. It is usually classified into three entities: present tense in which the time of the situation overlaps with the present moment as in *John is eating the cake* in English; past tense

in which the time of the situation is located before the present moment as in *John ate the cake*, and future tense in which the time of the situation occurs after the present moment as in *John will eat the cake*. Relative tense refers to a tense that tells whether the situation is located at, before or after a contextually given reference point, which may or may not be the present moment. Similarly, relative tense can be split into relative present, relative past and relative future tense (Comrie, 1999).

Philosopher Hans Reichenbach (1947) has proposed a schematic representation of time specification in terms of E (Event Time), R (Reference Time) and S (Speech Time).¹ E is the moment in which the state or event in question occurs; R is the time specified by the sentence, and S, the moment of utterance. The three elements may or may not coincide, depending on the content of the sentence per se. The most significant credit to Reichenbach's theory is that it sketches a very simple account of the linear sequence of tense in English. As seen in Figure 4.1 below, he generalizes the simple and perfect tenses of English in a notion of precedence, and shows how an event is related to the speech time (Cited from Binnick 1991: 111):



¹ Reichenbach (1947) uses the notion of ET, RT and ST for his three primitives while other scholars such as Comrie (1985), Binnick (1991) and Klein (1994) use E, R and T for the same notions of time. We adopt Comrie's notions in this study.

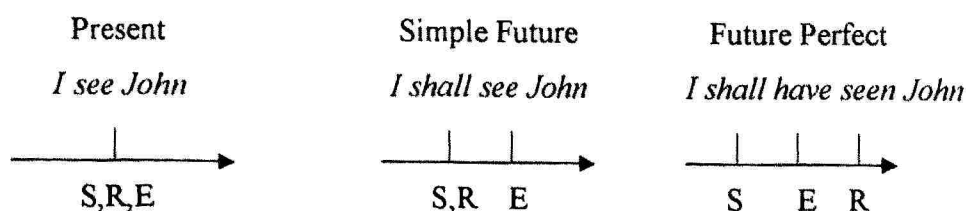


Figure 4.1

Reichenbach's theory, however, was criticised. It is said that the linear sequence of S,R—E for the simple future does not exclude the possibility of having R following S, which will be a violation of English grammar (Binnick, 1991: 115). Besides, as pointed out by Bull (1960), the theory fails to show how S, R and E are related or ordered with respect to each other, and it does not provide for the conditional perfect "would have" (Rohsenow, 1978). Nevertheless, Reichenbach has clearly defined that the focus of absolute tense is how E is specified with respect to S, the current moment of utterance.

Tense in human languages is far more complicated than a layman could imagine. Other than 'pure' absolute and relative tenses mentioned above, there are languages that may combine the absolute and relative reference points in one utterance or shift one tense to another (Comrie, 1985; Binnick, 1991). Among these complicated forms of tenses, there is the Absolute-Relative Tense (a term used by Comrie) that will combine absolute time location of a reference point with relative time location of a situation. The tense is determined by a reference point situated at, before or after the present moment (forming an absolute tense of $R=S$, $R<S$ and $R>S$ respectively), and at the same time, by a situation that is located at, before or after the reference point

(forming a relative tense of $E=R$, $E<R$ and $E>R$ respectively) (Comrie, 1985:65).²

Hence, A-R Tense establishes the theory that E is relative to R and R is relative to S.

There is no direct relation between E and S.

The pluperfect in English is a typical example of combined tenses. For example,

(2) Mary had left by three o'clock yesterday.

In (2), the reference point *three o'clock yesterday* establishes a reference point that precedes the speech time. It forms an absolute tense. Simultaneously, the event of Mary's leaving took place with respect to *three o'clock yesterday*. It is a relative tense. Hence, it results in the combination of the two tenses that E (Mary's leaving) $< R$ (*three o'clock yesterday*) $< S$ (the unspecified speech time in the sentence), just as what Reichenbach has shown in his diagram for the past perfect mentioned above.

Can A-R Tense be expressed in Reichenbach's one-dimensional formulation? Obviously, it is not possible. The S, E, R relationship in human languages is far more complicated than the case in (2). The latter is just a straightforward example that happens to be available in English.

Inspired by Reichenbach (1947), Comrie (1985), Bull (1960), Binnick (1991) and several other linguists, we believe that limitation in Reichenbach's model can be overcome by flipping his linear representation vertically. After flipping, the new

² Aspect is not part of any discussion of Time in Reichenbach's theory; however, the E-R relation has been found related to the notion of aspect (Comrie, 1976; Rohsenow, 1978; Cheng, 1985-86). There are three possible aspects that can be built on such E-R relations, that is, $E<R$ (perfect or anterior or retrospective), $E=R$ (imperfect or synchrospective) and $E>R$ (prospective or posterior). Retrospective, synchrospective and prospective are terms used in Cheng (1985-86).

diagram will allow a horizontal movement of R and E along their own vectors. Graphically, the new representation will look like Figure 4.2 below.

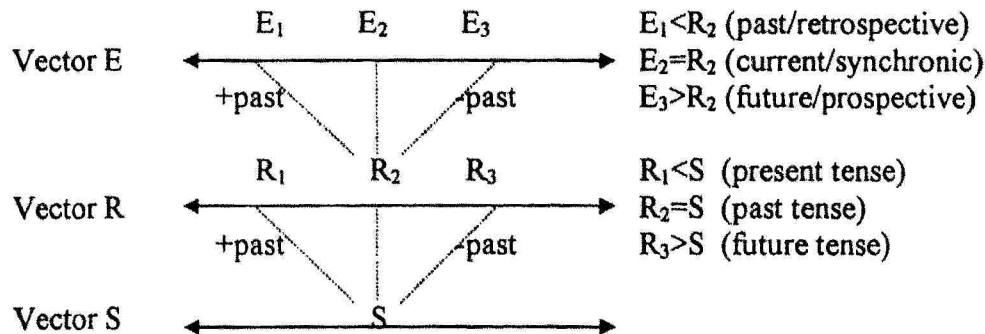


Figure 4.2

In the Figure, E_α refers to different cases of E and R_α to different points in time ($\alpha = 1, 2, 3 \dots$). When E, R and S form a straight line, it will be the case of absolute present tense. For sentence (2), the figurative representation will be:

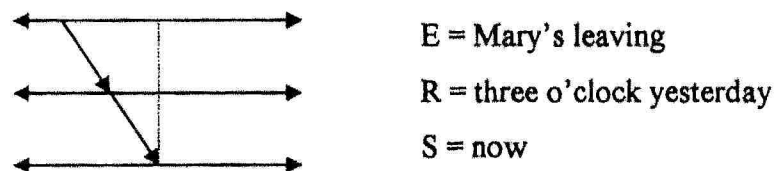


Figure 4.3

Here, $R < S$ and $E < R$. R is situated prior to the speech time, and E is prior to R.

Comrie (1985) did not mention Chinese when he discussed the characteristics of A-R Tense. However, we will soon see that Chinese is in fact a language that is very rich in this particular type of tense, and its system is even more complicated than the pluperfect in English. Hence, Figure 4.2 will further be modified and applied to the

system in Chinese in Section 4.4. after the characteristics of all tense markers are investigated in the following section.

4.2 Reference Points in Chinese

Before looking into the tense system of Chinese, it may be necessary for us to first understand the concept of reference points of time in the language.

Liao (1983) is considered a pioneer in the study of the reference points in time and space in discourse in modern Chinese. His study leads to the development of the examination of space in Chinese linguistics. His comprehensive description of reference points in time is so clear that it has never been queried.

He claims that there are three criteria to determine the reference point in Chinese. They are (1) speech time or the time an utterance is spoken or a sentence is written, (2) the time that Jesus Christ was born, and (3) the time that a known event occurs. He adds that at the sentence level, a reference point may be deleted by constituent ellipsis if the same time reference has already appeared in, or can be deduced from an earlier sentence or sentences. At the discourse level, a reference point in time can be traced from its background information by functional ellipsis.

Nonetheless, Liao emphasizes that, in cases where there is no corresponding anterior reference of time in the sentences of the discourse in Chinese, the reference time will be interpreted by deduction from the content or by intuition.

Interpretation by intuition is perhaps a habit of the Chinese-speaking people, and it is most obvious in their expression of space. In utterances, it is important to specify the reference point in space when talking about or giving directions in

languages, but the Chinese, as Liao points out, will not specify the reference point unless there is a need to draw the listener's attention. Listeners are assumed to know what or where the reference is.

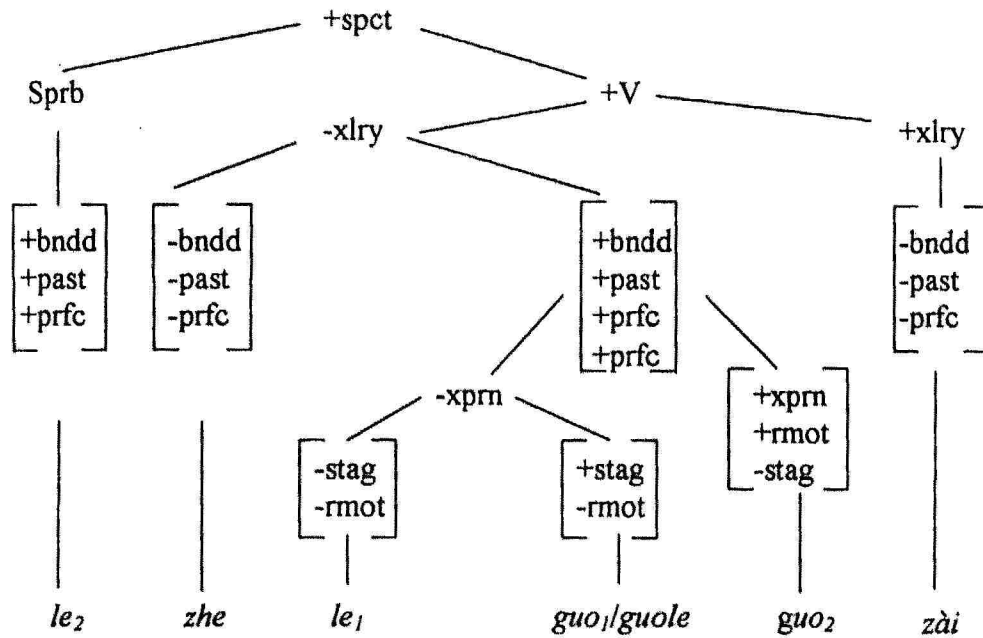
According to Liao (1983), it would not be incorrect to conclude that the most natural reference point in time in Chinese utterances or sentences is the speech time, unless there exists a time adverbial in the same data, and also, irrespective of whether or not the point of time is uttered. Liao's observations on the reference time have been proven accurate. Linguists such as L. Zhang (1997) have stressed in their studies of *le* that the marker is always used with respect to the speech time or the time of utterance or narration, and J. Zhang (1996) has claimed that native speakers of Chinese do not have difficulty in identifying the 'tense' of an utterance even though there is no marker in the sentences. This is possibly due to the fact that the Chinese observe the Principle of Temporal Sequence (PTS) which states that the temporal order of a state is reflected in the word order of Chinese (Tai, 1985b).³ This means that speakers of Chinese will be able to distinguish which action should occur first, or how an event is related temporally to another by word order in the utterances, without the existence of any 'tense marker'.

4.3 Identification of Tense Markers

This section aims to identify the properties of tense markers in Chinese, by first testing the co-occurrence of the aspect markers in Figure 2.8 in Chapter Two against selected time words or adverbials; and subsequently, to justify the

³ Refer to the description on Tai's PTS in Chapter One.

grammaticality of the sentences by using the stemmas in Lexicase theory. Figure 2.8 is reproduced below as Figure 4.4.



Complete Chart of the Subcategorization of Tense and Aspect Markers in Chinese

Figure 4.4

Time adverbials used for the testing of present, past and future tenses in Chinese include *xiànzài* 'now', *zhèng* 'just' for current/simultaneous events; *zuótiān* 'yesterday', *yǐjīng* 'already', *gāng* 'just, a short while ago' for past/anterior events, and *míngtiān* 'tomorrow', *jiāng* 'about to', *guò yīhuìr* 'a short while later' for future/posterior events respectively. For an event that has at least occurred once before, *céngjīng* 'formerly' will be used. Finally, the adverb for testing an event that has been ongoing for quite sometime will be *yīzhí* 'all along, continuously'. It is assumed that the tense of the marker will be consistent with the temporal feature of a time adverbial

if it co-exists with the designated time adverbial in a grammatically well-formed sentence. In other words, a marker should contain the same temporal feature as the time adverbial. For example, if *le₁* co-occurs only with *zuótiān* ‘yesterday’ but not *míngtiān* ‘tomorrow’ in a sentence, it is then a past tense marker, not a marker of future tense.

In this analysis, *le₁* and *le₂* will be discussed in one group since they are homonyms and semantically closely related. Similarly, *guo₁/guole* and *guo₂* will form another pair for comparison. *Zhe* and *zài*, both having the feature [-past] will be dealt with separately. Note that except for *le₂* and *zài*, all markers are regarded as inflection of verbs. Using the Triune Sign principle of Lexicase, the construction of “V+marker” will be treated as one single inseparable lexical item in all Lexicase stemmas in this study.

It is necessary to stress here that, in the following discussion, only the tensal property of the markers will be examined. Their aspectual features will not be discussed unless it is necessary to do so. For instance, boundedness is a significant feature in aspect and therefore, it will only be explained in the next chapter in relation to aspect. At present, all bounded markers are regarded as +past.

4.3.1 *Le (le₁ and le₂) as a Tense Marker*

Syntactically, there are two *le* in Chinese: the traditionally so-called verbal suffix *le₁* and the clausal or sentential final *le₂*. In Lexicase theory, *le₂* is featured as ‘Sperrbaum’ [Sprb], which is defined syntactically as “a class of words that occur as the rightmost dependent of a [+root] or a [+topc] word.” According to Comrie (1976:

82), *le*₁ “indicates a past perfect situation” which, strictly speaking, “is relative rather than absolute”.

Based on their syntactic distributions, Lü (1983) generalises that *le*₁ and *le*₂ only occur in six environments as listed below:

- | | |
|-------------------------------------|--|
| (A) V + <i>le</i> ₁ + NP | (B) V + <i>le</i> ₁ + NP + <i>le</i> ₂ |
| (C) V + NP + <i>le</i> ₂ | (D) NP + <i>le</i> |
| (E) V + <i>le</i> | (F) Adj + <i>le</i> |

The NP could be a simple noun, or a time or numeral or measure expression or a simple sentence. Subscripts of *le* in the constructions above show that the *le* in (A) – (C) have been confirmed as either *le*₁ or *le*₂, while the identity of those in (D) – (F) are still controversial in the sense that the marker that occupies this position could be interpreted as *le*₁ or *le*₂ or a haplology of *le*₁₊₂ or just a general *le* as argued in the works of many linguists, including Chao (1968), Lü (1983), Huang (1988) and Gong (1988). To a great extent, the identity of *le* is determined by the aspectual properties of the verb, the arguments in the sentence or discourse. But our focus in this section is to explore the tensal properties of the marker. Hence, we will focus our discussion on whether *le* is +past or –past, and whether it expresses absolute or relative tense, but not whether it is perfective or imperfective.

Type (A): V + *le*₁ + NP

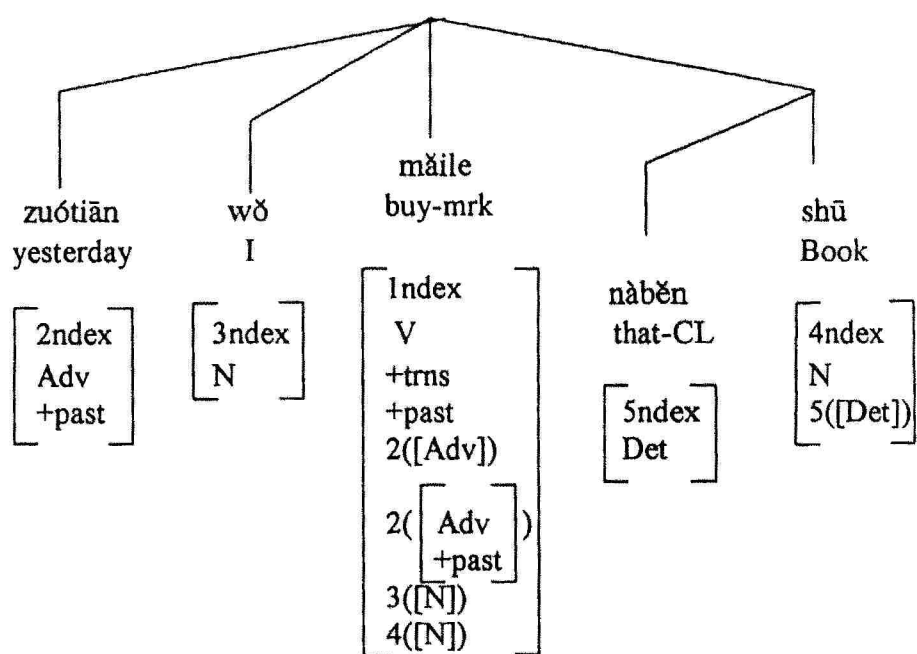
The most common form of this construction is the verb-object construction in Chinese, such as *mǎi shū* ‘to buy a book’, *chī fàn* ‘to eat rice’ and *hē chá* ‘to drink tea’. The construction is often used in simple sentences like *Wǒ chī fàn* ‘I eat rice’,

but it may also appear in relative clauses like *chīle fàn* '(I) have eaten rice' in *Chīle fàn wǒ jiù huíjiā* 'I will go home after eating'.

Let us compare the following sets of sentences:

- (3) a. Wǒ mǎile_i nàběn shū
I buy-mrk that-CL book
'I bought that book.'
- b. Zuótiān wǒ mǎile nàběn shū
'I bought that book yesterday.'
- c. Wǒ yǐjīng mǎile nàběn shū
'I have already bought that book.'
- d. *Wǒ xiànzài mǎile nàběn shū
*'I bought that book now.'
- e. *Míngtiān wǒ mǎile nàběn shū
*'I bought that book tomorrow.'

A simple test with adverbs in (b) - (e) proves that *mǎile* is +past because it co-occurs with adverbs *zuótiān* 'yesterday' and *yǐjīng* 'already' but not *xiànzài* 'now' and *míngtiān* 'tomorrow'. The grammaticality of (b) can be seen in the following stemma in Lexicase theory.



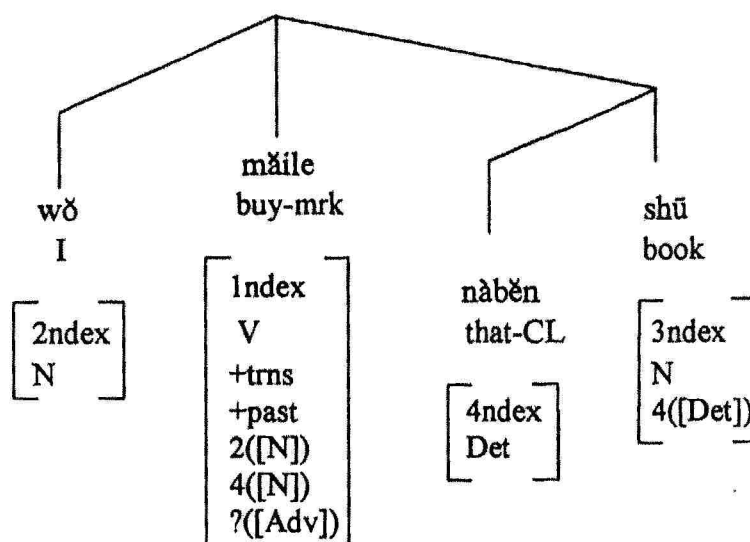
In the stemma, all features in the lexical matrix of the verb are indexed as required by the grammar of Lexicase. In the lexical matrix of the head *mǎile* 'buy', the transitive past tense verb expects an optional dependent ?([Adv]). This requirement is met with the presence of the adverb *zuótiān* 'yesterday' (2ndex). The feature +past of the adverb is consistent with the non-contextual feature +past in the lexical matrix of the verb. Therefore, the index of the adverb is copied onto the skeletal feature, forming 2([Adv]).

When the adverb is replaced by a word that indicates future time, such as *míngtiān* 'tomorrow', the sentence becomes ungrammatical because the contextual feature in the lexical matrix of *mǎile* cannot be satisfied. The matrix expects an optional adverb which has a +past feature, but the non-contextual feature of the dependent (2ndex) is -past, which is a contradiction.

*Míngtiān wǒ	mǎile	yīběn shū	*‘I bought a book tomorrow.’
2ndex	1ndex		
Adv	+past		
-past	2([Adv])		
	?(<div style="border: 1px solid black; padding: 2px; display: inline-block;">Adv +past</div>)		

Sentence (3a) *Wǒ mǎile_i nàběn shū* ‘I bought that book’ further confirms that *le_i* in the construction is a tense marker because, without any adverb, the sentence is still grammatical. Since the most natural reference time in Chinese is the time of utterance, it entails that *le_i* marks absolute past tense that can be paraphrased as ‘action V (the event) has been realized or completed before S (speech time)’.

Tense and grammaticality can also be captured syntactically in the stemma below although it does not contain any adverb. Compared to the tree above, it is obvious that the skeletal feature ?([Adv]) is not an obligatory constituent in the sentence. Should there be any, the features should not contradict each other.



It is also deducible syntactically that *le₁* is a ‘boundary’ marker of an action. Let us replace the word *zuótiān* ‘yesterday’ in sentence (3b) [repeated as sentence (4) below] with other adverbs that are closer to the current moment, that is, *gāngcái* ‘just now, a moment ago’, *gāng* ‘just’, *xiànzài* ‘now’, *guò yīhuìr* ‘a short while later’. The adverbs form a spectrum with little difference in time.

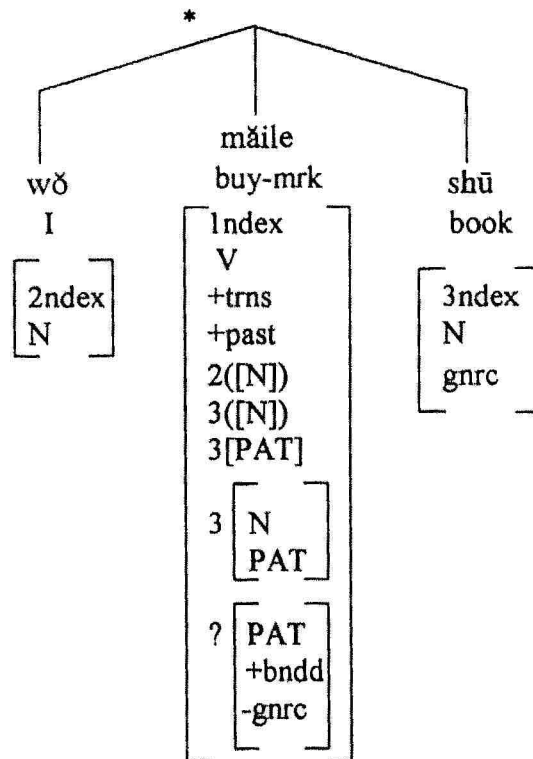
- | | | |
|-----|---|--|
| (4) | Zuótiān wǒ mǎile nàběn shū | ‘I bought that book yesterday.’ |
| a. | Gāngcái wǒ mǎile nàběn shū | ‘I bought that book just now.’ |
| b. | Wǒ gāng mǎile nàběn shū | ‘I have just bought that book.’ |
| c. | *Wǒ xiànzài mǎile ₁ nàběn shū | *‘I bought that book now.’ |
| d. | *Wǒ guò yīhuìr mǎile ₁ nàběn shū | *‘I bought that book a short while later’. |

The difference in grammaticality in sentences (b) and (c) indicates that there is a change of state between +past (a short while ago) and –past (now). The English translations also indicate the change in grammaticality, from ‘I bought that book a short while ago’, to *‘I bought that book now’. It shows that *le₁* is a boundary marking the ‘completion’ of a situation, but at the same time it signifies the ‘initiation’ or ‘inchoation’ of another that emerge (Huang, 1988; Tung, 1989; L. Zhang, 1996). Hence, all V+*le₁* constructions in Chinese are inherently bounded.

Now, we shall turn to a seemingly counter example which has the same V + *le₁* + NP construction but often felt to be incomplete in meaning by native speakers of Chinese.

- (5) a. **Wǒ mǎile shū* lit. 'I bought book.'
 b. *Wǒ mǎile yībēn shū* 'I bought a book.'

Sentence (5a) is ungrammatical, but (5b) is acceptable. Compared with (3a) *Wǒ mǎile nàběn shū* 'I bought that book', it is noticeable that tense may not be the only criterion that decides the grammaticality of sentences in Chinese. Here, it is the NPs that are responsible. The NPs in both sentences is *shū* 'book' which is generic in (5a), quantified in (5b) but specific in (3a) as the latter takes *nàběn* 'that' as the dependent. Quantified and specific events are bounded (therefore, +past by our definition) according to Li and Thompson's (1981) definition. On the contrary, a generic or non-specific noun is unbounded. In the following stemma, it can be seen that sentence **Wǒ mǎile shū* is ungrammatical because the contextual features in the lexical matrix of the head require a Patient that is bounded and specific, but its Patient, *shū*, is generic.



The problem above will be resolved if the sentence is extended as (6) below.

- (6) Wǒ mǎile₁ shū jiù huí jiā
 I buy-mrk book then return home
 'I will go home after buying the book.'

Now, *mǎile*₁ *shū* 'bought (a) book' has been shifted to the relative clause and becomes the first event of two in the sentence, the other being *huí jiā* 'go home'. Li

and Thompson (1981:198) state, in their theory of Functional Grammar, that:

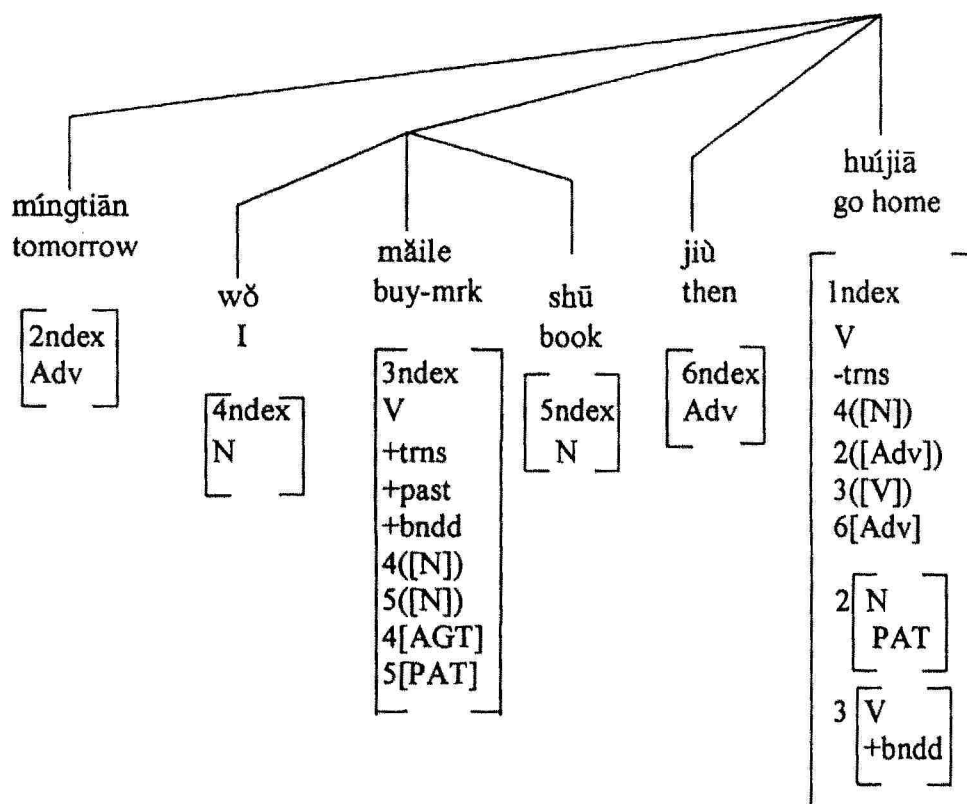
Sometimes an event is bounded by being the first event in a sequence, where what is important is that after one event has taken place, another one happens or a new state materializes. In such cases, the first event is of interest as an unanalyzed whole; the speaker signals that its occurrence is *bounded* by the subsequent event. In these instances *-le* is used, and the sentence can often be translated with 'after', 'when', or 'now that' in English.

Hence, the action of 'buying (a) book' is a bounded and completed event that should have taken place prior to the occurrence of the next action of 'going home'. As far as tense is concerned, *mǎile_l shū* 'bought (a) book' is now the reference time for the next event *huí jiā* 'to go home' to happen. In other words, it is a case of $R < S$. Since there is no indication of 'when' the person will buy the book, if we go by the intuition of native speakers, the utterance should have been made at speech time, the most natural reference point in Chinese according to Liao (1983). Technically, it means that R and S coincide. Sentence (6) is in fact an example of A-R Tense as explained by Comrie (1985).

Being the relative tense marker in the subordinate clause of a sentence, *le_l* is not sensitive to any time adverbial. The adverb has a broader scope that covers the basic sentences. This can be seen in (7) below and the stemma that follows.

- (7) a. Zuótiān [_S wǒ mǎile shū jiù huí jiā]
 'I went home after buying (a) book yesterday.'
 b. Míngtiān [_S wǒ mǎile shū jiù huí jiā]
 'I will go home after buying (a) book tomorrow.'

In the stemma, *mǎile* is no longer the head of the sentence but the verb of the complement. The head is *huí jiā* 'to go home'. The adverb *míngtiān* 'tomorrow' is a dependent to the head and it is syntactically not related to the verb *mǎile* 'bought'.



Another example of *le*₁ as a relative tense marker is the often-cited sentence given in Comrie (1976:82). *Nǐ sǐ le, wǒ zuò héshang* 'When you die, I shall be a monk.' Similar to (6), the first event in the conditional sentence, *nǐ sǐ le* 'you died' is bounded and completed, and it serves as the reference time of the second event in the sentence *wǒ zuò héshàng* 'I shall be a monk'.

Type (B) : V + *le*₁ + NP + *le*₂

It is common in Chinese that a V + *le*₁ + NP construction take a sentence final *le*₂, forming the type (B) construction, V + *le*₁ + NP + *le*₂. For example, from (6), we have (8a) below.

- (8) a. Wǒ mǎile₁ shū jiù huí jiā le₂
 I buy-mrk book then return home mrk
 'I went home after buying the book.'
- b. Zúotiān wǒ mǎile₁ shū jiù huí jiā le₂
 'I went home after buying the book yesterday.'
- c. Gāngcái wǒ mǎile₁ shū jiù huí jiā le₂
 'I went home after buying the book just a moment ago.'
- d. *Wǒ xiànzài mǎile₁ shū jiù huí jiā le₂
 *'I went home after buying the book now.'
- e. *Míngtiān wǒ mǎile₁ shū jiù huí jiā le₂
 *'I went home after buying the book tomorrow.'

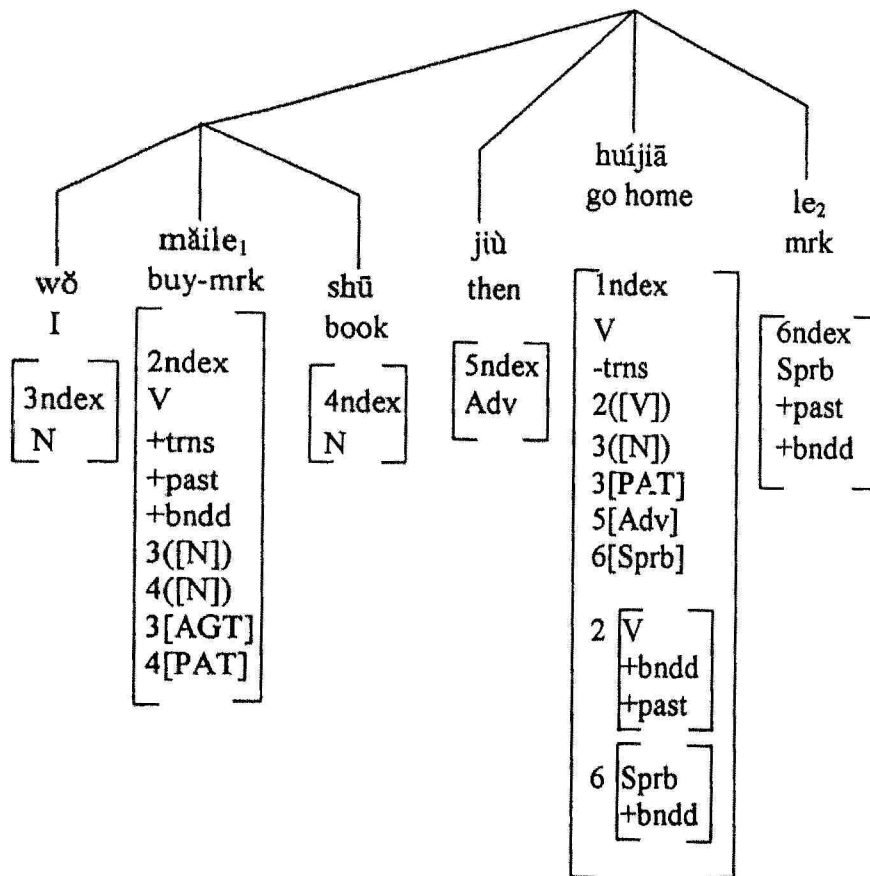
By applying the same criteria that we have applied to *le*₁, sentences in (8) show that *le*₂ is also a past tense marker because it only co-occurs with adverbs that indicate past time. Besides, judging from the English translations in (b) - (e), *le*₂ appears to be another boundary between +past and -past like *le*₁. It also manifests a change of state of the event to a new state or situation that occurs immediately after the event. Hence, the addition of *le*₂ to *Wǒ mǎile shū jiù huíjiā* 'I will go home after buying the book' entails the emergence of a new state after the event is completed.

This is perhaps the reason for Chao (1968) to translate *le*₂ as 'now', and Li and Thompson (1981) defines it as a marker of 'Current Relevant State', indicating that the marker is related to the current moment, although we have seen above that sentence with *le*₂ does not co-occur with the word *xiànzài* 'now'.

To be more precise, *le*₂ is in fact a point of 'immediate past' that is very close to the current speech moment rather than a point 'at speech time'. Klien (1994) defines a marker like *le*₂ to be the 'Topic Time' which is the time that a claim about an event

is made, and it 'clearly precedes' the time of utterance. Since *le*₂ is always uttered with respect to speech time in Chinese, it would not be wrong to conclude that *le*₂ is an absolute tense marker.

Syntactically, the grammaticality of (8b) is shown in the following tree:



The stemma above is well formed. The head *huíjiā* 'to go home' requires a bounded Sprb and it is satisfied with the features in 7ndex. The significance of this stemma is that both *le*₁ and *le*₂ are dependents of the main verb, but they are not mutually related to each other. The relationship is blocked by the main verb. This convinces us that the two homonyms belongs to two separate lexical items. The next

question is, how do *le*₁ and *le*₂ differ from each other besides the fact that the former is suffixlike while the latter is clause/sentence final?

Functionally, sentence (6) is a general statement which requires *le*₁. By adding the new sentence (8a) will be viewed in its entirety, and becomes a narration that expresses the speaker's "total contribution to the conversation at that point" (Li and Thompson, 1981). Semantically, the two *le* are different in the sense that *le*₁ marks the 'completion' or realization of the verb but *le*₂ indicates the 'completion' of the whole situation and it therefore entails the occurrence of a new situation or state of event.

It is natural in the real world that every event will have its natural end, and the ending of the event will lead to the occurrence of another new situation. In other words, every event involves a transition that contains two different states, which means that there is always a boundary in the space of time. Hence, syntactically, in terms of difference in boundaries, *le*₁ and *le*₂ in Chinese can be distinguished as Closing Boundary (cbnd) and Opening Boundary (ocnd) respectively.⁴ *Le*₁ in V-*le*₁ is the cbnd that has the scope over the verb only, whereas *le*₂ is the ocnd that has the scope over the whole verbal phrase or sentence preceding it.

"Suffixes belong to words, particles belong to phrases or sentences" (Chao, 1968:795). This highlights two significant points in Chinese that have long been neglected in Chinese linguistics: (1) in temporal relations, the main verb may have two reference points. One with respect to the V-*le*₁ in its subordinate clause, and another with respect to the clausal or sentence final *le*₂, and (2), since *le*₂ denotes a broader scope over the whole verb phrase, it overrides or governs the temporal property

⁴ These are terms used in Lexicase theory. Tung (1989) defines the two terms as Critical Internal Boundary (CIB) and Given External Boundary (GEB) respectively.

represented by le_1 . In other words, even if the structure of $[V + le_1 + NP]$ is –past or unbounded, with the inclusion of le_2 , $[V + le_1 + NP] le_2$ is always bounded. For example, the event $Wǒ mǎile_1 shū$ is unbounded, but if le_2 is added, $Wǒ mǎile shū le_2$ becomes bounded. This explains why, to native speakers of Chinese, sentence (6) is normally interpreted to be an event in the present tense but (8a) refers to an event that occurred in past. Let us recall the sentences:

(6) $Wǒ mǎile_1 shū jiù huí jiā$
 ‘I will go home after buying the book.’

(8a) $Wǒ mǎile_1 shū jiù huí jiā le_2$
 ‘I went home after buying the book.’

The same logic can be applied to even a conditional sentence such as that given in Comrie (1976:82).

(9) a. $Nǐ sǐ le, wǒ zuò héshang$
 ‘When you die, I shall be a monk.’

b. $Nǐ sǐ le, wǒ jiù zuò héshang le_2$ (*jiù* emphatic word ‘then’)
 *‘I became a monk since you died.’

Sentence (9a) is a conditional event that has yet to happen, but (b) is considered an event that is ‘past’. The sentence sounds irrational, as it is against human logic that a person may utter such a statement to a dead person. However, to Chinese speakers, the sentence is absolutely acceptable, in an illusionary or imaginary environment in a movie or a novel in which *nǐ* ‘you’ is a ghost.

On the other hand, if $[V + le_1 + NP]$ is +past, the +past feature of $V-le_1$ will become redundant as le_2 is also +past in $[V + le_1 + NP] le_2$. Consequently, le_1 is omissible. However, after the le_1 in $[V + le + NP] le_2$ is omitted, the structure will become the Type (C) construction that we will discuss next.

Type (C) : $V + NP + le_2$

Compare the following pair of sentences in type (B) and (C) constructions:

- (10) a. Tā hēzuìle₁ jiǔ le₂
 he drink-drunk-mrk liquor mrk
 ‘He is drunk.’
- b. Tā hēzuì jiǔ le₂
 he drink-drunk liquor mrk
 ‘He is drunk.’/ ‘He is drunk now.’

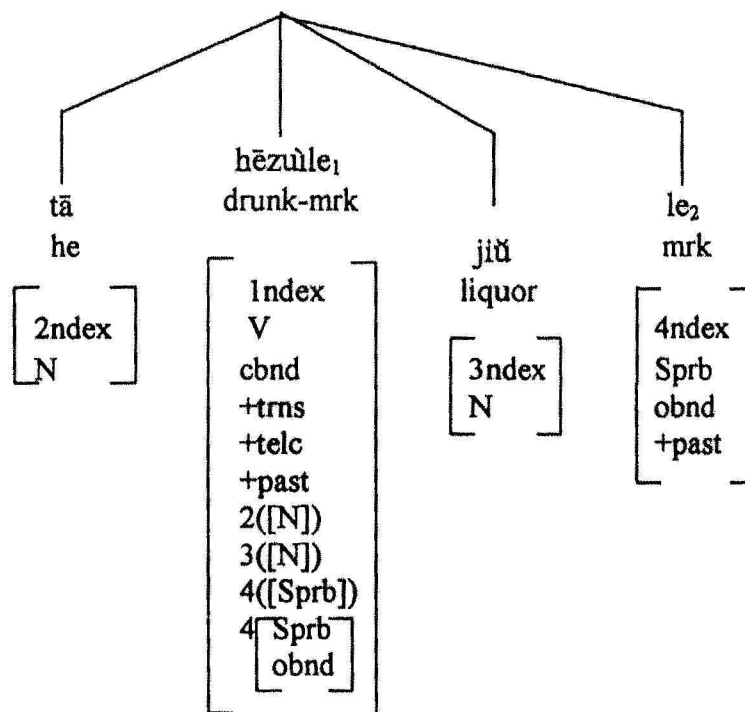
The sentences in (10) are identical in meaning, but the verbs *hēzuìle₁* and *hēzuì* are different in form. *Le₁* appears to be omissible. Why?

There are several arguments for such omission: (1) As mentioned earlier, the scope of le_1 is only over the verb, but that for le_2 covers the whole sentence. The relevant boundary of the sentence is therefore decided by le_2 (Tung, 1989), and therefore, the boundary set by le_1 is no longer necessary. (2) Verbs such as *hēzuì* ‘drunk’ is telic, resultative and inherently contain the meaning of completion. Since le_1 also marks the ‘completion’ of the action or event, it results in the duplication of meaning. Consequently, le_1 can be omitted due to the fact that the Chinese have the habit of dropping constituents whose meaning can be deduced from the same sentence (Liao, 1983), and (3), According to Grice’s Maxim of Quantity that in discourse, it is

not necessary for a speaker to make his contribution more informative than is required (Collinge, 1985; Grice, 1975). *Le*₁ is therefore redundant.

However, as stressed by Huang (1988), the absence of *le*₁ may produce semantic vagueness or indeterminacy and causes more than one reading in the sentence, or forces a change in meaning as in (10b). Semantics is not our concern in this chapter. Vagueness that arises from semantics will be discussed when we deal with aspect in later chapters. As mentioned earlier, we will only focus on the +past meaning of the sentence in this section.

(10) a. Tā hēzùlle₁ jiǔ le₂



- (10) b. Tā hēzuì jiǔ le₂
 Index 4ndex
 +telc bndd
 +bndd Sprb
 4[Sprb]
 4

Sprb
bndd

Both *hēzuìle* ‘(already) drunk’ and *hēzuì* ‘drunk’ in (10) are telic (telc) verbs that are always bounded. By our definition, ‘bounded’ implies +past. Consequently, the verbs have the same non-contextual features of +telc, +bndd and +past. These features are consistent with those for *le*₂. Hence, the index of *le*₂ satisfies the contextual feature of ?[Sprb, +bndd] required in the matrix of the head, forming 4[Sprb, obnd] in (10a) and 4[Sprb, bndd] in (10b). Stemmas above show both sentences in (10) are grammatical, and that *le*₁ is optional if the verb is telic. Here is another similar example:

- (11) a. Wǒ zhǎodaole nàfēng xìn le₂
 I find-got-mrk that-CL letter mrk
 ‘I have found that letter.’
 b. Wǒ zhǎodao nàfēng xìn le₂
 ‘I have found that letter.’
- (12) a. Nàfēng xìn wǒ zhǎodaole₁
 lit. ‘That letter, I found it already.’
 ‘I have found that letter.’
 b. *Nàfēng xìn wǒ zhǎodao

In (11), *zhǎodaole/zhǎodao* ‘found’ is telic, and *le*₁ is therefore optional like *hēzuìle/hēzuì* ‘drunk’ in (10). However, it should be noted that if the object of (11) is

topicalised, *le*₁ will become sentence final as in (12a). In such cases, *le* is obligatory because, as shown in (12b), the sentence is ungrammatical. Nevertheless, the resulting structure will turn out to be identical with the Type (E) construction that will be discussed later.

On the surface, Type (C) appears to be a kind of Type (B) [*V* + *le*₁ + NP + *le*₂] construction that has the *le*₁ omitted. However, it is not necessarily true for all verbs.

- (13) a. Wǒ xiěle₁ yīfēng xìn le₂
 I write-mrk one-CL letter mrk
 'I had written a letter.'
- a'. *Wǒ xiě yīfēng xìn le₂
- b. Wǒ chīle₁ liǎngge píngguǒ le₂
 I eat-mrk two-CL apple mrk
 'I had eaten two apples.'
- b'. *Wǒ chī liǎngge píngguo le₂
- c. Tā shāle₁ tā de chóurén le₂
 he kill-mrk he p enemy mrk
 'He had killed his enemy.'
- c'. *Tā shā tā de chóurén le₂

*Xiěle*₁/*xiě* 'wrote/to write' and *chīle*₁/*chī* 'ate/to eat' in (13) are atelic. The ungrammaticality in (13a') and (13b') shows that *le*₁ cannot be omitted in sentences with atelic verbs, irrespective of whether the NP is specific (like *liǎngge píngguo* 'two apples' in (13b)) or non-specific (like *yīfēng xìn* 'a letter' in (13a)).

(13c) appears to be a counter example. Its verb *shāle* 'killed' is telic but *le*₁ cannot be omitted as seen in (13c'). This could be due to the phonological

constrains in Chinese, as mentioned in Chapter One, that makes the marker obligatory if the verb is monosyllabic (Feng, 1997). Another reason could be that, after omission of *le*₁, the reading of (13c') will become *'He has begun (the action of) killing his enemy' which is unacceptable. 'Kill' is an instantaneous action. Hence, it should be borne in mind that *le*₁ can be omitted only if it occurs with a telic verb that is non-monosyllabic.

Another pattern of the Type (C) construction that is not related to Type (B) is a verb-object construction. Typical examples of V + NP combination are *chīfān* 'to have a meal (lit. eat-rice)', *hēchá* 'to have a drink (drink-tea)', *xǐzǎo* 'to bathe (wash-bath)' and *qù Rìběn* 'to go to Japan (go-Japan)'.

- (14) a. *Chīfān le*₂
eat-rice mrk
'(The food is ready) It's time to eat!' (lit. 'eat now!')
- b. *Xià yǔ le*₂
drop-rain mrk
'It's raining (now)!'
- c. *Tā xǐhuān tiàowǔ le*₂
he like dance mrk
'He loves dancing now.'
- d. *Tā qù Rìběn le*₂
he go Japan mrk
'He has gone to Japan.'
'He will be going to Japan (he has changed his mind).'

None of the sentences in (14) can co-occur with adverbs *zuótiān* 'yesterday' or *míngtiān* 'tomorrow', proving again that *le*₂ marks the boundary between +past and

–past and subsequently leads to the occurrence of a new event. This is consistent with what we have discussed so far.

But the structure $V + NP + le_2$ is sometimes ambiguous because the verb-object construction ($V + NP$) in Chinese can, at the same time, be interpreted as a gerund. *Chīfān* usually means ‘to eat (rice)’ or ‘to take a meal’ but it, could also be translated as ‘eating’. Similarly, *xǐzǎo* ‘to bathe’ and *tiàowǔ* ‘to dance’ can be translated as ‘bathing’ and ‘dancing’ respectively. There is no clear-cut difference between the two usages in Chinese which has no inflectional or derivational features. This ambiguity will further be discussed in Type (D) construction below.

Type (D) : $NP + le$

Lü (1983) leaves the *le* in this construction unmarked, indicating that the final *le* could be le_1 or le_2 , or a haplology of le_{1+2} or a general *le*.

However, based on the discussion above, we can still trace the syntactic identity of the marker: (a) The sentence final marker is le_2 when the verb-object construction ($V + NP$) is interpreted as a gerund in the Type (C) construction as shown above, and (b) If the NP is a statement, we may also interpret the marker *le* to be le_2 .

Here are some examples:

- (15) a. Wǒ shì dàxuéshēng le_2
I am university student mrk
‘I am a university student now.’
b. Míngnián shì 2004 nián le_2
next year is year mrk
‘It is the year 2004 next year.’

Lu (1991) proposes an Omission Test to distinguish the syntactic identity of the sentence final *le*. It states, “if a sentence is still grammatical, and the meaning remains unchanged after omitting the sentence final *le*, then *le* is *le*₂”. Lu is approaching the function of *le*₂ in terms of Mood in pragmatics. A mood particle is often used for emphasising the feeling or the perception of the speaker; it does not have any effect on the grammaticality of a sentence. Sentences in (15) are still grammatical after removing the sentence final *le*. By Lu’s definition, the *le* is therefore *le*₂.

Note that this is true even for cases when the sentence is dealing with a future event as in (15b). In the sentence, *le*₂ is added when a speaker wants to reaffirm the fact that ‘it will be the year 2004 next year’. To the speaker, the fact is a true event that is perceptually bounded. It therefore can be related as +past event with *le*₂. This is another common practice of ‘placing a future event in the past’ in Chinese. Liu (1988) says the *le*₂ in such cases indicate the ‘completion of a future event’.

The ambiguity in the Type (D) construction perhaps lies in cases related to Type (B) constructions (V + *le*₁ + NP + *le*₂) discussed earlier.

- (16) a. Tā hēzùle₁ jiǔ le₂ [sentence (10)]
 he drink-drunk-mrk liquor mrk
 ‘He is drunk.’
- b. Tā hēzù jiǔ le₂
 he drink-drunk liquor mrk
 ‘He is drunk.’/ *‘He is going to be drunk now.’
- c. *Tā hēzù jiǔ

We have found earlier that, when the verb is telic, *le*₁ is usually optional. However, after the omission of *le*₁, sentence like (16b) becomes a V + NP + *le*₂ construction that may carry more than one meaning: it could be a past event as well as a new situation. When the context is not clear, it is syntactically difficult to know the meaning intended. The inchoative interpretation of the sentence is semantic that is not part of our discussion.

At present, we can only put forward our arguments based on the following premise. Since sentence (16b) will become ungrammatical if *le*₂ is omitted as in (16c), the sentence final *le* should be an obligatory element in the phrase *hēzuì jiǔ* 'to be drunk'. Hence, based on the Omission Test conducted by Lu (1991), it is reasonable to believe that syntactically the marker is not *le*₂, but *le*₁. [emphasis mine] This judgment is supported by the fact that, to native speakers, *Tā hēzuì jiǔ le*₂ 'He is drunk' sounds more rational than *'He is going to be drunk now'. Similarly, sentence (11b) *Wǒ zhǎodào nàfēng xìn le*₂ is more acceptable as 'I had found that letter' rather than *'I begin to found that letter' if we go by the intuition of native speakers.

Type (E): V + le and Type (F): Adj + le

In these constructions, the identity of *le* is controversial. Type (E) and Type (F) are cases in which the verbs that precede *le* are intransitive and stative respectively. In Chinese, the adjectives are considered stative verbs. The Type (E) construction includes a variation of Type (B) construction (V + *le*₁ + NP + *le*₂) that is formed after the NP be topicalised (NP + V + *le*).

- (17) a. Tā lái le
he come mrk
'He came.' / 'He has come.' / 'He is coming.'
- a' Tā bìng le
he sick mrk
'He is sick.'
- b. Tāng xián le
soup salty mrk
'The soup is salty.' / 'The soup is salty now.'
- b' Huā hóng le
flower red mrk
'The flower is red.' / 'The flower is turning red.'
- c. Yīfu xǐgānjìng le
Cloth wash-clean mrk
'The clothes have been washed' / 'The clothes are washed.'
- c'. Wǒ kàncǐngchū le
I see-clear mrk
'I can see it clearly now.'
- d. Nàfēng xìn wǒ zhǎodào le⁵ [sentence (14)]
That-CL letter I found mrk
'I have found that letter.'

Except for (17c') and (17d) whose verbs are telic, it is noticeable that the sentences in these two categories usually have two interpretations that indicate: (a) the termination of the situation, and (b) the beginning of a new event. This is precisely what we have just discussed, that is, irrespective of whether it is *le*₁ or *le*₂, the sentence final marker encodes a transition between two states.

⁵ *Zhǎodào* in the sentence *Wǒ zhǎodào nàfēngxìn le*₁ is transitive, but it is syntactically intransitive after the object 'letter' is topicalised in Lexicase grammar.

None of the sentences in (17) can coexist with the adverb *mǐngtiān* ‘tomorrow’, but may take *yǐjīng* ‘already’ such as (18) below, proving that the events are +past, regardless of whether the *le* is *le*₁ or *le*₂. This is a property that is consistent with our findings so far.

- (18) a. **Míngtiān tā lái le* *He came tomorrow.
 a' *Tā yǐjīng lái le* 'He has/had come.'
 b. **Míngtiān tāng xián le* *'The soup will be salty tomorrow.'
 b' *Tāng yǐjīng xián le* 'The soup is salty (now).'

As shown in (19), sentences in (17) become ungrammatical after the omission of the sentence final *le*. It is clear that *le* is syntactically required by the verbs. According to reason given by Lu (1991), the marker should syntactically be *le*₁.

- (19) a'. **Tā lái*
 b'. **Tāng xián*
 c'. **Yīfu xǐgānjīng*
 d'. **Nàfēng xīn wǒ zhǎodao*

In this section, we have discussed in depth all the syntactic environments of *le*₁ and *le*₂ mentioned in Lü (1983), and we have identified the tensal property of the two markers. Contrary to previous observations that only *le*₁ is a (relative) tense marker in Chinese, it is proven that both *le*₁ and *le*₂ are tense markers, in absolute as well as relative tense constructions. We have also explained the causes of and offered

solutions to some of the controversies in Chinese grammar. In the next Section, we will examine the tensal property of another set of markers, the two *guo* in Chinese.

4.3.2 *Guo* (*guo₁/guole* and *guo₂*) as a Tense Marker

Unlike *le* for which we may have a V + NP + *le* construction, the marker *guo* cannot be located after the object. *V + NP + *guo* is unacceptable. Hence,

- (20) a. Wǒ qùguo Rìběn
I go-mrk Japan
'I have been to Japan.'
- b. *Wǒ qù Rìběn guo

Semantically, it is generally accepted that there are two *guo* in Chinese and they occur in the following syntactic environments:

- (21) a. Wǒ chīguo₁ zǎofān le₂
I eat-mrk breakfast mrk
'I have taken my breakfast.'
- b. Wǒ chīguole zǎofān le₂
'I have taken my breakfast.'
- c. Wǒ qùguo₂ Rìběn
'I have been to Japan.'
- d. Wǒ qùguo₂ Rìběn le
'I had been to Japan.'

In (21), *guo₁/guole* and *guo₂* occupy the same position syntactically. The V-*guo₁* and V-*guole* constructions are, in addition, identical in meaning. According to the Triune Sign principle of Lexicase, V-*guo₁* and V-*guole* will be treated as synonyms in this analysis.

By just looking at the English translations in (21), it is clear that both *guo* involve events in the past. This will further be confirmed when the sentences are tested against time adverbials such as *gāng* ‘just, a short while ago’, *xiànzài* ‘now’, *céngjīng* ‘formerly’, *yǐjīng* ‘already’ and *míngtiān* ‘tomorrow’.

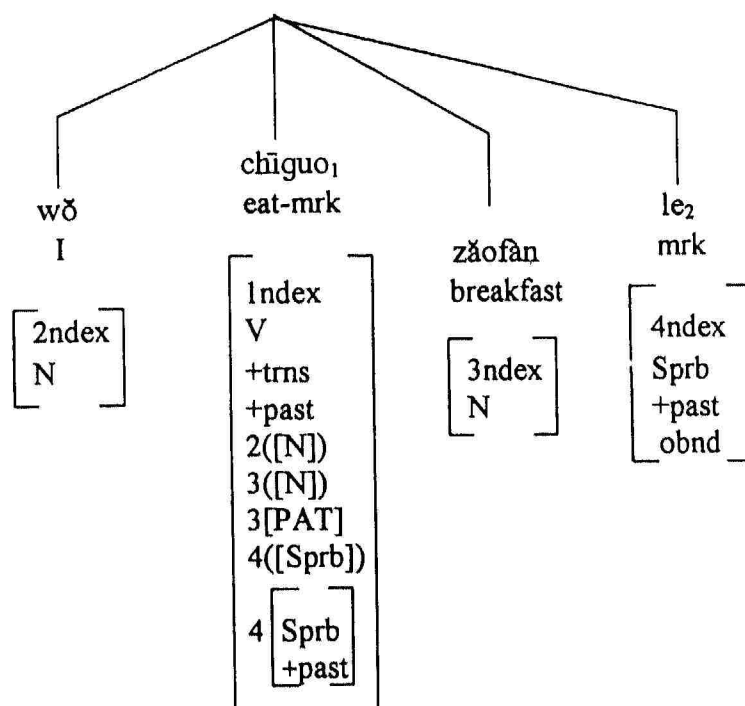
- (22) a. Wǒ gāng chīguo₁/chīguole zǎofàn le₂
‘I have just had my breakfast.’
- b. *Wǒ xiànzài chīguo₁/chīguole zǎofàn le₂
‘I am having my breakfast now.’
- c. Wǒ yǐjīng chīguo₁/chīguole zǎofàn le₂
‘I have already had my breakfast.’
- d. *Wǒ céngjīng chīguo₁/chīguole zǎofàn le₂
‘I have had the experience of taking breakfast.’
- e. *Wǒ míngtiān chīguo₁/chīguole zǎofàn le₂
*‘I had my breakfast tomorrow.’
- (23) a. Wǒ gāng qùguo₂ Rìběn⁶
‘I have just been to Japan.’
- b. *Wǒ xiànzài qùguo₂ Rìběn
*‘I have been to Japan now.’
- c. Wǒ yǐjīng qùguo₂ Rìběn
‘I have already been to Japan.’
- d. Wǒ céngjīng qùguo₂ Rìběn
‘I had been to Japan.’

⁶ Note that this sentence may be ambiguous. The speaker may mean (a) ‘I have just got the experience of traveling to Japan’ [*guo*₂] or (b) ‘I have just gone to Japan’ [*guo*₁]. It is because *guo*₂ deals with personal experience in life. Experience is subjective. For those who have never been to Japan, the sentence will mean (a), but for those who often travel to the country, it would be (b). The differentiation is aspectual, not syntactically. In this section, the meaning of *guo*₂ will be confined as ‘to have the experience of’. The aspectual significance of the two *guo* will be discussed in Chapter 5.

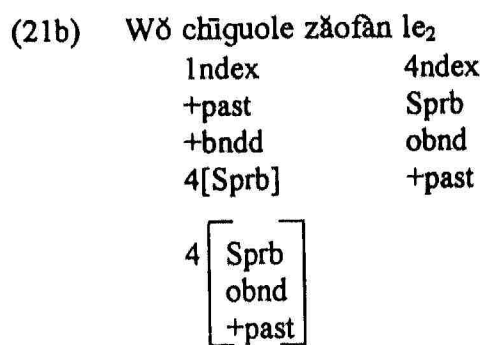
- e. *Wǒ míngtiān qùguo₂ Rìběn
 *‘I will have the experience of going to Japan tomorrow.’

Sentences (b) and (e) in (22) - (23) indicate that both *guo* can neither co-occur with the adverb *xiànzài* ‘now’ nor *míngtiān* ‘tomorrow’. (23d) is grammatical with the use of *céngjīng* ‘formerly’, but (22d) is not. This is because the adverb indicates a situation that has happened before, but which no longer exists now. Taking breakfast is a daily activity. Since it is not likely that a person will take his breakfast only once or twice just for the experience. (22d) is unacceptable. Sentences (22d) and (23d) are therefore the pair of sentences that shows the difference between the two *guo* in terms of \pm xprn (experience) as in Figure 4.1 shown earlier.

Sentences with *guo*₁ often co-occur with sentence final *le*₂. As mentioned before, Li and Thompson (1981) remark that the addition of *le*₂ highlights the speaker’s sentiments in conversation at that point of utterance. Yang (1985), on the other hand, claims that *guo* “denotes the termination of some situation prior to another situation” and “always conveys a current relevance meaning”. The event of *Wǒ chīguo₁ zǎofàn le₂* ‘I have taken my breakfast’ is viewed as an indivisible completed event and *le*₂ sets the opening boundary for the next event to happen. The stemma below illustrates the grammaticality of the sentence in accordance with Lexicase theory.



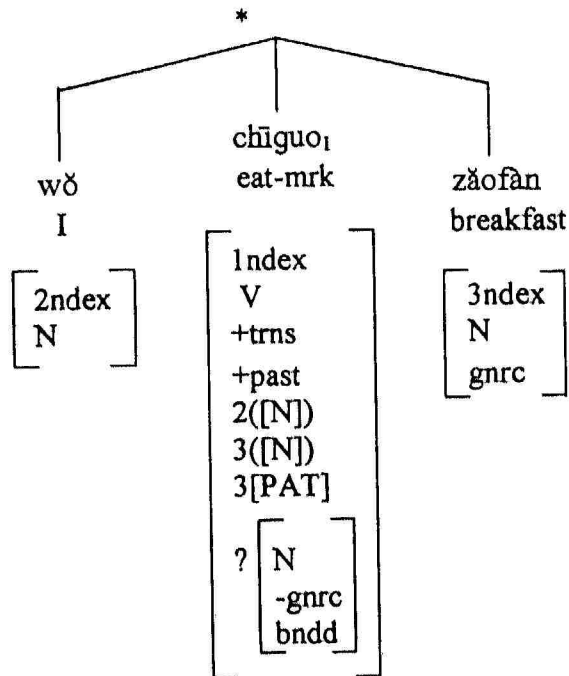
With the presence of the close boundary marker le_1 , sentence (21b) is also well formed, in line with Lexicase theory. As shown below, all the features in the matrix of the main verb are satisfied.



For comparison, let's see what would happen to (21a) if le_2 is omitted. The sentence **Wǒ chīguo₁ zǎofān* becomes ungrammatical because the contextual features in the lexical matrix of the head will not be satisfied. The head *chīguo₁*

requires a PAT (Patient) that is bounded, but the Patient of the sentence, *zǎofàn* is unbounded and non-generic. (21b) has the same problem.

(24) *Wǒ chīguo₁/chīguole zǎofàn



Similar to *le*, the ungrammaticality of (24) can be solved by adding another clause to round it off. In (25), the VP is now in the relative clause of the sentence.

- (25) a. Wǒ chīguo₁/chīguole zǎofàn jiù qù shàngkè
'I will go for classes after having breakfast.'
- b. Wǒ wènguō₁/wènguole lǎoshī zài gào sù nǐ
'I will let you know after asking teacher.'
- c. Wǒ qùguō₁/qùguole Rìběn jiù qù Zhōngguó
'I will go to China after going to Japan.'

Sentences in (25) can be regarded as examples of absolute-relative past tense defined in section 4.1. In the sentences, *chī fān* ‘to eat-rice’, *wèn lǎoshī* ‘to ask the teacher’ and *qù Rìběn* ‘to go to Japan’ serve as the relative reference time for the next events *qù shàngkè* ‘to go for class’, *gàosù nǐ* ‘to tell you’ and *qù Zhōngguó* ‘to go to China’ to take place respectively. The events are narrated at speech time.

One may argue at this point that the event involved in (25c) is not a regular or routine event that happens daily. Isn’t it a contradiction that *qùguo₁/qùguole* is used? Liu (1988) disagrees. According to her, a known event is one of the conditions for *guo₁/guole* to be used between the speaker and the listener who knows precisely what would happen next. In other words, this utterance is used only if the listener knows very well that the speaker will be going somewhere, including Japan and China. The action of going to Japan or China becomes a ‘stage’ or a ‘routine’ activity in a series of happenings in the perception of both the speaker and the listener. It is unrelated to the experiential *guo₂*.

Meanwhile, it is noteworthy that, in some cases, *guo₁/guole* in (25) is syntactically parallel to *le₁* and they are mutually interchangeable as in (26) below:

- (26) a. Wǒ chīle zǎofān jiù qù shàngkè
 ‘I will go for classes after breakfast.’
 b. Wǒ wènle lǎoshī zài gàosù nǐ
 ‘I will let you know after asking (our) teacher.’
 c. Wǒ qùle Rìběn jiù qù Zhōngguó
 ‘I will go to China after going to Japan.’

How are *guo₁*, *guole* and *le₁* related to each other? According to Zhang (1986) and Liu (1988), both *guo₁* and *le₁* indicate the completion of an action. However, *guo₁* has a strong meaning of ‘fully completed and finished’ as compared to *le₁* which only indicates the ‘realization’ of an action. *Le₁* may not indicate that the event is totally ‘finished’.

Liu (1988) emphasises that the activity involved in sentences with *guo₁/guole* is always completed and definitely over. For example,

- (27) a. Zhè ge huì kāiguō₁/kāiguole sāntiān le₂
 ‘The meeting was on for three days (it is over).’
 b. Zhè ge huì kāile sāntiān le₂
 ‘The meeting has been on for three days (it is still on).’

Guo₁/guole and *le₁* in (26) and (27) are mutually interchangeable only if the actions involved are really completed. In (27), the emphasis of the sentence lies in whether the meeting is completed or is still on. If *le₁* is used, it implies that the meeting is not yet over.

But sometimes, the rule seems to be less specific. In (28a) and (28b), *guo₁* and *le₁* are mutually interchangeable. This is probably because activities such as *chīfān* ‘to eat rice’ are telic. In real life, once a person has eaten, he will not feel like eating any more. So, the action need not or will not be ‘extended’ like *kāihuì* ‘to attend a meeting’ in (27). When compared with *guo₁*, *guole* is in fact more emphatic in meaning although both of them are generally interchangeable. For example, *chīguole*

in (28c) is an emphasis on the completion of the action, as compared to the less emphatic *guo₁* and *le* in (28b) (Zhang, 1986).

- (28) a. *chīguo₁ fàn le₂* → *chīle₁ fàn le₂* 'I have eaten.'
 b. *chīguo₁ fàn zài shuō* → *chīle₁ fàn zài shuō* 'Discuss after eating.'
 c. *chīguo₁le fàn zài shuō* 'Eat first, discuss later!'

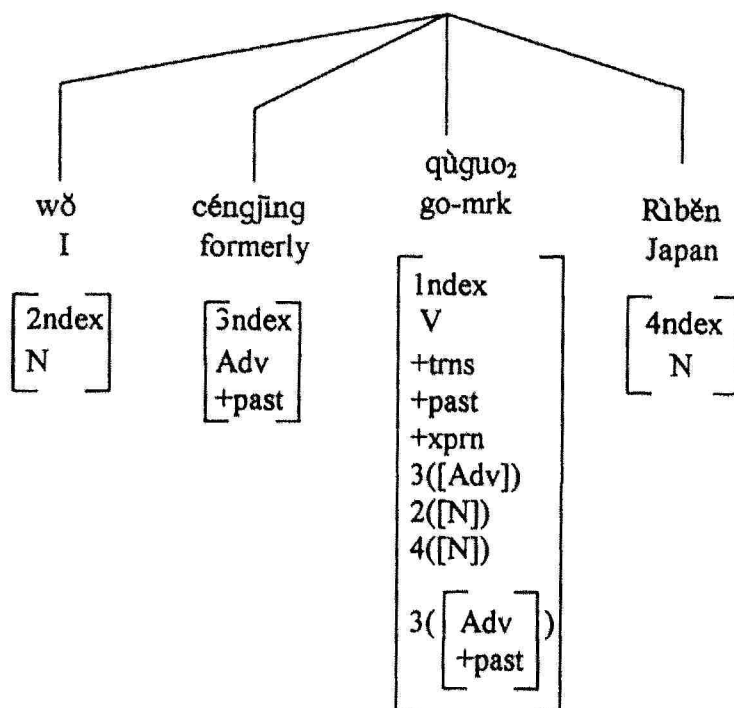
V-guo₁/V-guole are interchangeable with *V-le₁* when the verb is used in the subordinate clause as in (29) below. These markers are free to co-occur with various time adverbials, including *zuótiān* 'yesterday', *jīntiān* 'today' and *míngtiān* 'tomorrow' as they are not dependents of the time adverbials. This is similar to the examples given in (7) earlier.

- (29) a. *Zuótiān wǒ chīguo₁/chīguole zǎofàn jiù qù shàngkè*
 b. *Jīntiān wǒ chīle zǎofàn jiù qù shàngkè*
 c. *Míngtiān wǒ chīle zǎofàn jiù qù shàngkè*

Guo₂ does not have this property. Being an experiential (for an experience in the past), it cannot be replaced by *guo₁* which is non-experiential (-xprn). This can be seen if we compare the sentence *Wǒ duànle₁ tuǐ* 'My leg is broken (till now)' with *Wǒ duànguo₁ tuǐ* 'I have broken my leg before (I have recovered now)'.

Sentences in (23) show that *guo₂* can only co-occur with +past time adverbials such as *gāng* 'just, a short while ago', *céngjīng* 'formerly' and *yǐjīng* 'already'. The

tree below shows the grammaticality of sentence (21c) *Wǒ qùguo₂ Rìběn* 'I have been to Japan' using the adverb *céngjīng* 'formerly'.



The Lexicase stemma above shows the grammaticality of the sentence. The [+past, +xprn] features of *céngjīng* 'formerly' are consistent with the contextual features of the optional adverb in the lexical matrix of the head. The index of the adverb, 3, is therefore copied onto the feature in the matrix, producing a well-formed tree.

Guo₂ is often used to indicate absolute tense as in (30a) and (30b) below where the reference time is the unspecified speech time. It can also be used to show Absolute-Relative Tense as in (30a') and (30b'). In such cases, *le₂* serves as the shifter that changes the whole event to the past tense.

- (30) a. Wǒ qùguo₂ Rìběn 'I have been to Japan.'
 a' Wǒ qùguo₂ Rìběn le₂ 'I had been to Japan.'
 b. Tā niànguo₂ Fǎwén 'He has studied French.'
 b'. Tā niànguo₂ Fǎwén le₂ 'He had studied French.'

It is not common to see *guo*₂ occurring in a relative tense. Naturally, once an experience is over, it would not allow the continuation of the action or the occurrence of a second event in the same sentence. But this does not mean that *guo*₂ cannot be a relative tense marker in Chinese. (31) are exaggerations that we often come across. (31a) is used when a stubborn person who never listens to advice finally learns his lesson. Here, *sǐguo*₂ *'die once' is the relative reference point of *zhīdao* 'to know'. (31b) is normally used as a warning that means 'you will get what you deserve (if you do something you are not supposed to do)'. On some occasions, it is used as an encouragement to urge people to do something that they have never attempted before.

- (31) a. Tā sǐguo₂ yīcǐ cái zhīdao shénme jiào 'pà'
 he die-mrk one-CL then only know what call fear
 'He was scared after he has escaped from death.'
 b. Nǐ shǐguo jiù zhīdao le₂
 you try-mrk then know mrk
 'You will know if you have tried it.'

In brief, tests on the two *le* and the two *guo* above have disproved Lin's (2000) claim that *le* and *guo* are past tense markers, but only in the relative tense. Our test has shown that *le* and *guo* are markers of absolute tense as well.

4.3.3 *Zhe* as a Tense Marker

Zhe is the marker of sustaining aspect in Chinese that indicates the ongoing or durative nature of an event.⁷ Syntactically, it is often found in constructions below:

- (32) a. Zuòzhe (Imperative)
sit-mrk
'Remain seated!'
- b. Tā tǎngzhe ne (Progressive)
he lie-mrk p
'He is lying down.'
- b' *Tā tǎngzhe
- c. Tā tǎngzhe kàn shū (manner)
he lie down-mrk read book
'He reads while lying down.'
- d. Qiángshang guàzhe yīfú huà (existential)
wall-on hang-mrk one-CL painting
'There is a painting hanging on the wall.'
- e. Tā chuānzhe yījiàn xīn yīfu (state)
he wear-mrk one-CL new clothing
'He is wearing a new clothes.'
- e'. Mén guānzhe (state)
door close-mrk
'The door is closed.'
- f. Bìngrén zài chuángshang tǎngzhe (posture)
patient at bed-on lie-mrk
'The patient is lying on the bed.'

Is *zhe* a tense marker? Before we discuss this, let us check whether sentences with *zhe* can co-occur with the following time adverbials.⁸

⁷ In this study, the term 'sustaining aspect' is given by Fan (1984) and it is used for aspectual features of *zhe* and *zài*. It is the durative aspect or progressive aspect used in other works.

Table 4

Acceptability of *Zhe*-constructions with Time Adverbials

Sentence	Functions	<i>zuótiān</i> 'yesterday'	<i>jīntiān</i> 'today'	<i>zhèng</i> 'just'	<i>míngtiān</i> 'tomorrow'
1) A	Imperative	-	-	-	-
2) b	Progressive	-	?	+	-
3) c	Manner	+	+	+	-
4) d	Existential	?	?	+	-
5) e	State	?	?	+	-
6) e'	State	-	-	-	-
7) f	Posture	?	-	+	-

+ acceptable - unacceptable ? marginal

It is clear at first glance that none of the sentences in (32) can accept adverb the *míngtiān* 'tomorrow' in table above. This suffices to show that *zhe* is basically not a future tense marker.

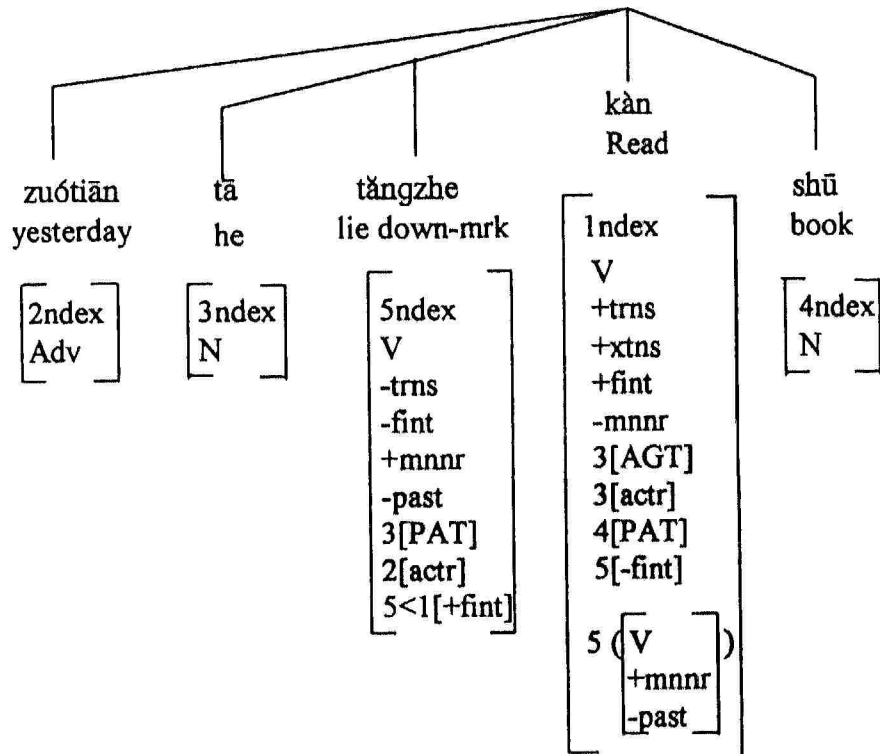
Sentence (32a), an imperative sentence, shows that the V-*zhe* cannot co-occur with any time adverbial. This is understandable because the primary role of an imperative is to give an order which can only be uttered at speech time. Hence, sentence (32a) proves that *zhe* in imperatives constructions is an absolute present tense marker.

Sentences (32b) and (32b') show that *zhe* in progressive sentences also indicate the present tense. The sentence final particle *ne* in (32b) indicates an 'action or state in progress' (Lü, 1983). Without *ne*, sentence (32b') is ungrammatical in the sense that

⁸ Judgment on the grammaticality of sentences is sometimes very subjective, especially when it comes to sentences that are marginal. This table is made according to our judgment as a native speaker of Chinese in Malaysia.

the sentence sounds incomplete to the hearer. To be grammatical, (32b') needs to be extended by adding a main event, such as *kàn shū* 'read book' to the sentence. The resulting sentence is seen in construction (32c).

Sentence (32c) shows simultaneous actions of sitting and reading. This has turned out to be a counter example which goes against our effort to prove that *zhe* is a present tense marker because it can coexist with the time adverbials *zuótiān* 'yesterday'. Hence, before going further, it may be appropriate for us to first examine the 'strange' behaviour of sentence (32c) syntactically.



The Lexicase tree above demonstrates that the 'problem' lies in the fact that, in this sentence pattern, the main verb or the head of this construction is *kàn* 'to read (a

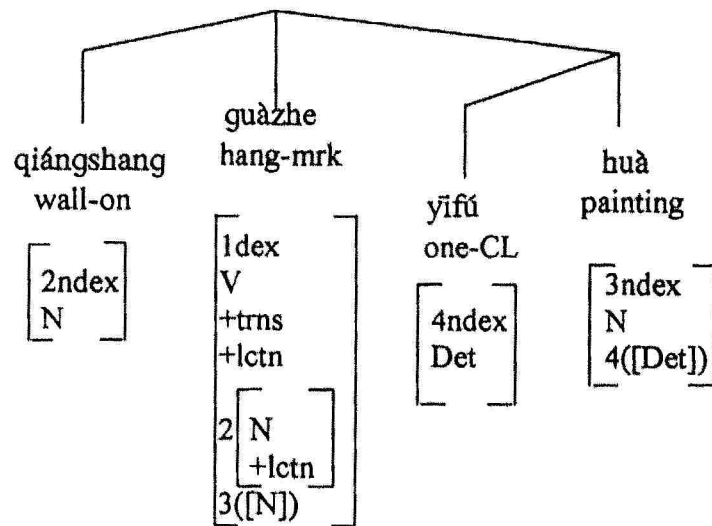
book)', not *tǎngzhe* 'lying down'. Syntactically, the verb *tǎngzhe* is an obligatory dependent of the head of the stemma which is *kàn* 'to read', and it is not related to the adverb *zuótiān* 'yesterday'. In other words, it is the action of 'reading' that will be governed by the adverb. The V-*zhe* lexical item is not predicted to carry any temporal meaning. Naturally, sentences with the marker *zhe* can co-occur with any time adverbial, except for *míngtiān* 'tomorrow' the reason for which will be explained later.

In terms of aspect (which will be discussed in the next chapter), the V-*zhe* is imperfective and it stretches the time interval or serves as a background to another event that is inserted (Chang, 2001). If this is the case, it would not be wrong to regard *tǎngzhe* 'lying down' to be the reference point (in the case, a period of time) for *kàn* 'read' to occur and *zhe* is the relative tense marker in such sentence.

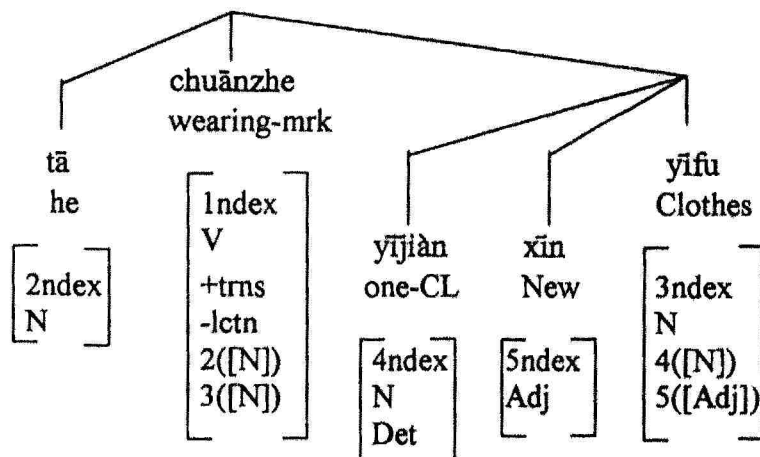
If the adverb *zuótiān* 'yesterday' is replaced by *míngtiān* 'tomorrow', sentence **Míngtiān tā tǎngzhe kànshū* 'lit. He reads while lying tomorrow' is unacceptable. This is probably because nobody can predict what would happen tomorrow in the real world. 'He' may read but he may not do it in the manner of 'lying down'. If it is known that 'he' will really be 'lying and reading', the sentence will require an auxiliary *huì* 'will' or *jiāng* 'going to, about to'. The new sentence will be *Míngtiān tā huì tǎngzhe kànshū* 'Tomorrow, he will read while lying down'.

Unlike (32c) where *V-zhe* is a dependant of the head verb, the *V-zhe* in (32d)-(32f) are the main verbs of their respective sentences, as it could be seen in the stemmas below:

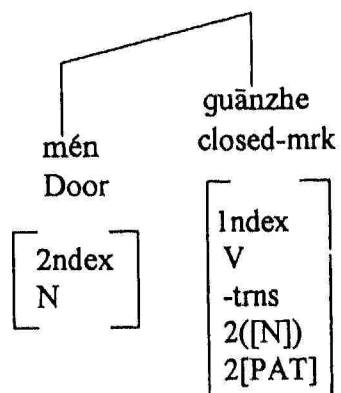
(32d) Qiángshang guàzhe yīfú huà
'There is a painting hanging on the wall.'



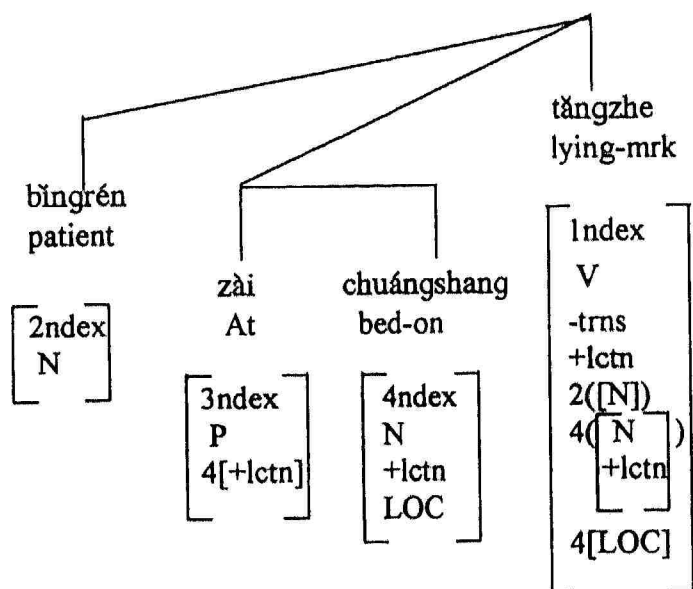
(32e) Tā chuānzhe yījiàn xīn yīfu 'He is wearing a suit of new clothes.'



(32e') Mén guānzhe 'The door is closed.'



(32f) Bǐngrén zài chuángshang tǎngzhe 'The patient is lying on the bed.'



Let us examine the acceptability of these sentences when time adverbials are included:

- (33) a. ?/*Zuótiān qiángshang guàzhe yīfú huà
 Adv V
 +past -past
- b. ?/* Zuótiān tā chuānzhe yījiàn xīn yīfu
 'She was wearing a suit of new clothes yesterday'
- c. ? Jīntiān tā zuòzhe ne
 'He is sitting today.'
- d. ? Jīntiān tā chuānzhe yījiàn xīn yīfu
 'She is wearing a suit of new clothes today.'
- e. * Jīntiān mén guānzhe
 'The door is closed today.'
- f. ? Bìng rén jīntiān zài chuángshang tǎngzhe
 'The patient is lying on the bed today, (but not yesterday).'

(33a) above shows that V-*zhe* is incompatible with the adverb *zuótiān* 'yesterday' because, as it can be seen in the features, *zhe* is -past (by our definition), but the adverb is +past.⁹ The features contradict each other. It appears that the marker is non-past if it is not a verb of manner.

Except for (33e) where the subject is non-agentive, and therefore cannot co-occur with the adverb *jīntiān* 'today', sentences (33c) - (33d) and (33f) above show

⁹ The sentence is marginal because semantically, existential sentences (together with the state sentence in (33b) may accept *zuótiān* 'yesterday', but it is only meant for the comparison of two situations. Hence (33a) carries the meaning that, as compared to yesterday, the painting is not there anymore, or has been replaced. Similarly, sentence (33b), the sentence implies that she is not wearing new clothes now. Note that the same argument will hold for the marginality of the sentences in (32) with the adverb *jīntiān* 'today' as in (33c) - (33d) and (33f).

that progressive, existential and state sentences with agentive subjects are marginal. The sentences sound incomplete to hearers.

We believe the marginal interpretation in (33b) and (33d) may be due to the fact that, in narration, *jīntiān* 'today' does not necessarily cover the current speech moment, or the remaining time in the day.¹⁰ As Chang (1985-86) says, every narration should be +past. Subsequently, the adverb *jīntiān* 'today' clashes with the –past nature of *zhe*.

To make sentences (33c), (33d) and (33f) acceptable, the adverb *hái* 'still' needs to be added. The new adverb allows the sentence to be valid at speech time. For example,

- (33) b'. *Jīntiān tā chuānzhe yījiàn xīn yīfu*
'She is still wearing a suit of new clothes today.'
- c'. *Jīntiān mén hái guānzhe (ne)*
'The door is still closed today.'
- d'. *Bīng rén jīntiān hái zài chuángshàng tǎngzhe*
'The patient is still lying on the bed today.'

The temporal characteristic of *zhe* can further be examined when we check its coexistence with the adverb *zhèng* 'just' in the table. In the table, sentences having the functions of existential, state and posture in (32d)-(32f) are grammatical when the adverb *zhèng* 'just' is added. This surface evidence reflects that V-*zhe* should happen

¹⁰ Time after the speech moment in the day is usually clearly specified, such as *jīntiān xiàwǔ* 'this afternoon'. Exception is made for the case when someone is expected to come today, but he has yet to arrive. The sentence *Tā jīntiān lái* 'He will come today' will then cover the time from now till the end of the day.

at speech time. In sum, based on empirical evidence *zhe* can be generalised as non-future, non-past and occurs at speech time. It marks the present tense as well as the relative tense (for sentences with verbs of manner like 32c).

At this juncture, one may ask, ‘Why can’t *míngtiān* ‘tomorrow’ which is –past co-occur with these sentences?’ Although this is something trivial in Chinese, it needs to be explained. Let’s begin by examine the syntactic analysis of the problem.

míngtiān	bìnggrén	zài	chuángshàng	tǎngzhe
tomorrow	patient	At	bed-on	lying
2ndex	3ndex	4ndex	5ndex	1ndex
Adv	N	P	N	V
-past		lctn	LOC	-trns
			Lctn	-past
				+lctn

?

?

Adv
-past

In the stemma above, the intransitive locative verb *tǎngzhe* ‘lying’ is looking for a non-past adverb. There is one (2ndex) in the tree. The indexing is therefore satisfied. By right, the sentence should be well-formed after the index number 2 is assigned to the corresponding feature of ?[Adv, -past] in the matrix of the head. However, it does not. This shows that the ungrammaticality of the sentence may come from something beyond the control of syntax.

We believe the problem lies in the definition of past [emphasis mine] in the traditional theory of tense and aspect as in Comrie (1976, 1985) and Starosta’s Lexicase. The theories only have a binary opposition of +past and –past, but the

particular distinction in this case in Chinese is ‘present’ and ‘future’. Unfortunately, both features happen to fall into the same –past category. Hence, unless there exists a two-way distinction of future and non-future, past and non-past functioning simultaneously in the grammar of Chinese, it is difficult to explain this particular situation syntactically.

4.3.4 *Zài* as a Tense Marker

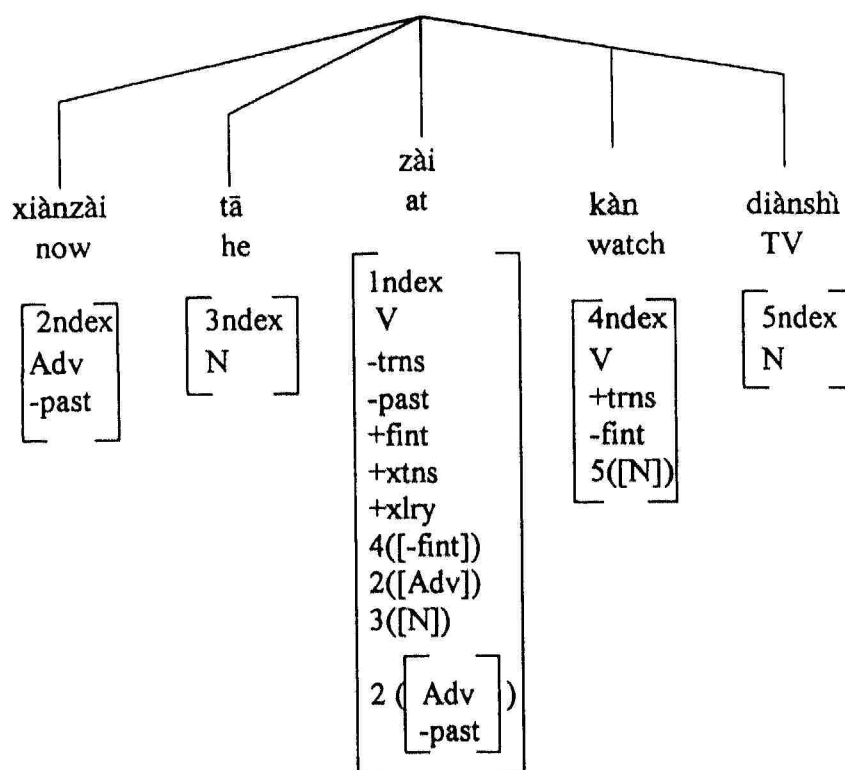
Zài, as a verb means ‘to exist’ as in *Tā zài jiā* ‘He is at home’ in Chinese. In this section, we are not concerned about the verbal meaning of the verb, but will focus on its function as a tense marker. As a tense marker, *zài* indicates that an action is in progress. Hence, it does not co-occurs with stative or telic or irreversible or resultative verbs such as *xǐhuan* ‘like’, *sǐ* ‘die’ and *kànwan* ‘finished reading’ in (34a) - (34c) respectively. These verbs mark the termination or completion of an action. Naturally, it contradicts with the meaning of *zài* that shows something exists. Only activity verbs such as *kàn* ‘to see, to watch’, *chī* ‘to eat’ take *zài* as in (34c). Unlike *le*, *guo* and *zhe* that are postverbal, *zài* precedes the verb.

- | | | |
|---------|---------------------------|----------------------|
| (34) a. | * <i>Tā zài xǐhuan wǒ</i> | *‘He is liking me.’ |
| b. | * <i>Tā zài sǐ</i> | ‘He is dying.’ |
| c. | * <i>Wǒ zài chībǎo</i> | *‘I am eating full.’ |
| d. | <i>Tā zài kàn diànshì</i> | ‘He is watching TV.’ |

The temporal property of *zài* can be seen when sentences in (35) are tested against adverbs such as *zuótiān* 'yesterday', *yǐjīng* 'already', *céngjīng* 'formerly', *xiànzài* 'now', *zhèng* 'just', and *míngtiān* 'tomorrow'.

- (35) a. **Zuótiān tā zài kàn diànshì* 'He was watching TV yesterday.'
 b. **Tā yǐjīng zài kàn diànshì* *'He is watching TV already.'
 c. **Tā céngjīng zài kàn diànshì* *'He was watching TV before.'
 d. *Xiànzài tā zài kàn diànshì* 'He is watching TV now.'
 e. *Tā zhèng zài kàn diànshì* 'He is watching TV right now.'
 f. **Tā míngtiān zài kàn diànshì* *'He is watching TV tomorrow.'

Sentences above show that only (35d) and (35e) are acceptable in the spectrum of +past to -past. This confirms that *zài* refers to the current moment. It is an absolute tense marker of the present tense. The grammaticality of (35d) can be represented in Lexicase. In the theory, *zài* is treated as an auxiliary, which in turn, is the head of the sentence. An auxiliary is, by definition, an extension verb that always contains a verbal complement as dependent (*kàn diànshì* in this sentence). Being an extension verb, *kàn* is non-finite, which means that it does not contain a nominative dependent. In simple terms, it has no subject NP by itself, as explained in Chapter Three.



Contextual features in the tree are all satisfied. The head expects an adverb that is non-past. This requirement is satisfied by the presence of *xiànzài* 'now' (2ndex). If the adverb is replaced by *zuótiān* 'yesterday' as in (35a'), the sentence becomes ungrammatical because the +past nature of the adverb is not compatible with the -past feature of *zài*. As regards the ungrammaticality of (35f'), we can only argue that it is due to the limitation in the general theory of tense and aspect that the distinction between the present and the future is not defined. The problem is precisely the same as what has been discussed earlier in the case of *zhe*.

- (35) a'. **Zuótiān tā zài kàn diànshì*
 Adv V
 +past -past

- f. *Tā míngtiān zài kàn diànshì
 Adv V
 -past -past

We may also examine the sentence with another adverb that indicates a longer duration, namely *yīzhí* ‘all along’ as in (36) below. The acceptability of the sentence confirms that *zài* can also be used for an activity that has been on for a longer period of time or ‘periodicity’ as discussed by Huang (1988). This property of the marker leads to the ambiguity in the meaning of sentence (37). The sentence has two interpretations.

- (36) Tā yīzhí zài kàn diànshì
 he all along at watch TV
 ‘He has been watching TV (for quite some time).’
- (37) Tā zài jiàoshū
 he at teach
 ‘He is teaching now.’ (current activity)
 ‘He is teaching now.’ (as a profession)

The meaning of (37) is determined by the addition of an external argument such as an adverb or by the discourse.

- (38) a. Nànián wǒ zài jiàoshū
 * ‘I was teaching that year.’ (current activity)
 ‘I was teaching that year.’ (as a profession)
- b. Měitiān zhège shíhou tā yíding zài shuǐjiào
 everyday this-CL time he sure at sleep
 lit. ‘He is surely sleeping at this hour everyday.’
 ‘Without fail, he sleeps at this hour everyday.’ (current activity)

Syntactically, we know that the sentential adverb has a broader scope over the basic sentence (such as *Wǒ zài jiàoshū* and *Tā yīdīng zài shuǐjiào* in (38)). Hence, the temporal property of the basic sentences is now determined by the scope of *nànián* ‘that year’ and *měitiān zhège shíhou* ‘at this hour everyday’ respectively, despite the fact that *zài* has been seen as a marker of the present tense so far. In other words, the new reference time of the events in (38) is no longer the ‘speech time’ but the time designated by the time adverbials.

- (38') a. *Nànián* [_s *wǒ zài jiàoshū*]
 b. *Měitiān zhège shíhou* [_s *tā yīdīng zài shuǐjiào*]

This leads to another interesting phenomenon. When we replace the verbs in (38') with verbs that indicating an ongoing activity, such as *kàn diànshì* ‘watch TV’ in *Tā zài kàn diànshì* ‘He is watching TV’ (34d), the sentences become ungrammatical unless another sub-sentential adverb is added to make the action a durational or habitual activity.

- (39) a. * *Nànián* [_s *tā zài kàn diànshì*]
 b. * *Měitiān zhège shíhou* [_s *tā zài kàn diànshì*]
 a'. *Nànián* [_s *tā jīngcháng kàn diànshì*]
 ‘He often watched TV that year.’
 b'. *Měitiān zhège shíhou* [_s *tā yīdīng zài kàn diànshì*].
 ‘He is definitely sleeping at this hour everyday.’

(39a) is ungrammatical because the short time span of ‘watching TV’ contradicts with the long time span denoted by *nànián* ‘that year’ in the same sentence. By adding the adverb *jīngcháng* ‘always’ added, the single ongoing activity of ‘watching TV’ in (39a’) is now turned into a regular activity that recurs many times throughout *nànián* ‘that year’. Note that *zài* cannot survive in the new sentence. Similarly, sentence (39b’) needs an additional adverb *yīdīng* ‘definitely, certainly’ to make the event of ‘watching TV’ a particular instant of activity that will take place *měitiān zhège shíhou* ‘at this hour everyday’. In sum, when ‘*zài* + V’ indicates an activity currently in progress, *zài* is an absolute present tense marker. However, when it indicates that a long-term activity, such as *zài jiàoshū* ‘is teaching (as a profession)’, the tense of the sentence may still be in the present tense (as in (37)) or the meaning may depend on the time adverbial that occurs in the sentence or deducible from the discourse. In such cases, *zài* is no longer the tense marker of the sentence.

This is perhaps the why Lin (2000) argues that *zài* cannot be a tense marker. He provides sentence (40) below as evidence:

- (40) a. Tā sāndiǎn de shíhou zài shuǐjiào
 he three-o’clock at time at sleep
 ‘He was sleeping at three o’clock.’
 b. Tā zài shuǐjiào
 he at sleep
 ‘He is sleeping.’

Lin explains that:

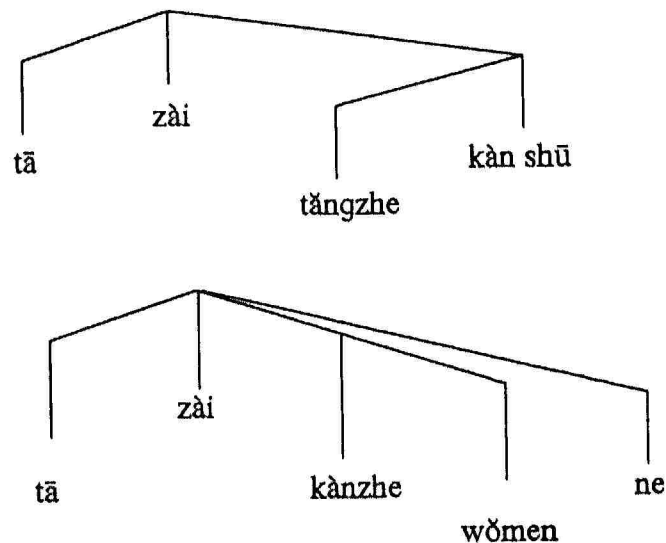
Zai is a pure aspect marker which does not have its own tense interpretation, namely, it does not say anything about when the action denoted by the VP takes place. (p.112)

Based on explanation provided for (39), we agree with Lin that *zài* in (40a) is not a tense marker, because the reference point of the event is the time set by the adverbial ‘three o’clock’, not the time that ‘he’ sleeps. However, we cannot agree with his other claim that *zài* in (40b) is merely a ‘present-tense like interpretation’, just because *zài* in (40a) ‘is not a tense marker’. Such a deduction is debatable. Lin seems to be unaware of two different semantic interpretations of the same verb which occurs with *zài*: one for current short-term activity and the other for an activity that occupies a longer duration.

Our findings show that the markers *le* and *guo* cannot coexist with *zài*, while in some cases, they can co-occur with *zhe*.

- (41) a. *Wǒ zài chīle fàn
 * ‘I have eaten right now.’
- b. *Wǒ zài chīguo₁/chīguole fàn le₂
 * ‘I have already eaten right now.’
- c. Tā zài tǎngzhe kànshū ne
 ‘At this moment, he is lying and reading.’
- d. Tā zài kànzhe wǒmen ne
 he at watch-mrk we p
 ‘He is watching us (now)!’

(41a) and (41b) are unacceptable because of the temporal contradiction between the markers: *le* and *guo* are past tense markers but *zài* marks the present tense. But in (41c) and (41d), *zhe* and *zài* co-occur. This is because syntactically, they occur at different clause levels. In the Lexicase theory, *zài* is the head of a sentence but *zhe* is in the extension clause of the head. It is the dependent of the extension verb *kàn* in (41c) and it is an extension verb itself in (41d) below.



In this section, the tensal properties of the set of markers that has long been recognized as markers of aspect have been examined by first checking their ability to coexist with different temporal expressions, and subsequently, by demonstrating their syntactic grammaticality according to the Lexicase theory. Contrary to general belief, we have shown that *le*₁, *guo*₁/*guole*, *guo*₂ and *zhe* are not only markers of absolute tense, but are also markers of relative or/and relative-absolute tense. *Le*₂ and *zài*,

however, only play the role as absolute tense markers. Besides, we have also found that each of the markers can function independently without any time adverbial. These findings have satisfied the first two criteria stated in our hypothesis. At the beginning of this chapter, we hypothesized that,

- (i) A well-formed sentence may express tense without the co-occurrence of any adverbial of time;
- (ii) The set of markers selected for this study will denote tense; and
- (iii) The markers form an integral and coherent system.

Can (iii) be satisfied?

Relative-absolute tense is a type of tense defined by Comrie (1985). It is very common in many languages of the world, but it has never been tested on Chinese. After testing the markers, it is discovered that Chinese is a language that is very rich in this tense. Next, we shall summarise our findings in a schematic representation according to the distinctive features of each marker deduced from our investigation. Our aim is to see if we can come up with a formal representation of the system of tense in Chinese, and, whether the markers form an integral and coherent system as hypothesized.

4.4 Schematic Representation of Tense in Chinese

Bybee (1985) defines the notion of grammatical category as a set of conceptually-related morphemes that contrast with one another, and which are expressed in a parallel fashion. In other words, they will occur in the same position. He further defines tense as follows:

tense is the category that covers references to time relative to the time of the speech event. This domain is divided into three parts in some languages: time preceding the speech event, time simultaneous with the speech event, and time subsequent to the speech event. If the three markers for these functions are mutually exclusive in some language, and expressed in a parallel fashion, we conclude that *tense* is a grammatical category in that language. (p.191)

Is tense a grammatical category in Chinese? In this section, we wish to propose a schematic representation of tense in Chinese that will be used as a model to see whether or not the markers are qualified to be a 'grammatical category' defined by Bybee (1985).

Based on the concept advocated by linguists such as Reichenbach (1947), we have proposed in section 4.1 an alternative way to express the temporal representation of human languages. Graphically, it is a multi-tier diagram (Figure 4.2 reproduced below) that may accommodate Reichenbach's E, R and S at separate levels instead of his original linear representation.

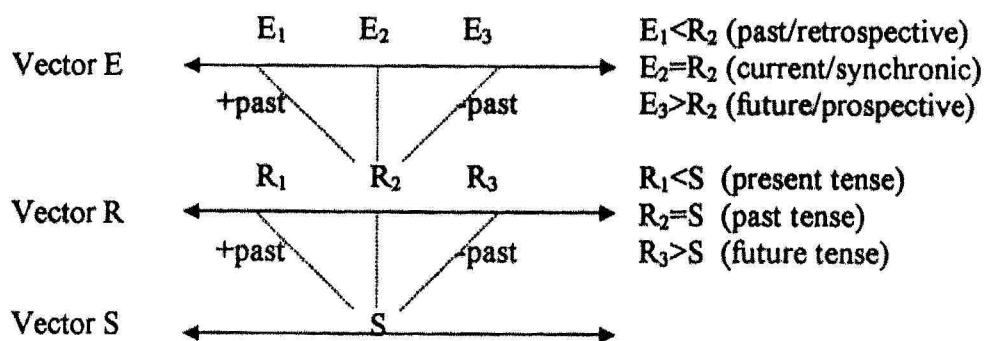


Figure 4.2

The Schema is a key to the understanding of tense in Chinese. As it have been shown in this chapter, tense in Chinese is far more complicated than that in many

other languages. Naturally, it needs a multi-tier schema to manifest the significance of markers in the language.

A graphic representation of the visual position of all markers in tense in Chinese is given in Figure 4.5, based on observations deduced from the discussion in this chapter. The types of tenses available in Chinese are identified, and illustrated with sentences that are considered representative in the grammar. Since the tenses related to these sentences have already been discussed in this chapter, we will only show the graphic representation will be shown without further explanation of the tenses of the sentences.

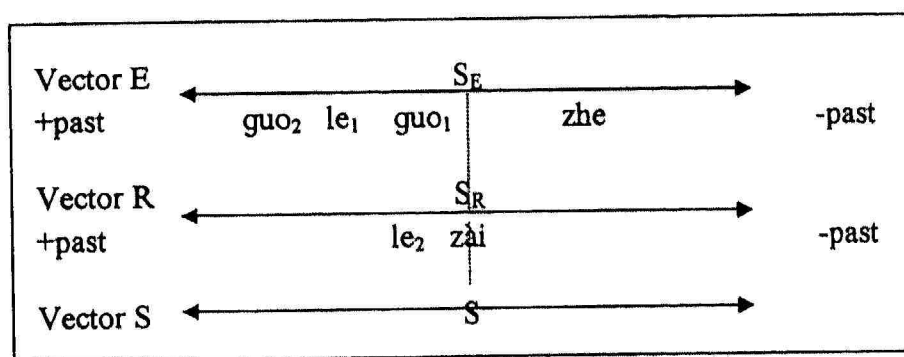


Figure 4.5

In Figure 4.5, S (speech time) is pivoted at a fixed position at the lowest tier, because speech time is always the natural reference point of reference in Chinese (Liao, 1983). Any E or R that falls on the vertical dotted line above S (axis S) means technically, it coincides with S. For convenience, the signs of S_E and S_R are used to represent 'event time that coincides with speech time at Vector E' and 'reference time that coincides with speech time at Vector R' respectively. Hence, S, S_E and S_R actually refer to the speech time. R is the reference time that relates to the speech time on the

one hand, and to E on the other. Vector E is where the reference time of the main verb of an event or situation is located. Event is “whatever occurs (or could occur) at some time period under some set of conditions” (Chung and Timberlake, 1985).

A significant finding in this study is that the tense markers could be generalized into a coherent schema. Figure 4.5 shows the position of these markers and manifests how they are related conceptually to each other. Nevertheless, before going into detail, it should be borne in mind that some of the markers are in fact very close to each other in terms of temporal sequence. For instance, *le₁* and *guo₁* are so close to each other that syntactically they are mutually interchangeable in most cases as can be seen in the sentences *Wǒ chīle₁ fàn le₂* and *Wǒ chīguo₁/ chīguole₁ fàn le₂* ‘I have eaten’ discussed earlier (Zhang, 1986). Also, *le₂* is so close to the vertical axis of S that it marks the termination of one event (+past), and at the same time, the beginning of another new event (-past). For example, *Huā hóng le* can be translated as ‘The flower has turned red’ (a past event) and ‘The flower is turning red’ (an emerging situation) simultaneously. The figure here is just a visual representation of the ‘sequential’ positions of these markers. There is no significant meaning to the temporal ‘distance’ between them although in the figure, they are drawn ‘spatially’ apart. They are ‘sequential’ in terms of temporal occurrence relative to the vertical axis of speech time found in this study: *Le₂*, *le₁*, *guo₁* (includes *guole* discussed so far) and *guo₂* are +past whereas *zhe* and *zài* are –past. *Guo₂* is more remote than *le₁* (Huang, 1988) and *guo₁* is nearer to S than *le₁*. It is judged intuitively by of native speakers that *chīguo₁ fàn le₂* indicates a time that is ‘closer’ to S than *chīle₁ fàn le₂*.

This judgment based on intuition is supported by the definition of *guole* given by Egerod (1994). Egerod defines the marker as “a semiverbal expression, grammaticalised in the sense of anterior (mostly recent) accomplishment, anterior (mostly recent) punctual event, done and over with” (p.295).

Le₂ is +past as mentioned earlier whereas *zài* is located on the vertical axis of S. *Zhe* marks duration that is –past. On the other hand, it is also significant that *le₂* and *zài* only function as absolute tense markers with respect to speech time.¹¹ They are free morphemes while the other markers are bound morphemes. The markers at Vector E mean that they are markers of verbs at the basic or subordinate sentence level. As we have found, they contain both absolute and relative tenses. *Le₂* and *zài*, on the other hand are located at Vector R, and they are syntactically at the sentential or higher clause level. This is another contrast that distinguishes these two markers from the others.

Thus, it would not be wrong to claim that the markers form a coherent and regular tense system. Now, what generalisation can be deduced from this coherent system? Are these indications sufficient to formalize tense as a grammatical category in Chinese? What type of tense system does Chinese possess?

At this point, we shall begin with the argument that there is only one type of tense in Chinese, namely, the Absolute-Relative Tense defined by Comrie (1985). As mentioned earlier, it is the type of tense where a situation is located relative to a

¹¹ Note that there is no marker for future tense in Figure 4.5. This is because future events in Chinese do not have markers on verbs like the past and the present tenses. Usually, the tense is indicated by the presence of auxiliaries such as *huì* ‘will’, *jiāng* ‘about to’ in the sentence. Since the future tense is not compatible with the set of markers dealt within this study, it will not be discussed in this study.

125). As shown in Figure 4.2, the reference point may occur at, before, or after the present moment and at the same time, the event or situation may lie at, before, or after that reference point.

Our claim can be verified with a pair of complex sentences. A complex sentence contains two verbs, one from the main clause and the other from the subordinate clause such as (42) below.

- (42) a. Wǒ mǎile₁ shū jiù huí jiā 'I will go home after buying the book.'
 b. Wǒ mǎile₁ shū jiù huí jiā le₂ 'I went home after buying the book.'

There are several symbols that need to be explained:

- (i) A : The main verb in a simple or complex sentence, such as 'to go home' in (42).
- (ii) B : The verb in the subordinate clause in a complex sentence, such as 'to buy the book' in (42).
- (iii) R_A: The reference time for action A to occur at Vector E. It is relative to the time of action of B in the same sentence. For instance, in (42), the actor will 'go home' only after 'buying the book'. In a simple sentence that contains only one verb, the R_A will be the time designated by the time adverbial in the sentence, or the unspecified speech time otherwise.
- (iv) R_E: Reference time of the event or situation at Vector R. It is simultaneously the reference time with respect to the speech time S.
- (v) S_E and S_R: Visual notations of speech time at the intersection of the vertical axis of S with Vector E and Vector R respectively. The notations are used for discussion purposes only, hence, S, S_E and S_R refer to the speech time.
- (vi) B precedes A: B should occur before A.
 A precedes B: A should occur before B.

On Vector E, the positions of A and B are relative to each other. In complex sentences, we may visualize that they are gliding along the vector without any fixed position on the vector. However, in simple sentences that have no time

specification, it can be assumed that A refers to speech time. Therefore, R_A coincides with S_E .

For a sentence in the present tense, A/S_E , R_E/S_R and S form a straight line, indicating that both the event time and the reference time coincide with the speech time.

Case (1) : Complex Sentences

Case (1a) : Present Tense

As mentioned earlier, a complex sentence contains two verbs: A is the main verb of the sentence while B is the verb in the subordinate clause.

- (42a) *Wǒ mǎile, shū jiù huí jiā* 'I will go home after buying the book.'
(sentence (6))

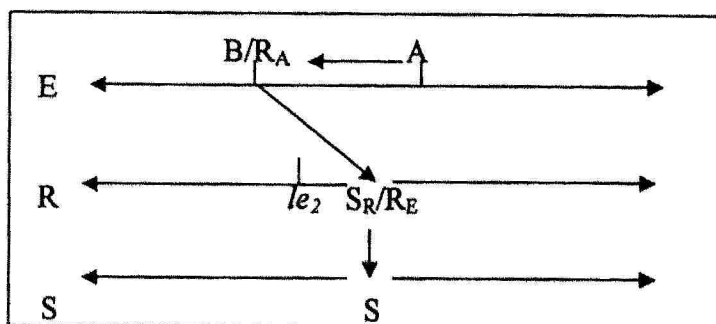


Figure 4.6

The arrows in Figure 4.6 indicate the visual direction of how the reference points are related to each other. In this sentence, the time of action B (buying the book) is the reference time for A (to go home) to occur. Thereafter, R_A is relative to another reference point, namely, the reference time of the whole event (R_E). In this sentence, R_E coincides with S_R because the event happens at the unspecified speech time. Finally, R_E forms an absolute relation with the speech time (S) at Vector S.

Case (1b) : Past tense

With an additional sentence final, sentence (42b) indicates a past event.

- (42b) *Wǒ mǎile₁ shū jiù huí jiā le₂* 'I went home after buying the book.'
(Sentence (8))

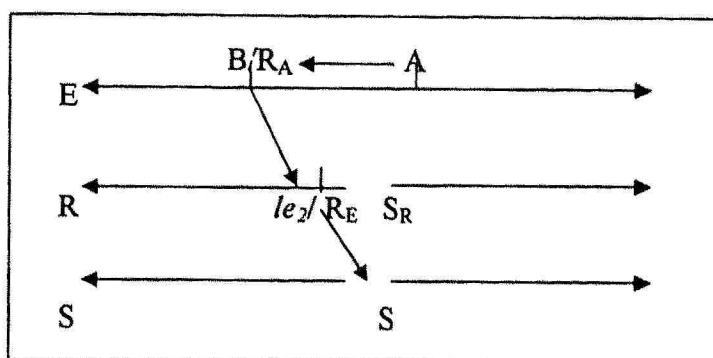


Figure 4.7

As compared to Figure 4.6, it is noticeable that R_E in Figure 4.7 has shifted because of the presence of the past tense marker le_2 . R_E coincides with le_2 in this figure. Thereafter, R_E forms an absolute past relation with respect to S as it is located prior to S_R .

Case (1c) : Present Continuous Tense

This is the case where a sentence contains a manner verb *zhe*. At basic sentence level, the construction has two actions: the main verb and the V-*zhe* which serves as the reference 'point' (in this case, a period of time) for the main verb to take place as discussed in section 4.3.1.3.

(43a) *Tā tǎngzhe kàn shū* 'He reads while lying down.' (32c)

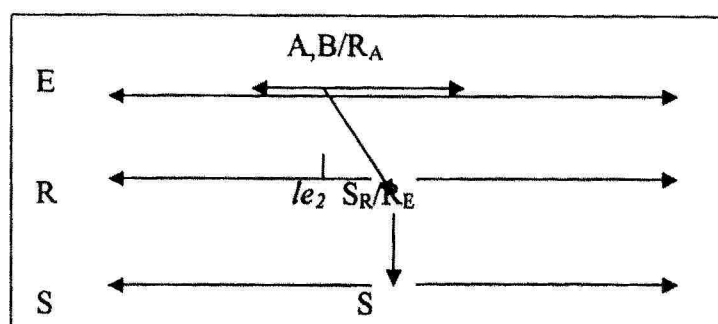


Figure 4.8

In this Figure, B is represented by *tǎngzhe* 'lying down' while A, *kànshū* 'read a book'. The comma between A and B indicates that they are simultaneous activities. As the activities are continuative or in progress, the double-ended arrow shows that no endpoints are specified. Naturally, R_A coincides with A,B. Again, the R_E falls on S_R as the sentence has an unspecified time of utterance which can only be the speech time.

Case (1d) : Past Continuous Tense

Analogically, the sentence above has a parallel construction in past tense although it is not discussed in this chapter. The sentence formed by adding a sentence final *le₂* to the designated sentence. The graphic representation is shown below:

- (43b) *Tā tǎngzhe kàn shū le₂* 'He reads while lying now.'

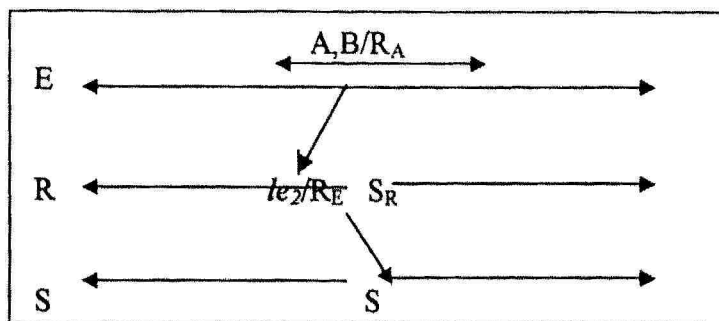


Figure 4.9

The figures above illustrate how complex and continuous sentences in Chinese can be represented schematically. It is significant that all of them demonstrate the properties of A-R Tense defined by Comrie (1985). However, as we compare these figures with Figure 4.3 discussed in this chapter, it is noticeable that the A-R tense in Chinese differs slightly.

Figure 4.3 is the schematized representation of the pluperfect sentence, *Mary had left by three o'clock yesterday* in English cited in Comrie (1985). It is claimed to be a typical case of A-R Tense (reproduced below). In the figure, it is noticeable that there is only one type of connection between R and E, in other words, there is only ONE reference point between Vector E and Vector R. Here, the A is 'Mary's action of leaving', R_E is 'three o'clock yesterday' and S is the speech time.

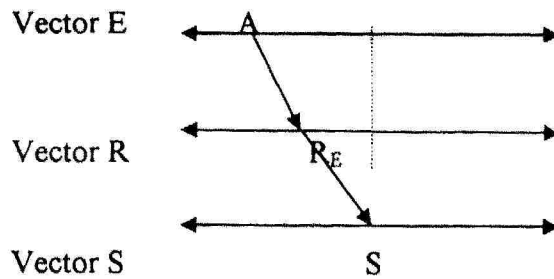


Figure 4.3

However, there are TWO reference points in Chinese in Figure 4.6-4.9. How should it be explained? Fortunately, Comrie (1985) has a little more to say about his A-R Tense in an almost unnoticeable paragraph. He says:

A minor extension of the formalisation enables one to represent even more complex instances of time location, as when a situation is located relative to a reference point which is in turn located relative to a reference point which is located relative to the present moment. (p.128)

His valuable 'minor extension' fits precisely into the temporal significance of Chinese. Figures 4.6 to 4.9 above clearly show that the situation represented by the action of the main verb (A) is relative to a reference point (R_A) set by the time of action of the verb in its subordinate clause (B), or by the time frame set by the manner verb in a continuous sentence. Then, R_A is relative to the reference point of the whole event (R_E) which in turn, is located relative to the present moment (S).

Hence, it becomes necessary for us to redefine our definition of tense in Chinese as a variation of the A-R Tense as the Extended Absolute-Relative Tense. Our schematic representation shows that it is the only type of tense in Chinese [emphasis mine]. Following that, the type of tenses stated in Case (1), should therefore be

renamed as Complex Extended Absolute-Relative Tense, versus a corresponding Simple Extended Absolute-Relative Tense that will soon be discussed below.

Meanwhile, it has been stressed earlier that A and B are relative to each other, and they are not located at any fixed position at Vector E. This characteristic in Chinese also satisfies what Comrie explains in

Relative tenses in themselves give no indication of what the contextually given reference point is – this the hearer must work out from the context and from general consideration of plausibility – rather all that they indicate is that there must be a contextually given reference point. (1999:366)

Hence, it can be deduced that the tense of a sentence in Chinese is determined by the absolute tense, either in the past or the present, with respect to speech time, and it is the presence or absence of the sentence final *le* that decides the tensal property of the sentence. [emphasis mine] Nonetheless, the word ‘past’ does not necessarily mean that the event has really happened. It includes situations that are deducible from broader contexts in the discourse, or upon general consideration of plausibility, or perceptually true to the speaker. This perhaps explains why sentences such as *Nǐ sǐ le, wǒ jiù zuò héshang le₂* lit. *‘I became a monk after you died.’ are acceptable to Chinese speakers, and it could even be narrated as ‘a past event’. The grammar allows a future or irrealise event to be expressed with the marker *le₂* in a conceptual use of past tense.

After identifying the nature of the Extended A-R tense for Chinese, we will demonstrate now how this tense system is applied to simple sentences which contain only one action at Vector E.

Case (2): Simple Extended Absolute-Relative Tense

The simple sentences to be discussed are listed in (44) - (47) below. The significance of this type of tense is that each sentence contains only one verb. At first glance, it appears to contradict our definition of a double-referenced tense in Chinese:.

- (44) a. Wǒ qùguo₂ Rìběn 'I have been to Japan.'
 b. Wǒ qùguo₂ Rìběn le 'I had been to Japan.'

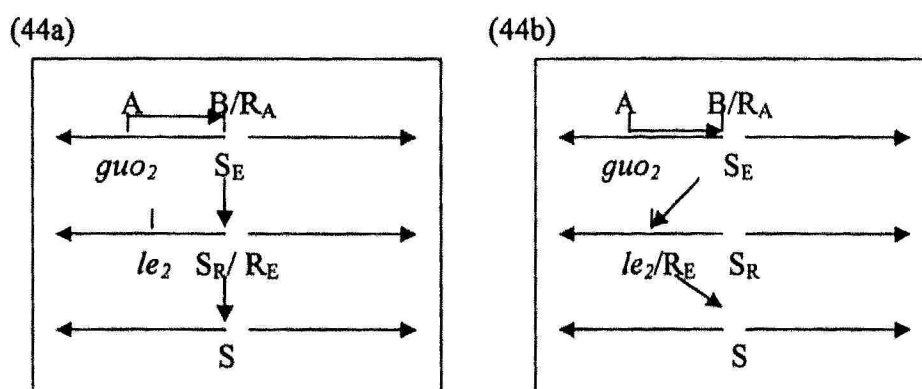


Figure 4.10

Figure 4.10 shows that R_A still exists in simple sentences. But unlike sentences (42) – (43) above where A and B are relative to each other with no designation on their time of occurrence at Vector E, action B in (44) is presumed to have occurred at S_E , which is the unspecified speech time that set the time of the sentence. Hence, the S_E/R_A , S_R/R_E and S coincide in the diagram for (44a). In (44b), the R_E is forced to shift because the presence of le_2 changes the sentence into the past tense.

The same diagram will hold for parallel sentences with le_1 as in (45) below, except that the position of A is closer to B than that in Figure 4.10 because guo_2 is considered more remote than le_2 semantically (Huang, 1988).

- (45) a. Tā qùle₁ Rìběn 'He has gone to Japan.' (21c)
 b. Tā qùle₁ Rìběn le₂ 'He had gone to Japan.' (21d)



Figure 4.11

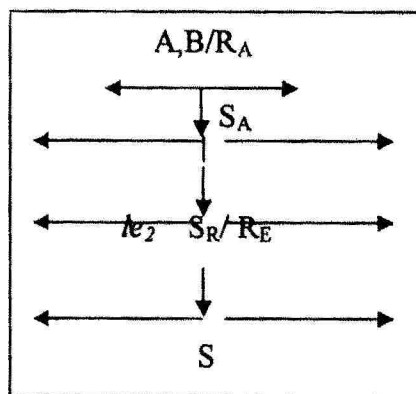
Next, we will illustrate the tensal representation of sentences that indicate action in progress at speech time, that is, sentences with the marker *zài*. Consider

- (46) a. Bìngrén zài chuángshang tǎngzhe (32f)
 'The patient is lying on the bed.'
 b. Bìngrén zài chuángshang tǎngzhe le₂
 'The patient has been lying on the bed.'
- (47) a. Tā zài shuǐjiào 'He is sleeping.' (40b)
 b. Tā zài kànzhe wǒmen ne 'He is watching us now.' (41d)

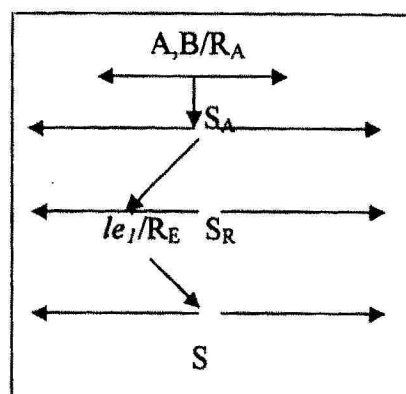
Both the V-*zhe* and *zài* constructions indicate action in progress. They are not concerned with when the action began or when it will be over. However, there is a

difference. As can be seen in Figure 4.8, *V-zhe* (that is, B) sets the durative frame within which the main verb A takes place. *Zài*, on the other hand, focuses on only a point in time of the duration flow, namely, the speech time. Hence, it can be seen in the figures below that A and B coincide at S_E as shown in (46) and (47).

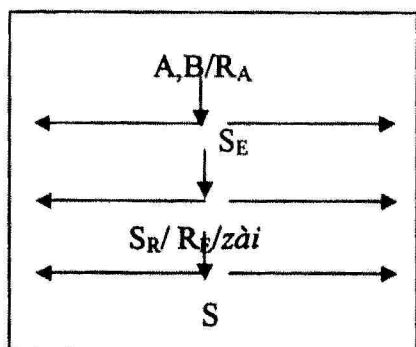
(46a)



(46b)



(47a)



(47b)

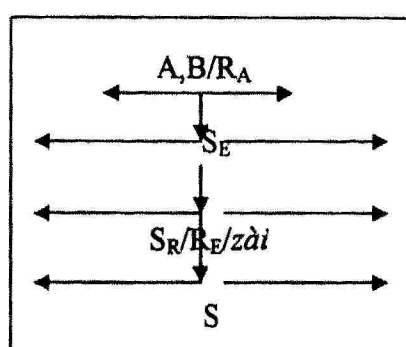


Figure 4.12

However, there are some differences between the schematic representations of sentences (46) and (47). For example, the verbs *tǎngzhe* 'lying on' in (46) and *kànzhe* 'watching, keeping an eye on' in (47b) indicate that the actions of 'lying on' and

'watching' have been ongoing for an unspecified period of time, and at speech time, 'the patient' is still lying on the bed. (46a), and 'he' is still watching us (47b). Sentence (47a), however, only focuses on the fact that 'He is sleeping' at the moment of utterance. (47b) shows that 'he' has been watching 'us' for quite sometime, but the emphasis is the action of 'watching' at speech time

The graphic representations above clearly demonstrate that Chinese is very regular and coherent in its patterns of tensal expressions. It can be seen that the schema proposed in this section has not only captured the whole concept of tense in Chinese, but it can also be used to explain some controversies in the grammar. For instance, linguists have debated for a long time over the identity of sentence final *le* when it is preceded by an intransitive verb. *Tā lái le* can be translated as 'He is coming' or 'He has come' or 'He came'. But our proposed schema can explain the controversy. Syntactically, they are two different types of constructions: (a) *Tā lái le₁* as in (48a) and (b) *Tā lái le₂* as in (48b).

(48a) *Tā lái le₁*

(48b) *Tā lái le₂*

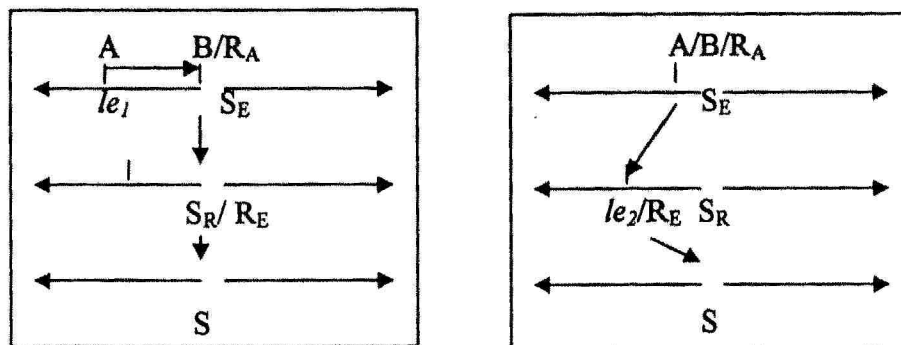


Figure 4.13

If the sentence is analysed as (48a), the verb is *láile₁* ‘came’ and it is a completed action with respect to the S_E , the speech time. If the sentence is interpreted as (48b), the verb *lái* ‘come’ will be an action that has occurred anytime along Vector E. The use of the marker *le₂* turns the action into a past event with respect to R_E . The diagrams show that schematically, the two sentences are very different from each other.

One may ask at this juncture, if tense in Chinese is proven to be the extended form of the A-R Tense, how are they related to our findings in the earlier sections of this chapter in which the markers are found to be Absolute and/or Relative markers? Isn’t this a contradiction?

Our explanation is that, in Section 4.3, we are only concerned with the tensal properties of the individual markers, by checking syntactically whether or not they satisfy the traditional definitions of the absolute tense and the relative tense. No effort has been made to put all markers together into a set of inter-related markers.

It should also be pointed out that the tensal properties of markers established in earlier sections fit nicely into the new Extended A-R Tense defined in this section with no exception. As stressed by Comrie when he introduced his description on Absolute-Relative Tense, the simple absolute and relative tenses are in fact, one of the possible reference points in the A-R Tense (1999: 366-367). In other words, our earlier findings are a subset of the integral tense system, not a contradiction. The present Extended A-R Tense is perhaps a more formal or explicit way of representation that captures all properties in the tense system of Chinese as a whole.

4.5 Analogical Representation of Tense in Chinese

Lexicase theory contributes another type of schematic representation of tense in Chinese, that is, by its Word Formation Strategy (WFS) in Seamless Morphology. The Seamless Morphology is the new morphological theory developed from the Lexicase.

As has been described in Chapter Two, Lexicase defines a ‘word’ in three components (symbolized by the Triune Sign in the theory), namely, the sound, the meaning and the distribution, as compared to Saussure’s differentiation of only ‘sound and meaning’. In other words, in the Lexicase theory, any two words that differ in sound or meaning or distribution are two different words. Hence, a root word that has no marker and the same root word that contains a marker are treated as separate lexical items. For example, *lái* ‘to come’ is considered different from *láile* ‘came’, *chī* ‘to eat’ is different from *chīguo* ‘had eaten before (experience)’, and *kàn* ‘to read, to watch’ is lexically distinctive from *kànzhe* ‘is reading, is watching’ and so on, mainly because each of them represents a differing perspective of an action.

As such, the theory seems to be producing an unlimited number of lexical items in a language. However, Starosta’s belief that pair-wise words that arise from the same root, or words that are related to each other semantically or grammatically or phonologically can actually be grouped into a set of words by analogical rules in his WFS.

Tentatively, there are two rules that can be analogized from our discussions on *le₁* and *guo₂* in this chapter.

WFS-1 (for le_1):

$$\left[\begin{array}{c} V \\ -\text{past} \end{array} \right] : \left[\begin{array}{c} V \\ +\text{telc} \\ +\text{past} \end{array} \right]$$

$$] : le_1]$$

The WFS-1 rule establishes the relationship between the verb that appears to the left of the analogical rule and another verb indicated on the right. This indicates that, corresponding to a V which is non-past, there is another verb with the features +telc and +past and ending in le_1 . For example, the verb *lái* ‘to come’ has a corresponding form *láile* ‘came’ in the past tense. Similarly, *chī* ‘to eat’ has *chīle₁* ‘ate’, and *kàn* ‘to read, to watch’ has its past tense form which is *kànle₁* ‘read, watched’.

WFS-2 (for guo_2):

$$\left[\begin{array}{c} V \\ -\text{past} \\ -\text{prmn} \end{array} \right] : \left[\begin{array}{c} V \\ +\text{past} \\ +\text{xprn} \end{array} \right]$$

$$] guo_2]$$

Rule 2 summarises the morphological difference between a set of analogically related words that are ‘±experience’. To the left of the analogical rule, lies the verb that is –past and –prmn (non-permanent). These verbs have a corresponding V that is +past and +xprn and ends with guo_2 .

A non-permanent verb is a verb that is reversible or repetitive. In other words, with the exception of verbs like *sǐ* ‘to die’, *zhǎng* ‘to grow’ which are irreversible,

cognitive verbs such as *míngbai* ‘to understand’, *zhīdao* ‘to know’ which are non-repetitive, all action and stative verbs that are non-permanent will have a corresponding verb *V-guo*₂ that is experiential.

The two WFS rules stated above have therefore formulated all *V-le*₁ and *V-guo*₂ into simple representations. Similar to the schematic representation of the tense system defined in section 4.3 above, these WFS rules will be further developed as we discuss aspect in the next chapter.

4.6 Concluding Remarks

Tense, as Binnick (1991) stresses, do not establish reference time (R). Instead, it only indicates the relation of R to S, the speech time. The tense system in English that always relates R to S is merely one particular type of tense in human languages. However, it leads to the misunderstanding that it is the basic form of tense because of the dominating influence of the language in the world.

In this chapter, we have used, as our basis of analysis, (i) Comrie’s definition of tense, that is, tense is the grammaticalised expression of location in time, (ii) Rohsenow’s (1978a) claim that tense is a ‘time orientation’, and (iii) Bybee’s (1985) morphological criterion on the grammatical category of tense. Contrary to general belief, Chinese does not only have tense, it also has a set of well-defined tense markers which indicate the temporal meaning of the sentence without the assistance of any time adverbial. Moreover, the markers are so coherent in behaviour that they can be represented graphically. As such, we claim that tense is a grammatical category in Chinese and it is identified to be the Extended Absolute-Relative Tense, a tense that is

very different from that in English. The schematic representation proposed is a preliminary discovery in this study. It may not be perfect, but it is a plausible solution to the understanding of the tense system in Chinese.

It is common practice among Chinese speakers to omit tense markers when they are felt to be redundant. Also, the markers can be mutually interchangeable when they are semantically identical. This ellipsis has caused many controversies in the field of Chinese syntax. This chapter has thus provided some explanation to clarify various long existing controversies that arise from this peculiar behaviour in the language.

The traditional claims that Chinese is a language with no tense needs to be reexamined. The tense markers discussed in this chapter are traditionally the aspect markers in Chinese. In the next chapter on aspect, we will discuss the syntactic function of these markers. It is hoped that the same schematic representation proposed in this chapter can be developed further at the end of our discussion on aspect. We also hope to show that the two grammatical categories in Chinese can be integrated into a coherent system.