CORPUS-BASED STUDY OF THE GRAMMATICALIZATION AND SEMANTIC NETWORKS OF CHINESE GUO AND LE

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ABSTRACT

Due to their polysemous nature and inter-lexical polysemy (Evans, 2015), Chinese guo (過/过) and le (了) have proven to be two of the most closely related and most puzzling linguistic items for linguists to describe and L2 learners to master. Previous studies have made important findings on the semantics of guo and le (e.g., Chao, 1968; Lü, 1980; Li & Thompson, 1981; Huang & Davis, 1989; Smith, 1997); however, no satisfying, unified account has been offered. One major gap in the previous studies is the lack of systematicity. Moreover, none of the previous studies have tried to offer complete accounts for guo and le. In addition, the inter-lexical polysemy of guo and le has not been addressed as a polysemous phenomenon in a systematic fashion in the literature. With the aim of filling these gaps, this dissertation explores the semantics of guo and le from a cognitive, usage-based approach (e.g., Langacker, 1987, 2008). Specifically, by adopting Tyler and Evans’s (2003) methodology of Principled Polysemy, this study begins the exploration from the discussion of the proto-scenes or the primary senses of guo and le, and argues that the previous studies that treated the aspectual meanings of guo and le as their central senses and the starting point of their analyses are mostly wrong-headed. Through analyzing diachronic corpus data that cover a history of 3,000 years from the Western Zhou (1046-771 BCE) to modern times, this dissertation shows how guo and le have systematically evolved from their primary senses to today’s highly polysemous phenomena. Cognitive and usage-based explanations of meaning extension are an essential part of this dissertation.
Furthermore, this study establishes semantic networks for *guo* and *le*, which not only represent the diachronic grammaticalization paths (Bybee et al., 1994) of the two particles, but also the synchronic interrelationship among the meanings. Finally, the inter-lexical polysemy, i.e., the seemingly interchangeable, but subtly different uses of *guo* and *le*, is analyzed with Lexical Concepts and Cognitive Models (Evans, 2015). Overall, this dissertation provides a systematic, motivated and fuller account of the semantics of *guo* and *le*.
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Chapter 1 Introduction

In this chapter, I first introduce the main thesis of this dissertation, and then provide a brief overview of the theoretical background underpinning this study, including the basic tenets of Cognitive Linguistics, Tyler and Evans’s Principled Polysemy Model, Evans’s Theory of Lexical Concepts and Cognitive Models, and grammaticalization.

1.1 The point of this dissertation

During the past fifty years of linguistic studies on the Mandarin Chinese language, guo (過/过) and le (了1) have proven to be two of the most closely related and most puzzling linguistic items for linguists to describe and L2 learners to master. In large part, this is due to the fact that they both are highly polysemous in nature. Moreover, while each has a distinct set of meanings associated with it, several of the meanings of guo and le are very similar or even overlap; there exist situations in which guo and le are apparently interchangeable, which adds to the complexity of the polysemous guo and le. Previous studies have made important findings on the semantics of guo and le; however, no satisfying, unified account has been offered in the literature. Since Chinese is essentially a tenseless language with a very limited number of aspect markers, including guo and le, most of the previous studies on guo and le focused on the aspectual meanings of guo and le as their central senses and the starting point of their analyses (e.g., Chao, 1968; Lü, 1980; Li & Thompson, 1981; Huang & Davis, 1989; Iljic, 1990; Smith, 1997, 2005; Pan & Lee, 2004; Lin, 2003, 2006, 2007; Chen, 2009; Li, 2011). This has resulted in the present state in which the analysis tends to remain at the surface-level with the many

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1 I hypothesize that le experienced phonological reduction from liao to le. This is discussed in detail in the dissertation.
meanings of *guo* and *le* represented by a list of discrete, confusing abstract senses. The main thesis of the current work is to establish a systematic, unified\(^2\) and persuasive account of the semantics of *guo* and *le*.

This dissertation seeks to explore the semantic substances of *guo* and *le* from a cognitive, usage-based approach (e.g., Langacker, 1987, 2008; Bybee & Hopper, 2001). This approach offers a more accurate, explanatory and more complete understanding of language than the traditional view (Tyler, 2012, p. 4). The traditional view treats language as an isolated system separate from general cognitive processes which operates under a set of abstract and arbitrary rules. Unlike the traditional view, the cognitive, usage-based approach posits that language is a reflection of general cognitive processes, including human experience and interaction with the physical world, and that all linguistic units arise from usage events. Central to this approach are two basic human cognitive processes: schematization and categorization (Langacker, 2008). Specifically, linguistic units are abstracted from “the contextual understanding of occurring expressions” (Langacker, 2008, p. 220). Once the units are entrenched in the language through recurring uses, cognitive routines are established as schematic templates or categories, and subsequently guide further usage events. An established linguistic unit may develop new senses through new usage events which partially manifest or distort the category schema. This leads to semantic extension and the phenomenon of polysemy. Furthermore, all the senses associated with the linguistic unit, with some more central or prototypical than others, are linked by categorizing relationship (Tyler & Evans, 2003; Langacker, 2008) and form a semantic network

\(^2\) Following Evans (2015), the word “unified” does not mean that *guo* and *le* as two distinct linguistic items can receive a single account. “A unified account of *guo* and *le*” conveys that these two distinct phenomena of polysemy can be analyzed with the same methodology of cognitive linguistics that reveals “our universal meaning-making capacity” (Evans, 2015, p. 102).
that exhibits motivated systematicity in the extended senses (Tyler & Evans, 2003). For the cases of the Chinese *guo* and *le*, most previous studies followed the traditional approach and treated *guo* and *le* as arbitrary forms behaving under abstract principles yet with many exceptions and unaccountable interchangeable situations. The cognitive, usage-based approach allows us to explore and understand the mysterious *guo* and *le* bottom-up, i.e., from a perspective in which the linguistic features are grounded in “the elemental components of [our] moment-to-moment living” (Langacker, 2008, pp. 4-5).

In this dissertation, I argue that although the previous studies that treat *guo* and *le*’s aspectual senses as the central senses and starting points have provided us an interesting perspective, they are mostly wrong-headed. Using Tyler and Evans’s (2003) methodology of principled polysemy, the present study begins the exploration from the discussion of the proto-scenes of *guo* and *le*. Primarily, there are three aims in this study: First, it uses diachronic corpus data to explore how *guo* and *le* have evolved to be highly polysemous by focusing on the proto-scenes (i.e., the primary senses) (Tyler & Evans, 2003) and the grammaticalization paths (Kuryłowicz, 1975; Heine, 1991; Hopper & Traugott, 1993; Bybee et al., 1994; Langacker, 1999, 2011). Second, it adopts Tyler and Evans’s (2003) methodology of principled polysemy to establish a semantic network for each of the two items in question, which will be a motivated and systematic representation of all the meanings of *guo* and *le* identified in the diachronic corpus data. Third, it probes the inter-lexical polysemy (Evans, 2015) of *guo* and *le* by comparing the semantic networks of *guo* and *le* so as to address the seemingly interchangeable, but subtly different uses of the two items.
The diachronic corpus data employed in the present study involve eleven books and a corpus – the Corpus of the Center for Chinese Linguistics of Peking University (Modern Chinese Section) 北京大学中国语言研究中心语料库 (现代汉语)³, covering a history of 3,000 years from the early Western Zhou (1046-771 BCE) to modern times. 1877 tokens of guo and 1026 tokens of liaolle were examined, and over 40 senses associated with guo and over 30 senses associated with liaolle were identified. To my knowledge, it is the largest diachronic corpus study on guo and le to date, and provides strong evidence of the semantic developments and grammaticalization paths of guo and le. The semantic networks illustrate how the senses and functions are connected and extended from one another in a systematic and motivated way. Moreover, the semantic networks are organized clockwise to roughly represent the diachronic evolution of the senses and functions.

A major gap in the previous studies of the semantics of guo and le is a lack of systematicity. The establishment of the semantic networks for guo and le fills that gap. None of the previous studies paid attention to the fundamental question: Whether the various meanings associated with guo and le are simply accidental, or systematically related (following Tyler and Evans’s question for the exploration of the polysemy of the English preposition over). As Tyler and Evans (2003) point out, this question is central as “it affects not only how we model the semantics of individual lexical items and the architecture of the mental lexicon, but also the rest of one’s model of language” (p. 1). By adopting Tyler and Evans’s (2003) Principled Polysemy Model (PPM) and using diachronic corpus data, the present study is able to show how the many

³ The Corpus of the Center for Chinese Linguistics of Peking University 北京大学中国语言研究中心语料库 is available at http://ccl.pku.edu.cn:8080/ccl_corpus/ [last accessed on December 27, 2016].
meanings of *guo* and *le* are systematically extended from their proto-scenes or primary senses to today’s highly polysemous phenomena. The shift of starting point from the aspectual meanings of *guo* and *le* to their proto-scenes is not trivial, but crucially important. It makes a systematic and motivated account of the semantics of *guo* and *le* possible. For instance, the proto-scene of *guo*, the TR moves along a certain path from one side of the LM to the other side in the manner of walking, essentially represents one of the most common processes that people encounter and repeat in everyday life. The sense of ‘process’ is central in the original motion semantics of *guo*, which has extended to involve the concept of process beyond the domain of physical motion events. When an event described by a verb is marked with *guo* as a previously repeated process, the ‘experiential aspect’ arises. That is, *guo* evolved from a verb denoting motion events to an aspect marker indicating that the agent has the experience of going through a certain kind of process or doing a certain kind of action. Note that the language used to discuss experiencing a process involves movement. Similarly, by starting the exploration of the semantics of *le* from its proto-scene, we will be able to understand the systematicity and the motivated relationship among the distinct senses associated with *le*. The proto-scene, a newborn baby without arms, associated with *le* invites people to infer that the child’s life is finished or will soon to be finished (Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher, 2002, 2010), especially when we consider the formidable natural, living conditions two thousand years ago, when the character first arose. Once the sense of ‘finish’ became entrenched in *le*’s semantics, *le* began to evolve into a perfective aspect marker indicating that an event is viewed as an integral whole. Using Tyler and Evans’s PPM, the present study not only establishes a systematic and motivated account for *guo* and *le*, but also demonstrates that language cannot be an autonomous enterprise housed in an
encapsulated module of the brain with the goal of generating grammatically correct sentences. The meaning development of guo and le in conjunction with the emergence of their grammatical functions provides concrete evidence that what promotes semantic extension and grammaticalization is essentially our non-linguistic knowledge, e.g., our knowledge of the world and our experience with the world and language, to which words facilitate access (Evans, 2015). Furthermore, this dissertation demonstrates that Tyler and Evans’s PPM has wider application. Tyler and Evans only claimed that going back to the earliest attested form worked for spatial particles since the core of the spatial meaning did not change. The present study looks at examples of Chinese words that started as a verb and a noun, respectively, retained their schematic cores, and developed a wide range of meanings and word classes.

The use of a diachronic corpus provides a broader, richer representation of the semantics of the two markers than any other source. The diachronic corpus study finds numerous senses or functions associated with guo and le which have not been discussed systematically in previous studies. The findings of the new senses not only help to establish a more complete understanding of guo and le, but also to explain some of the more puzzling cases in the literature. For instance, Li and Thompson (1981) define the verb suffix le as a perfective aspect marker. However, when facing the sentence

墙 上 挂 了 一 幅 画。  
Qiang -shang gua -le yi -fu hua  
Wall -on hang -PFV one -CL picture
‘A painting was hung on the wall.’  
‘A painting had been hung on the wall.’  
‘On the wall hangs a painting.’

– which has a stative reading as shown in the third English translation, Li and Thompson (1981) self-contradictorily claim that “-le cannot be characterized as expressing completion. Typically,
of course, an action that is bounded is also complete, but -le need not necessarily signal completed action” (Li & Thompson, 1981, p. 215). On the one hand, Li and Thompson argue that this sentence is perfective as it is bounded by a quantified direct object, and thus, the perfective aspect suffix le is used. (Note that their English translation is in the past tense – ‘A painting was hung on the wall’ or ‘A painting had been hung on the wall.’) On the other hand, they claim that the perfective aspect suffix le in this sentence does not convey completion, but a state because the verb gua ‘hang’ describes a stative situation. (Note that they provide an English translation in the present tense – ‘On the wall hangs a painting.’) In the corpus-based study, I found that the verb suffix le can be used to convey the sense of ‘actualization.’ The ‘actualization’ sense is the second most frequently used sense of the verb suffix le in the data from the Modern Chinese Corpus of the CCL. Going back to the puzzling sentence above, the structure of this sentence is Place Word + Verb + Object. This is a typical existential sentence structure, or construction, in Chinese. Therefore, the sentence is better understood as ‘there is a painting hanging on the wall,’ and this event is actualized by the suffix le. Without the suffix le, the event is not actualized yet, namely, there is no painting on the wall. The expression without the suffix le

墙        上        挂        一        幅        画。
Qiang    -shang   gua   yi    -fu  hua
Wall    -on  hang   one   -CL   picture
‘Hang a picture on the wall.’

– is an imperative expression or a suggestion.

The ‘actualization’ sense of the suffix le seems derived from the ‘finish/complete/end’ sense of liaolle. Based on our experience, when an event or action was finished prior to the reference point, it may become the starting point for a new state. For instance, when the action of hanging
a picture on the wall was performed and finished, the picture exists on the wall after that, i.e., there is a picture hanging on the wall.

Benefitting from the recent development in the theory of CL, this dissertation is the first work that addresses the inter-lexical polysemy (Evans, 2015) of guo and le from a cognitive and usage-based perspective. Inter-lexical polysemy refers to “apparent similarities in the nature of lexical concepts associated with distinct lexical forms” (Evans, 2015, p. 112). For example, both guo and le can convey the sense of ‘past [event]’ and the sense of ‘after.’ In other words, guo and le share the lexical concepts ‘past [event]’ and ‘after.’ However, what is important is to find out whether these lexical concepts associated guo and le are completely identical or have distinct lexical profiles or different semantic and/or formal selectional tendencies (Evans, 2015). The corpus data in this dissertation illustrates the distinct lexical profiles or selectional tendencies associated with the lexical concepts shared by guo and le. For example, the lexical profile of the ‘past [event]’ lexical concept associated with guo selects for semantic arguments concerning indefinite past events or experientiality, whereas the semantic arguments that co-occur with le relate to content that has to do with specific past events. In other words, although guo and le share the lexical concept of ‘past [event],’ they have distinct semantic selectional tendencies. Another example is that guo and le both have the lexical concept of ‘after,’ however, they are distinct in terms of formal selectional tendencies. Specifically, guo can be followed by a time period as in guo liang nian ‘after two years,’ whereas le cannot. Conversely, le in the sense of ‘after’ can be attached right after a “verb + resultative complement” construction as in Wei-bao-le ma, Cao Cao xian shui ‘After [they] fed [the] horses, Cao Cao slept first,’ whereas guo cannot. The explanation of the distinct formal selectional tendencies can be traced back to the proto-
sciences of *guo* and *le*, which involve the notions that *guo* emphasizes the process, whereas *le* focuses on the end point or the result. Thus, *guo* can take a period of time, e.g., ‘two years,’ and *le* is compatible with resultative complement construction.

This cognitive, usage-based study of *guo* and *le* has potential benefit to Chinese learners and teachers. Traditionally, *guo* and *le* are taught based on syntax-oriented grammar adopted by most textbooks. However, the formal approach is inadequate (van den Berg & Wu, 2006) in accounting for the uses and functions of *guo* and *le* largely due to the absence of consideration of the semantic and contextual features of these two linguistic items. For instance, here is how a textbook widely adopted by universities in the United States explains *guo* (*過*/*过*) and *le* (*了*):

As a complement, *過*/*过* [*guo*] must be used with *了* [*le*] when occurring at the end of a sentence, as in (1) and (2). However, if there is an object, *了* can be omitted, as in (3). *過*/*过* as a complement is interchangeable with *了*, as seen in (3a). If there’s *了* after *過*/*过*, *過*/*过* can be omitted without changing the meaning, as seen in (1a) and (2a).

(From *Integrated Chinese, Level 2 Part 2*, by Liu et al., 2010.)

Here are the sentences from the textbook:

1. A: 老师叫你去办公室找他，你快去吧。
   Laoshi jia ni qu bangongshi zhao ta, ni kuai qu ba
   ‘The teacher asked you to go see him in his office. You’d better go quickly.’

   B: 我去过 了。
   Wo qu-guo le
   ‘I’ve already gone [there].’

2. A: 你看看这本杂志吧，很有意思。
   Ni Kan-kan zhe ben zazhi ba, hen you-yisi
   ‘Take a look at this magazine. It’s really interesting.’
B: 什么杂志？噢，这本，我看过了，的确不错。
Shenme zazhi? Ou, zhe ben, wo kan -guo le, dique bucuo
What magazine? Oh, this CL, I look-GUO LE, indeed good
‘Which magazine? Oh, this one. I have already read it. Indeed, it’s quite good.’

(3) 别急，我洗过澡就走。
Bie ji, wo xi -guo zao jiu zou
Don’t worry, I wash-GUO bath then go
‘What’s the big rush? I’ll leave as soon as I take a shower.’

(3) a. 别急，我洗了澡就走。
Bie ji, wo xi -le zao jiu zou
Don’t worry, I wash-LE bath then go
‘What’s the big rush? I’ll leave as soon as I take a shower.’

(1) a. A: 老师叫你去办公室找他，你快去吧。
Laoshi jiao ni qu bangongshi zha ta, ni kuai qu ba
Teacher ask you go office find him, you quickly go BA
‘The teacher asked you to go see him in his office. You’d better go quickly.’

B: 我去了。
Wo qu le
I go LE
‘I’ve already gone [there].’

(2) a. A: 你看看这本杂志吧，很有意思。
Ni kan-kan zhe ben zazhi ba, hen you-yisi
You look-look this CL magazine BA, very interesting
‘Take a look at this magazine. It’s really interesting.’

B: 什么杂志？噢，这本，我看 了，的确不错。
Shenme zazhi? Ou, zhe ben, wo kan le, dique bucuo
What magazine? Oh, this CL, I look LE, indeed good
‘Which magazine? Oh, this one. I have already read it. Indeed, it’s quite good.’

This textbook grammar regarding *guo* (过/过) and *le* (了) is not only confusing, but also misleading. First, *guo* as a complement is not always interchangeable with *le*. For example, if the event marked by *guo* in (3) is not ‘take a shower’ but ‘watch TV,’ *le* should be used, not *guo*, because the course of watching TV (e.g., at which point the action can be considered completed)
is undetermined, which is incompatible with the semantic property of *guo* – the whole course/process described by the verb is completed successfully. Second, if there is *le* after *guo*, omitting *guo* may change the meaning in certain context. For instance, if the focus is on reading a whole book, *guo* denotes that the process of reading the whole book has been completed; whereas *le* merely conveys that the reading action has been stopped by the speech time, and it is unclear if the agent has finished reading the whole book. These two counter examples are common situations that occur during the process of human life. However, the syntax-oriented grammar explanation concerning *guo* and *le* fails to account for their nuanced distinctions, which results in many “exceptions” or “irregularities.” Different from the syntax-oriented approach adopted by most textbooks, the present study changes the focus from abstract, arbitrary sentence structures to the semantic basis of grammar. This allows learners and teachers of the Chinese language to select the most appropriate grammatical markers to use based on their understanding of the situation and the information that they want to communicate.

In summary, with the goal of filling the gaps in the literature, this cognitive, usage-based study adopts Tyler and Evans’s (2003) methodology of principled polysemy and establishes a systematic, unified and motivated account of the semantics of *guo* and *le*. The establishment of the semantic networks of *guo* and *le* is based on the examination of the proto-scenes (i.e. the primary senses) and the grammaticalization paths of *guo* and *le* reflected in a set of diachronic corpus data covering a history of 3000 years. The inter-lexical polysemy of *guo* and *le* is also an integral part of this exploration, which addresses the seemingly interchangeable situations between the two linguistic items. It is hoped that this study will provide Chinese learners and
teachers a more complete, accurate and accessible explanation of guo and le. The next section provides an overview of the theoretical background underpinning this study.

1.2 Theoretical background

This dissertation is a cognitive, usage-based study of the semantics of guo and le. Cognitive Linguistics (CL) encompasses a variety of approaches and methodologies, particularly regarding polysemy. The methodology employed in this study is the Principled Polysemy Model (PPM) (Tyler & Evans, 2003). The Theory of Lexical Concepts and Cognitive Models (LCCM) (Evans, 2009, 2013, 2015) is also relevant, especially regarding the component of inter-lexical polysemy. Moreover, this study uses diachronic corpus data to explore the meaning extensions of guo and le; thus, grammaticalization (Kuryłowicz, 1975; Heine, 1991; Hopper & Traugott, 1993; Bybee, et al., 1994; Langacker, 1999, 2011) is an indispensable aspect of this study. In this section, I provide a brief overview (especially with respect to the tenets related to this study) of CL, Tyler and Evans’s PPM, Evans’s LCCM, and grammaticalization one by one.

1.2.1 Some key tenets of Cognitive Linguistics

Symbolic nature of language

Traditionally, lexicon and grammar (syntax and morphology) are two important areas of language teaching and learning. CL posits that lexicon and grammar form a continuum of symbolic structures (Langacker, 2007, 2008). There is no clear line of demarcation between lexicon and grammar. As Langacker notes, “the highly schematic meanings of “grammatical” elements—such as the infinitival to, the preposition of, or the auxiliary verb do—do not prevent them from also counting as lexical items. Nor is [the] lexicon limited to words, compounds, and short phrases. Provided that they are learned as conventional units, expressions of any size
qualify as lexical items” (Langacker, 2007, p. 428). Nevertheless, symbolic structures differ in terms of specificity and symbolic complexity (Langacker, 2007). In general, the symbolic structures that are traditionally viewed as belonging to the lexicon are “fairly specific and of limited symbolic complexity” (Langacker, 2007, pp. 427-428). The symbolic structures that are less specific and more schematic are more possibly considered as grammar in the traditional view. “Grammatical rules” are also symbolic structures, which are “both schematic and symbolically complex” (Langacker, 2007, p. 428).

The symbolic structures are also known as form-meaning pairings or constructions (Langacker, 1987). A form can be spoken, written or signed. A meaning is the semantic content conventionally associated with the symbolic structure. That is, a symbolic structure consists of a form (spoken, written, or signed) pole and a semantic pole. Figure 1.1 roughly illustrates a symbolic structure of form and meaning.

![Figure 1.1 A symbolic structure of form and meaning](Adapted from Taylor, 2002)

Note that the depicted by the image of a tree in Figure 1.1 does not refer to any particular tree in the real world, but a mental representation residing in the mind of a language user. The same applies to the phonological form [tri:]. Two lower-level symbolic structures can be combined to
form a higher-level complex symbolic structure. For example, the expression moonless is a combination of two lower level symbolic structures moon and less. Langacker calls this high-level symbolic structure a **symbolic assembly** (2008, p. 16). Higher level symbolic assemblies are also capable of combining and producing a more complex, but more elaborate symbolic assembly. Thus, language is an inventory of symbolic assemblies with one pole being the linguistic form and another pole the semantic content. However, it is important to mention that the semantics of any lexical units are far more complex than this because most words are polysemous. Even the word tree has multiple meanings, e.g., we can talk about syntactic trees and family trees, and tree can be used as a verb.

Having illustrated the symbolic nature of language, the next section focuses on the semantic pole of linguistic units.

**Conceptual semantics**

Unlike formal linguistics in which meaning is analyzed with formal logic based on truth conditions (i.e., “a relationship between language and the world” [Verhagen, 2007]), CL claims that “meaning resides in conceptualization” (Langacker, 2002, p. 1). That is, the semantic content is a mental representation residing in the mind of a language user. The symbolic view of language posits that all linguistic units, including grammar, are form-meaning pairings. Therefore, grammar is meaningful. Linguistic meaning is the conceptualization associated with linguistic expressions. Broadly speaking, conceptualization encompasses any facet of mental experience:

(i) both established and novel conceptions;

(ii) not just abstract notions, but sensory, motor, and emotive experience as well;
(iii) conceptions that are not instantaneous but change or unfold through processing time;

(iv) full apprehension of the physical, linguistic, social, and cultural context.


Note that conceptualization is grounded in perception and our embodied experience with the real world. Evans (2006) illustrates the relationship between conceptual semantics, linguistic form and the real world with a figure below.

![Figure 1.2 Levels of representation](Adopted from Evans, 2006)

For instance, information from the world is received by our perceptual system, e.g., the size, shape, color, and smell of a rose, and is integrated into a mental image which gives rise to the concept of ROSE (Evans, 2006). When we use language, we use phonological, gestural and/or orthographic forms to symbolize this conceptual content residing in our mind, which makes a form-meaning pairing. Besides concrete objects, “the social and mental phenomena that constitute so much of the world we experience” (Langacker, 2008, p. 297) can also be conceptualized and expressed with language. Metaphor is a mental phenomenon which is manifested in language frequently. The expression of metaphor resides in mappings between a
source domain/space and a target domain/space, i.e., a blended space. For example, for the
expression *The thought just flew right out of my head* (Langacker, 2008, p. 51), the source space
could be the scene that a bird flew out of a cage and can no longer be seen. The target space is
the common mental experience of entertaining a thought but subsequently being unable to access
it (Langacker, 2008, p. 51). The elements of the target space, a thought, a person’s head, and that
person, are connected with the elements of the source space, a bird, a cage, and a viewer,
respectively. The connections give rise to the metaphorical expression which represents a hybrid
conception describing a mental phenomenon.

Importantly, linguistic meaning does not only involve the conceptual content, but also
how that content is construed (i.e., construal; see Langacker, 2002) and the speaker’s perspective
or speaker stance (i.e., epistemic viewpoint or strength of speaker’s commitment to the
proposition; see Dancygier & Moder, to appear) on a situation. For instance, the sentences in
(1.1) and (1.2) are truth conditionally equivalent, i.e., if one of the sentences truly applies to the
situation, then so will the other. However, they differ in how the situation is construed.

“Construal is a matter of how a situation is conceptualized, it cannot be reduced to the
observable features of a situation” (Taylor, 2002, p. 189; emphasis mine), and it is more than
truth conditions.

(1.1) a. The glass has water in it.
   b. The water is in the glass.
(1.2) a. The glass is half-full.
   b. The glass is half-empty.
   (Adapted from Langacker, 2002, p. 43)

The conceptual content is the conceptual base. The conceptualizer can direct attention to
a particular substructure within the conceptual base, as illustrated in Figure 1.3. This process is

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called **profiling**. For instance, (1.1a) profiles the glass, (1.1b) profiles the water, (1.2a) profiles the part of the glass that is filled, and (1.2b) designates the part of the glass that is not filled, though having the same conceptual base.

![Figure 1.3 Conceptual content and construal](Adapted from Langacker, 2002, p. 44)

Different construals of the same conceptual content (i.e., the same situation) may also be represented by different relational organizations between participants, with one participant being more prominent as the primary focus of attention. Following Langacker, the more prominent participant within the conceptualization of a relationship is the **trajector** (tr), whereas the participant that has secondary focus is the **landmark** (lm). Figure 1.4 illustrates the different tr/lm alignments for sentences (1.1a), (1.1b), (1.2a) and (1.2b). In (1.1a), the focal participant (tr) is *the glass*, and *water* is the secondary participant (lm). In (1.1b), *the water* reverses to be the focal participant (tr), and *the glass* receives secondary focus as the lm. In (1.2a) and (1.2b), *the glass* is the focal participant (tr), but they have different secondary participants or landmarks. In (1.2a) the landmark is a scale indicating how full the tr (*the glass*) is as depicted by an upward arrow, whereas in (1.2b) the landmark is a scale showing how empty the tr (*the glass*) is as
represented by a downward arrow. Following Langacker, there is a time line (t) if the profiled relationship occupies a span of time as indicated by the bold section on the time line.

![Figure 1.4 Trajector/landmark alignment](image)

In addition to construal, speaker stance is an important component of conceptual semantics. Speaker stance refers to epistemic viewpoint or strength of speaker’s commitment to the proposition (see Dancygier & Moder, to appear). For instance, the two sentences, “If he is elected president next year, he will travel a lot” and “If he were elected president, he would travel a lot” (Dancygier & Trnavac, 2007), are both predictive. However, the first sentence with the present tense expresses the speaker’s neutral stance, i.e., there is no commitment on the part of the speaker as regards the likelihood of the event actually happening (Dancygier & Trnavac, 2007, p. 184). In contrast, the second sentence conveys a negative stance with the past tense, i.e., the speaker’s uncertainty or doubtfulness about the event’s happening.

I have briefly reviewed the conceptual nature of linguistic meaning, including two important phenomena, construal (profiling and trajector/landmark alignment) and speaker stance. The next section focuses on where linguistic units (i.e., form-meaning pairings) come from.
Usage-based model of language

According to CL, language is an inventory of symbolic assemblies, i.e., form-meaning pairings. Linguistic meaning corresponds to conceptualization (including conceptual content and conceptualizer’s perspective) associated with expressions (sounds, gestures, and/or orthography). A reasonable question is: Where do the form-meaning pairings come from? Different from the formal approach which regards linguistic system as an autonomous enterprise, i.e., one housed in an encapsulated module of the brain with the goal of generating grammatical expressions, CL takes a bottom-up approach and claims that all linguistic units or constructions come from usage events. A usage event is “an actual instance of language use, in all its complexity and specificity” (Langacker, 2008, p. 220). Importantly, any instance of language use is embedded in a particular context, including not just the immediate physical circumstances but also the social and cultural specificities of a particular linguistic community, the interlocutors’ attitudes, intentions and goals, and even “their awareness of the ongoing discourse itself and how the current expression fits into it” (Langacker, 2008, p. 220). Language users extract linguistic units from patterns experienced in usage events with a contextual understanding of the expressions and their phonetic details. This process largely relies on two basic human cognitive processes: schematization and categorization. Langacker defines schematization as “the process of extracting the commonality inherent in multiple experiences to arrive at a conception representing a higher level of abstraction” (Langacker, 2008, p. 17). Schematization can result in different levels of abstraction. For example, bird is schematic for robin; animal is schematic for bird; animate being is schematic for animal, etc. As Tuggy points out, “schematicity is a relative matter and all concepts communicated linguistically are schematic in some degree” (Tuggy,
Note that even *robin* is schematic as it is not identified with a particular robin bird out there in the real world, but a conceptualization/mental image of the robin birds that the language user experienced. When this conceptualization is expressed via phonological means, it is an utterance or usage event. Linguistic units are extracted from usage events and conventionalized in the language system through reinforcement of repeated uses. What the recurrence reinforces is the commonalities among the successive usage events, not the fine-grained differences. Since the fine-grained details have been washed out, a conventional linguistic unit “is schematic relative to each sound experience it is based on” (Langacker, 2008, p. 458). According to Langacker (2008), linguistic units of any kind in any size (e.g., abstract grammar or discourse) emerge in this fashion, and therefore, language is usage-based.

The previously established linguistic units function as prototypes or templates to interpret and categorize future events. “**Categorization** is most broadly describable as the interpretation of experience with respect to previously existing structures” (Langacker, 2008, p. 17; emphasis in the original). New linguistic units are identified as members of groups either because it is fully compatible with the specifications defined by the prototype, or on the basis of perceived similarity despite some conflicts with the prototypical specifications. The latter case is termed as an **extension** from the prototype (Langacker, 2008). Lakoff (1987) points out that extensions are not random. The possibilities of extensions are determined by the prototype and the possible relations between the prototype and the extensions. Two types of categorical structures are most studied: hierarchical/vertical categories and radial categories. Hierarchical/vertical categories, such as *animal* → *bird* → *robin*, are distinguished according to level of inclusiveness (Rosch et al., 1976; Evans, 2006) and schematicity (Langacker, 2008). Categories at the tail of an arrow (e.g. *animal* → *bird* → *robin*)...
bird) are more schematic and inclusive than categories at the head of the arrow (e.g. robin). Radial categories represent extensions/subcategories from the prototype. Langacker defines prototype as “[the] unit in a schematic network which is naturally most salient, most often thought of, most likely to be chosen as representative of the category” (1987, p. 492). The prototype functions as the best exemplar with respect to which new units can be brought into the category, in virtue of their similarity to the prototype (Taylor, 2002, p. 591). For example, the prototype for the ‘mother’ category can be a woman who has given birth to a child. Based on Lakoff’s (1987) idealized cognitive models (ICM’s), this prototypical ‘mother’ is related to our understanding of an idealized conception of the traditional family with a man and woman who are married, live together, conceive children through natural methods, and raise and nurture children (Hilferty, 1997, p. 51). However, the word ‘mother’ can also be used to name father’s wife (e.g., stepmother), or a woman who adopted a child and raises him/her (e.g., adoptive mother). These types of mothers are nonprototypical because “they represent departures from the traditional family-ICM” (Hilferty, 1997, p. 52), and are extensions from the prototype. Figure 1.5 illustrates the radial category of mother which exhibits prototype effect.

![Radial category of mother](Adapted from Evans, 2006, p. 276)
Schematization and categorization are basic human cognitive abilities, not specific to language. Language as an integral part of human cognition is subject to these general cognitive processes and reflects them in linguistic organization. In sum, language comprises a vast inventory of conventional linguistic units which are derived from usage events via general cognitive processes, especially schematization and categorization. Linguistic units are categories that reveal how the surrounding speech community labels events and actions in the world; these categories include privileged perspectives of construals. Different languages divide and label the world in different ways. This is the usage-based CL model of language.

The extension of category leads to the phenomenon of polysemy, e.g., the category of *mother*. The next section is focused on Tyler and Evans’s (2003) Principled Polysemy Model, which is the methodology adopted in the present study.

**1.2.2 Tyler and Evans’s Principled Polysemy Model**

Almost all linguistic units are polysemous. Tyler and Evans’s (2003) Principled Polysemy Model (PPM) is a cognitive, usage-based approach to analyzing the many-to-one mappings between meanings and a single linguistic form. In particular, Tyler and Evans developed their account to address the phenomenon of many meanings associated with English spatial particles.

Tyler and Evans acknowledge that, different from the traditional view of grammar as rules that avoid redundancy, the cognitive approach entails some redundancy because it regards grammar (like its approach to the lexicon) as form-meaning pairings ranging from morphemes (e.g., third person singular -s), to sentence structures (e.g., *What’s X doing Y*), and to idiomatic expressions (e.g., *He kicked the bucket*). However, this does not assume that the cognitive
approach to language is inefficient. “[B]y treating the symbolic assemblies which comprise the grammar as being (more or less) related by virtue of semantic networks, the redundancy entailed does not imply inefficiency” (Tyler & Evans, 2003, p. 39). For instance, one positive attribute coming from redundancy could be more effective processing and spreading activation. Tyler and Evans further claim that the distinct senses associated with a single spatial particle are not arbitrary but systematically related and constitute a semantic network organized with respect to a primary sense (Tyler & Evans, 2003, p. 3). While acknowledging a certain amount of redundancy inherent in polysemy networks, Tyler and Evans are also wary of analyses which involve too much redundancy; they criticized Lakoff’s (1987) full-specification model in determining distinct senses associated with a linguistic form, which vastly increases redundancy. Based on Lakoff’s model, the word *over* in examples (1.3) and (1.4) is semantically different.

(1.3) The helicopter hovered over the ocean.
(1.4) The hummingbird hovered over the flower.

(From Tyler & Evans, 2003, p. 40)

Lakoff argues that in (1.3), the LM, *the ocean*, is extended, whereas in (1.4), the LM, *the flower*, is not extended; therefore, *over* in (1.3) and (1.4) represents two different mental representations and should be represented as two distinct senses in the semantic network of *over*. Tyler and Evans criticize Lakoff’s full-specification model which regards the differences in the metric attributes of the TR and/or LM as distinct senses associated with a linguistic form from four perspectives. First, this model is too unconstrained. Based on this model, *across, through* and *above* can all be related to the semantic network of *over*. Second, what is important is the relationship between the TR and LM (e.g., the TR being located higher than the LM for the case of *over* in [1.3] and [1.4]), not the detailed metric properties. Third, the detailed metric properties
of TRs and LMs, such as extended or not extended, vertical or not vertical, etc., are not always specified by the lexical forms. Think of vine. Is it extended or not? Is it vertical or not? Fourth, Lakoff’s model builds unconstrained redundancy into the semantic networks. Take the word *over* for example; more additional senses involving an extended LM could be added, such as “one which specifies for verticality (e.g., a mountain range), one which specifies for non-verticality (e.g., an ocean), and one which does not specify for verticality (e.g., the area)” (Tyler and Evans, 2003, p. 41).

Subsequently, Tyler and Evans propose a methodology for determining distinct senses associated with spatial particles. According to Tyler and Evans (2003), for a sense to count as distinct, it must meet two criteria:

(i) It must contain additional meaning not apparent in any other senses associated with a particular form, that is, a distinct sense must involve non-spatial meaning or a different configuration between the TR and LM than found in the proto-scene.

(ii) There must be instances of the sense that are context independent, that is, in which the distinct sense could not be inferred from another sense and the context in which it occurs.

(Adopted from Tyler & Evans, 2003, p. 43)

The uses of *over* in (1.3) and (1.4) above both prompt for the spatial scene in which the TR is located higher than the LM. That is, the two instances of *over* designate the same TR-LM configuration, and neither of them add additional meaning with respect to each other. Therefore, the two instances cannot be counted as two distinct senses associated with the form *over* as they fail the first criterion.
Cognitive linguists essentially agree that the semantic network involves a primary sense associated with a linguistic form and multiple distinct senses that are systematically extended from the primary sense. However, in many analyses the selection of a primary sense was intuitive and arbitrary “reflecting each analyst’s own preferences or imagination” (Tyler and Evans, 2003, p. 47) as to which sense represents the prototype, i.e., the best exemplar of a particular category. For example, some linguists (e.g., Lakoff, 1987; Brugman, 1981, 1988) argued that the primary sense for *over* is ‘above and across,’ as in *The plane flew over the city*, whereas others (e.g., Kreitzer, 1997) claimed that the primary sense for *over* is something similar to an *above* sense, as in *The hummingbird hovered over the flower* (Tyler & Evans, 2003).

Although the prototype is a useful notion for categorization as it captures the inherent fuzziness of (linguistic) categories, it is problematic when used to determine the primary sense. Tyler and Evans point out the problems associated with the way of determining the primary sense based on a simplistic understanding of prototypicality. The most basic problem is how to determine the prototypical sense. Is the prototypic sense the most frequent usage, or the usage that native speakers perceive to be the “most basic,” or the one that is the “most specific” (Tyler & Evans, 2003, p. 46)? Tyler and Evans (2003) propose a methodology for determining the primary sense. They borrow Langacker’s notion of the “sanctioning” sense (1987, p. 157), and claim that a primary sense should be able to sanction other senses extended from the primary sense. Specifically, it involves five criteria: “(1) earliest attested meaning, (2) predominance in the semantic network, (3) use in composite forms (Langacker, 1987), (4) relations to other spatial particles, and (5) grammatical predictions (Langacker, 1987)” (Tyler & Evans, 2003, p. 47). Note that Tyler and Evans developed PPM while studying English spatial particles. The present
research uses PPM to explore two highly polysemous Chinese particles, commonly understood as temporal/aspectual particles. The specifications aiming at spatial particles (e.g., the fourth criterion) should not be applied directly and may be modified as “relations to other temporal/aspectual particles.” I briefly explain the five criteria one by one in the following. The earliest attested meaning is the historically earliest sense which may be active or not active in the synchronic semantic network of the linguistic item, although Tyler and Evans found the earliest attested meaning of all the prepositions they examined were still active in the semantic networks. The earliest attested meaning is important as it projects a diachronic nature of the semantic network of the linguistic item, which is compatible with and reflects the historical nature of language development. Predominance means the unique (TR-LM) configuration “that is involved in the majority of the distinct senses found in the network” (Tyler & Evans, 2003, p. 48). Composite forms include compound words or set phrases. Tyler and Evans point out that “participation in composite forms cannot directly determine which sense is primary, but failure to participate can be taken as suggestive that that particular sense is probably not primary in the network” (Tyler & Evans, 2003, p. 48). As for the modified fourth criterion “relations to other temporal/aspectual particles,” it means that the particular sense that leads to a set of temporal/aspectual senses in relation to a contrast set of temporal/aspectual senses is likely to be a candidate for the primary sense. This is similar to the idea that the primary sense of up is related to and partially determined by the primary sense of down. At a more fine grained level, careful comparisons of uses of over versus above reveal important distinctions between the two. For instance, She hung the jacket over the back of the chair versus She hung the jacket above the back of the chair (for instance, on a hook) evoke two distinct scenes, one involving
contact/proximity, but the other involving no contact or distance. Finally, a primary sense should be able to give rise to testable grammatical predications based on the communicative nature of language. This echoes the proposal that a “sanctioning” sense gives rise to additional senses through extension (Langacker, 1987).

Central to PPM are CL explanations for meaning extension, especially embodied meaning, experiential correlation, perceptual resemblance, and pragmatic strengthening (or pragmatic inferencing). I discuss these four notions one by one in the following paragraphs.

As discussed in the previous section, language reflects conceptualization. Much research in cognitive science and psychology has suggested that conceptualization relies on our perceptual/sensorimotor system and the raw information provided by the physical, spatial world ‘out there’ (Mandler, 1992, 2008). That is, our experience with the world ‘out there’ is crucially mediated by the nature of our bodies (Tyler & Evans, 2003). Hence, our experience is embodied.

For instance, our experience of color is defined by the human trichromat visual spectrum, whereas, some other species, such as pigeons and butterflies, have five or more color channels. Another example is that the upright posture of the human body generated a set of spatial schemata, such as up/down, above/below, and front/back. These image-schemata in turn function as “perceptual framework from which guiding concepts grow” (Eigen, 2014, p. 92). It is true that “humans perceive the color and depth of three-dimensional space in a way which is comparable to nonhuman primates” (Matsuzawa, 2008, p. 22); however, what makes the human experience different is the perception of relationships. Primatologist Matsuzawa claims that humans spontaneously perceive relationships of two levels. One level of relationships revolves around contrast spatial displays, such as up-down, left-right, front-rear, in-out, contact-separate, and so
on. Another level of relationships is social, i.e., humans perceive events in the outer world in terms of an intentional/social relationship. For example, when viewing the scene in which a red ball rolling toward a blue ball, the red ball stops upon impact and in turn the blue all starts to move, “humans develop a vivid impression of the red ball having “pushed” the blue ball forward” (Matsuzawa, 2008, p. 22). According to Matsuzawa, the perceived social relationship comes from “the built-in mechanism for perceiving the world in terms of the triadic relationship of self-conspecifics-objects” which “is physically based on the enlargement of the associative cortex over the course of human evolution” (Matsuzawa, 2008, p. 22). In sum, our perception is constrained and determined by the kind of bodies we have and the human interaction with the physical and spatial world, which provides the framework/foundation for our conceptualization. As Tyler and Evans point out, “it is this embodied experience that gives rise to conceptual structure” (Tyler & Evans, 2003, p. 23). In other words, meanings generated from conceptualization are embodied.

I have argued that meanings are grounded in our embodied experience with the external, physical, social world. One way in which experience gives rise to meaning is through experiential correlation (Tyler & Evans, 2003, p. 32). That is, two distinct experiences can be correlated or linked at the conceptual level and give rise to conventionalized linguistic readings, e.g., seeing and knowing as illustrated in I see [= understand] what you mean (Tyler & Evans, 2003). Tyler and Evans (2003) point out that an unavoidable consequence of the nature of our experience is that many experiences are correlated. For example, a common, recurring experience is pouring milk into a glass. As the level of the milk rises, the quantity of milk increases. That is, there is a correlation between an increase in vertical elevation and an increase...
in amount of the entity. Note that this correlation is not inevitable. It is possible to pour more milk onto a flat surface without a noticeable increase in elevation. However, because humans find containers, such as glasses, very useful, and a large number of our experiences with ‘more’ involve containers; hence we are exposed to the correlation of ‘more’ and ‘up.’ This correlation is reflected in language, such as *The fuel prices are going up*, *rising crime rate*, and *We should up our output*. Furthermore, experiential correlation is an important means by which we conceptualize mental activities (e.g., knowing) or intellectual phenomena (e.g., knowledge). For instance, visual perception is one of the most reliable ways for us to obtain information and to “confirm the perceived verity of the existence of objects and relationships in the world” (Tyler & Evans, 2003, p. 33). The epistemic statements “I know it when I see it” and “I only believe what I see” illustrate that knowing and believing are correlative events of the event of seeing. It is through experiential correlation two quite different experiences (e.g., knowing versus seeing) become conceptually linked, which, in turn, gives rise to such conventionally accepted linguistic readings as in *I see what you mean*, *Now I see!* [= understand], *Your vision is just what our company needs* (Tyler & Evans, 2003).

Unlike the analyses which use the term conceptual metaphor (e.g., Lakoff, 1987; Lakoff & Johnson, 1980) for both experiential correlation and perceptual resemblance, Tyler and Evans, based on Grady (1997a, 1999a) and Panther and Radden (1999), provide a more refined understanding of the cognitive processes that promote the development of the linking of concepts. Tyler and Evans (2003) argue that perceptual resemblance differs from experiential correlation in that while the latter relies on unavoidable correlative experience and links concepts that “would not ordinarily be construed as similar” (p.36) (e.g., seeing versus knowing), the
former is a cognitive process that establishes links between concepts based on “perceived physical resemblance, or the perception of shared abstract qualities or characteristics” (p. 35). For instance, we can conceptualize a person in terms of a twig due to the perceived physical resemblance, e.g., “in both cases there is no excess flesh to conceal the rigid structural materials of the entity” (Tyler & Evans, 2003, p. 35), as in She is just a twig. Tyler and Evans offer another example, The new boss is a real pussy-cat, to illustrate the association between two different concepts on the basis of the perception of shared abstract qualities or characteristics, e.g., friendly and relatively non-threatening. Note that perceptual resemblance is not merely a perceptual experience as it involves the attentive process of comparing, which leads to the conceptualization of association between two concepts.

The fourth cognitive mechanism that is central to Tyler and Evans’s (2003) Principled Polysemy Model (PPM) is pragmatic strengthening. Pragmatic strengthening refers to a process in which contextual implicatures or inferences come to be conventionally associated with a linguistic form as new senses through continued use of the linguistic form in those particular contexts. Note that “invited inferences,” i.e., the writer or speaker evokes implications and invites the reader or listener to infer them (Traugott & Dasher, 2002, 2010; Bybee, Perkins & Pagliuca, 1994), are a key part of the notion of pragmatic strengthening in a broad sense. The result of pragmatic strengthening is meaning extension, namely, the development of the semantic network associated with the linguistic form. Since pragmatic strengthening is based on recurring, context-based implicatures, meaning extension is usage-based and pragmatic in nature (Tyler & Evans, 2003). As Tyler and Evans (2003) point out, linguistic items do not occur in isolation. On one hand, they may be embedded in longer segments of language; on the other hand, they are
used for purposeful communication. That is, a naturally occurring linguistic item is always contextualized and the interpretation of the linguistic item “is affected by the context in which it occurs and the inevitable inferences involved in establishing an overall interpretation for the utterance” (Tyler & Evans, 2003, p. 229). Moreover, “utterances serve as prompts for the elaboration of cognitive structure, which includes the interlocutors’ knowledge of the world and their prior experiences with the world, including their prior experience with language” (Tyler & Evans, 2003, p. 229). Importantly, the local linguistic environment, the interlocutors’ cognitive structures, and the interlocutors’ communicative purpose/motivation, in turn, constrain the semantic extension of the linguistic item. Tyler and Evans illustrate pragmatic strengthening with the word, *over*. Recall that the proto-scene for *over* is a spatial configuration with the TR being higher than the LM as in *The hummingbird hovered over the flower*. However, in situations depicted by sentences such as *Mary bent down to look at the dead man’s face, but there was a thick cloth over it*, the TR (Mary) is located higher than the LM (the dead man); in addition, the situation involves obscuring or occlusion of the man’s face. Thus, the interpretation of such sentences involves an inference of obscuring, in addition to the “being higher than” reading. Tyler and Evans (2003) argue that this additional meaning of *over* is prompted by the sentential context that the cloth is located between Mary and the face, our knowledge about the property of thick cloth (e.g., opaque) and ourembodied experience of human vision (e.g., cannot see through opaque objects). That is, the additional meaning associated with *over*, “obscuring or occlusion,” is a contextual implicature. Once a contextual implicature is conventionalized as part of the semantics of the linguistic item through recurrence and routinization of the usage pattern, the
implicature becomes a conventionalized sense which is free from its original context (e.g., spatial or locative) as shown in *He tried to varnish over the truth with a lie*.

I have laid out Tyler and Evans’s (2003) Principled Polysemy Model (PPM), including their methodology in determining the primary sense (i.e., the proto-scene) and distinct senses and the cognitive processes (e.g., embodied meaning, experiential correlation, perceptual resemblance, and pragmatic strengthening) underlying meaning making and semantic extension. Related to PPM is Evans’ Theory of Lexical Concepts and Cognitive Models (LCCM). I briefly introduce LCCM in the next section.

**1.2.3 Evans’s Theory of Lexical Concepts and Cognitive Models**


Based on Langacker’s analysis of active zones (Langacker, 1987), Evans claims that “different aspects of the non-linguistic or encyclopaedic knowledge to which a word form facilitates access” (p. 106) give rise to conceptual polysemy. Consider two examples:

(1.5) a. France is one of the leading nations in the European Union.
    b. France beat New Zealand in the 2007 Rugby world cup.
    (From Evans, 2015, p. 106)

Evans points out that the word *France* in the examples in (1.5) has slightly different readings. In (1.5a), *France* refers to ‘a political entity,’ whereas in (1.5b), *France* means ‘the 15 players who make up the French Rugby team.’ Evans terms this kind of polysemous phenomena as
conceptual polysemy. Conceptual polysemy arises because no lexical item is monolithic, but “consists of a complex array of distinct components” (Evans, 2015, p. 101). Moreover, lexical items do not occur in isolation, but are embedded in longer segments of language (Tyler & Evans, 2003, p. 229). Distinct linguistic contexts activate different facets of our conceptual representation of the lexical item, and thus lead to the phenomena of conceptual polysemy, as illustrated in (1.5).

Different from conceptual polysemy, lexical polysemy refers to the phenomenon that a lexical form is conventionally associated with a number of distinct, yet related senses. For instance, the preposition in is conventionally associated with several senses, such as a ‘container’ sense as in in a room and a ‘state’ sense as in in love/shock/pain (Evans, 2015). Evans offers an in-depth analysis of lexical polysemy by using the term “lexical concept.” He claims that “a single form can be conventionally associated with a potentially large number of distinct lexical concepts” (Evans, 2015, p. 103). A lexical concept is defined by its lexical profile, similar to the notion of behavioral profile (Hanks, 1996; Gries, 2006; Evans, 2015). The lexical profile of a lexical concept provides selectional tendencies which decide “whether a particular usage of a form relates to one lexical concept rather than another” (Evans, 2015, p. 103). Essentially, the lexical profile of a lexical concept consists of semantic selectional tendencies and formal/grammatical selectional tendencies (Evans, 2009, 2015). “Semantic selectional tendencies have to do with the (range of) lexical concepts with which a lexical concept co-occurs and in which it can be embedded. Formal selectional tendencies have to do with the (range of) forms with which a given lexical concept co-occurs, or in which it can be embedded” (Evans, 2015, p. 110). Evans proposes that semantic and formal selectional tendencies are also the two criteria to
determine whether a lexical profile, and hence a lexical concept, is distinct. He claims that “successful application of only one of the two criteria will normally be sufficient to point to the likelihood of a distinct lexical concept” (Evans, 2015, p. 111). For example, the usages of the preposition in in *He is in the room* and *He is in a depression* do not exhibit distinct formal selectional tendencies as they appear in the same sentence-level construction with a subject, a copular verb and a noun-like object. However, the lexical concepts co-occur with the two instances of *in* are distinguishable, with one being a container-like physical entity (e.g., *room*) and the other referring to a psycho-somatic state (e.g., *depression*). In other words, the two instances of *in* have distinct semantic selectional tendencies, and hence are very likely to correspond to two distinct lexical concepts, i.e., [container] versus [state] (Evans, 2015). (Note that in LCCM Theory, Evans uses a semantic gloss in square brackets to represent a lexical concept associated with a particular linguistic form.)

The reading of ‘state’ is not unique to *in*; some other prepositions also have the interpretation of ‘state,’ such as the preposition *on* as in *on alert/best behavior/look-out* (Evans, 2015). This leads to the third type of polysemous phenomena – inter-lexical polysemy – proposed by Evans. Inter-lexical polysemy emerges from “apparent similarities in the nature of lexical concepts associated with distinct lexical forms” (Evans, 2015, p. 112). For instance, English prepositions *in* and *on* both appear to have a [spatial] lexical concept (e.g., *in a room, on the sand*) and a [state] lexical concept (e.g., *in love/shock/pain, on alert/best behavior/look-out*) (Evans, 2015). However, the [spatial] and [state] lexical concepts associated with *in* and *on* are distinct. Specifically, the lexical profile of the [spatial] lexical concept associated with *in* correlates with semantic arguments which are physical entities and can serve as containers (e.g.,
in the jar). In contrast, the lexical profile of the [spatial] lexical concept associated with on relates to semantic arguments which are physical entities and can serve as surfaces (e.g., on the table). Moreover, the lexical profile of the [state] lexical concept associated with in “selects for semantic arguments which access conceptual structure concerning emotional or psychological ‘force’ such as being in love, in pain and so on,” whereas “the semantic arguments that co-occur with on relate to content that has to do with time-restricted” and volitional activities such as being on alert, on duty and so forth (Evans, 2015, p. 113). In short, the construct of the lexical profile including its selectional tendencies in LCCM Theory provides a methodology for hypothesizing “whether we are dealing with similar or distinct lexical concepts” (Evans, 2015, p. 113), namely, analyzing inter-lexical polysemy. Note that although inter-lexical polysemy is considered as non-prototypical polysemy by some researchers, it, together with LCCM Theory, is particularly useful to the present study of the Chinese guo and le, as it provides a principled way to analyze comparable senses associated with the two distinct linguistic forms.

As Langacker points out virtually all linguistic forms used with any frequency are polysemous. While polysemy appears to be a synchronic phenomenon, it is commonly believed that meaning extension involves a diachronic process, i.e., grammaticalization, which is introduced in the next section.

1.2.4 Grammaticalization

The most prevailing definition of grammaticalization is Kuryłowicz’s: “Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status” (1975, p. 52). This is also the definition of grammaticalization adopted in the present study.
It is commonly accepted that the term “grammaticalization” was coined by French linguist Antoine Meillet in 1912. However, as early as the 18th century, French philosophers Condillac and Rousseau had pointed out that “both grammatical complexity and abstract vocabulary are historically derived from concrete lexemes” (Heine, Claudi & Hummemeyer, 1991, p. 5). In the early 19th century, German linguists also discussed important issues related to grammatical evolution (Narrgo & Heine, 2011). Although the Chinese term for grammaticalization, yǔfǎhuà 语法化, was not coined until the 1980’s, discussions on language change in the Chinese language have a history of more than two thousand years. For example, a Han dynasty (206 BCE-220 CE) philologist, Xu Shen, stated in his book Shuòwén jiězì 说文解字 (Explaining Graphs and Analyzing Characters) that “Cover is nightwear, and is extended into a verb to mean to cover or to suffer.” (Bèi, qǐnyī yě. Yǐnhēn zuò dòngcí, yǒu fūgài, méngshòu liǎng yì. 被，寝衣也。引申作动词，有覆盖、蒙受两义。) From the Wei-Jin period to the Song dynasty (220-1279 CE), the Chinese word bèi 被 evolved into a passive voice marker from the meaning to suffer. In recent years, the passive voice marker bèi 被 has developed a new meaning or function. It is used right before a verbal predicate to indicate a ‘false claim/act’ (Liu, 2017, unpublished comments). We can see the grammaticalization path of the Chinese passive voice marker bèi 被, Noun>Verb>Preposition>Particle for speaker stance. Interestingly, the character of the Chinese passive voice marker bèi 被 is composed of two components – the

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4 Dilin Liu points out that the passive voice marker bei (被) has developed a new grammatical meaning, ‘falsely claimed,’ in the past few years in China. “It started when a citizen died in police custody and the police claimed he committed suicide. People don’t believe it as they thought the police beat him to death, but in China citizens do not dare to openly say that the police/government lied, so they said that “the person was (被) suicided.” Since then, this new bei (被) grammatical structure has been widely used in China to talk about a false claim/act” (from Dilin Liu’s comments on this dissertation).
component on the left side means clothing and the component on the right side refers to skin – representing its earliest attested meaning, nightwear. A Yuan dynasty (1271-1368 CE) scholar, Zhou Boqi, wrote in his book 六书正伪 that “generally ancient people created characters all starting from objects and things. Today’s empty words are all ancient content words.” (大抵古人制字，皆从事物上起。今之虚字，皆古之实字。) In order to understand the semantics of Chinese guo and le, it is important to know their etymology. “The secret of words lies in their etymology” (Tooke; see Heine, Claudi & Hummemeeyer, 1991, p. 5). Moreover, Chinese has certain advantages in the study of etymology as we have rich records throughout an unbroken history of 3000 years (Zhu, 2010). All different dialects in modern Chinese (some linguists even might refer to them as different languages) share the same writing system with logographic forms (Zhu, 2010). Chinese written forms or characters directly represent form-meaning pairings. However, as Sapir points out, “form lives longer than its own conceptual content” (Sapir, 1921, p. 98). For the forms of guo and le, their conceptual content has changed, i.e., extended and evolved from the concrete to the abstract, from lexical to grammatical. In short, guo and le have been grammaticalized. The historical evolutionary perspective of guo and le helps explain why guo and le are highly polysemous with so many distinct senses today, and contributes to the understanding of the grammar and meanings of guo and le.

It might be worth noting that although analyzing Chinese language from a linguistic perspective can be dated back to the earliest written records in Chinese (Duanmu, 2000), the grammaticalization process of Chinese language as a whole is rather slow. Givón (1979) uses a shift from a “pragmatic mode” to a “syntactic mode” of communication to show
“syntacticization,” which Heine et al. believe is “a process that has substantial implications for grammaticalization” (Heine et al., 1991, p. 239). Based on Givón (Table 1.1), contemporary Chinese still follows a more pragmatic pattern with a salient topic-comment structure, chronological word order, and a roughly one-to-one ratio of verbs to nouns. However, the issue of whether Chinese as a language has morphology is still highly debatable. Thus, we can expect that the grammaticalization of Chinese guo and le is a rather slow and prolonged process. This requires that the diachronic data for the grammaticalization study of guo and le should cover a long period of history.

Table 1.1
The pragmatic and syntactic mode

<table>
<thead>
<tr>
<th>Pragmatic Mode</th>
<th>Syntactic Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic-comment structure</td>
<td>Subject-predicate structure</td>
</tr>
<tr>
<td>Loose conjunction</td>
<td>Tight subordination</td>
</tr>
<tr>
<td>Word order governed mostly by the principle</td>
<td>Word order used mostly to signal semantic case</td>
</tr>
<tr>
<td>old-new information</td>
<td>functions</td>
</tr>
<tr>
<td>Roughly one-to-one ratio of verbs to nouns in discourse</td>
<td>A larger ratio of nouns over verbs in discourse</td>
</tr>
<tr>
<td>Verbs are semantically simple</td>
<td>Verbs are semantically complex</td>
</tr>
<tr>
<td>No use of grammatical morphology</td>
<td>Elaborate use of grammatical morphology</td>
</tr>
<tr>
<td>Several intonation contours</td>
<td>A single intonation contour</td>
</tr>
</tbody>
</table>

Note. This table is adopted from Givón, 1979, p. 223.

Grammaticalization is motivated, principled and based in human cognition. Linguists (Heine, 1991; Hopper & Traugott, 1993; Bybee et al., 1994; Bybee, 2014; Langacker, 1999) have discussed the mechanisms that promote grammaticalization. Those that are relevant for the discussion of the polysemy networks of guo and le are metaphorical extension, inference, and generalization (Bybee, 1994). Since metaphorical extension has been discussed in a more fine-
grained way through the notions of “experiential correlation” and “perceptual resemblance” and inference has been addressed as “pragmatic inferencing” in the section on Tyler and Evans’s (2003) Principled Polysemy Model, I briefly introduce the cognitive process of generalization here.

Generalization of meaning is also known as bleaching, referring to the loss of specific features of an original lexical meaning with the consequent expansion of appropriate contexts of use (Bybee, 1994, 2014). For instance, *be going to* loses the spatial movement components of its original lexical meaning and is used to indicate intention or as a future marker with a wider range of subjects, including immobile entities, as in *These trees are going to lose their leaves* (Bybee, 2014). Bybee (2014) points out that the generalization or bleaching of the meaning of a construction is brought about by frequency, but it also leads to additional frequency due to the fact that a generalized construction can be used in more contexts. Moreover, generalized or bleached constructions that lack specific lexical meaning “are more likely to pick up inferential meaning from the context, that is, grammatical meaning” (Bybee, 2014, p. 157). This leads to the development of grammatical functions and meaning extension.

Cross-linguistically, the lexical items that are candidates for grammaticalization represent basic and concrete aspects of human experience with the world, such as movement in space and parts of the human body (Bybee, 2014). Furthermore, “[g]rammaticalization always involves a loss of categoriality” (Hopper, 1996, p. 231) and proceeds unidirectionally from the prime categories, i.e., noun and verb, to another category, such as adverb, auxiliary, or preposition, etc. Importantly, the phenomenon of grammaticalization provides evidence that (1) grammar is not a self-contained, static system, but instead, it “is highly susceptible to change and highly affected
by language use” (Bybee, 2014, p. 145); and (2) the border between lexicon and grammar is fuzzy (Hopper, 1996).

The Chinese *guo* and *le*, with the proto-scenes or the primary senses depicting a basic motion event and a baby’s body without arms respectively, are good candidates for grammaticalization. Moreover, both of them originally belong to the prime categories with *guo* being originally a verb and *le* a noun. Using the diachronic corpus data that covers a history of 3000 years, the present study is promising in exploring the semantic and grammatical development of *guo* and *le* from the perspective of grammaticalization.

I have briefly reviewed the CL theories and tenets that are relevant to this study. The following chapters, i.e. chapters 2, 3 and 4, demonstrate how these theories and tenets are used to analyze Chinese *guo* and *le* with the goal of establishing a unified, motivated and systematic account of *guo* and *le*.

The rest of the dissertation is organized as follows. Chapter 2 is devoted to *guo* which includes an examination of the previous studies on *guo*, the corpus study of *guo*, and the principled semantic network of *guo*. Chapter 3 focuses on *le*, which is structured in the same way as Chapter 2 with an examination of the previous studies on *le*, the corpus study of *le*, and the principled semantic network of *le*. Chapter 4 compares the respective semantic networks of *guo* and *le*, addressing the most confusing aspects of the two linguistic items, i.e., inter-lexical polysemy. Chapter 5 concludes the study, while also pointing out limitations of the present study.
Chapter 2 On GUO

Mandarin Chinese has no morphological tenses. The studies of time in Mandarin Chinese have mainly focused on its very limited number of aspect markers and various complements. Guo, as an aspect marker indicating viewpoint on a situation and a “phase complement” (Chao, 1968) indicating aktionsart, i.e., intrinsic temporal qualities of a situation (Brinton, 1988), has proven to be one of the most mysterious linguistic phenomena in Mandarin Chinese due to its polysemy and the subtle distinctions between aspect and aktionsart. The literature which argues that guo is an aspect marker, suggests that guo indicates the occurrence of at least one instance of a type of events and is highly polysemous, contributing but not limited to the distinct senses of experientiality, discontinuity, repeatability, recurrence, reversibility and indefiniteness (e.g., Chao, 1968; Li & Thompson, 1981; Iljic, 1990; Smith, 1997, 2005; Pan & Lee, 2004; Lin, 2003, 2006, 2007; Chen, 2009; Li, 2011); guo, as a “phase complement,” has been argued to indicate the occurrence of a determined event, comparable to a past event (Iljic, 2009). The following examples from Chao (1968) illustrate the use of guo as an aspect marker and a “phase complement” respectively.

(2.1) A: Ni chi-guo yuchi meiyou?  B: Chi-guo
You eat-GUO fish-fin not-have?
‘Have you ever eaten shark’s fin?’
‘Yes, I have.’

(2.2) A: Ni chi-guo -le yuchi meiyou?  B: Chi le / Chi-guo le
You eat-GUO -le fish-fin not-have?
‘Have you eaten (finished eating) the shark’s fin? (Are you ready for the next course?)’
‘Yes, I have.’

(From Chao, 1968, pp. 251-252)

No satisfying, unified account regarding the semantics of guo has been offered. Previous studies have posited guo’s use as an aspect marker as its central sense. This study argues this is a
faulty starting point. Using the methodology of principled polysemy (Tyler & Evans, 2003) and diachronic corpus data analysis, this study argues for a primary sense for guo which stems from its oldest attested meaning, a physical-spatial motion event, ‘to walk across,’ with manner and path. By attending to the earliest attested meaning (i.e., the proto-scene) and embodied experience, this corpus-based study aims to elucidate guo’s grammaticalization paths (Bybee & Bechner, 2010) and provide a motivated, unified semantic network for guo which emphasizes how the various meanings are systematically extended from a physical-spatial motion event to non-spatial and temporal domains.

In this chapter, I first review four previous studies that have had great influence on the studies of guo. Then, I present the diachronic corpus study including the discussion on the proto-scene or primary sense. Finally, based on the previous studies and the findings of the corpus-based study, the semantic network of guo is established using Tyler and Evans’s (2003) methodology of principled polysemy to show the diachronic grammaticalization paths and synchronic connections between the senses of guo.

2.1 Previous studies of GUO

2.1.1 Yue Ren Chao (1968)

Chao (1968) provides “the first fundamental and comprehensive analysis of Chinese grammar” (van den Berg & Wu, 2006). His analysis of guo also provides the foundation for the later studies. He observes several important meanings or functions associated with guo, but there are also obvious holes in his analysis. In this section, I review Chao’s (1968) analysis of guo and point out the gaps.
Chao defines *guo* as “the indefinite past aspect” (Chao, 1968, p. 251). Chao’s seminal work inspired numerous studies on the temporal meaning of *guo*. Although Chao’s work has inspired many studies that have focused on the “indefiniteness” and “past” senses of *guo*, the question, how *guo* is used by speakers of Mandarin Chinese, remains rather largely unexplored. Part of the confusion seems to stem from the fact that Chao, and the subsequent studies his work inspired, focused mainly on the “indefiniteness” and “past” senses of *guo*, which Chao identified as “aspect.” However, Chao does not precisely define what he means by “aspect.” In fact, Chao’s definition of *guo* seems to be a combination of both tense and aspect. Thus, much of his analysis seems to conflate the two linguistic phenomena, rather than teasing them apart. Chao also does not explicitly explain what he means by the “indefinite” aspect. This inevitably raises questions, such as: How is the “indefinite” aspect related to the imperfect aspect versus the perfect aspect? Does “indefinite” refer to an indefinite temporal location or an indefinite event? In addition to the tense and/or aspect function of *guo*, Chao points out when *guo* is used as a verb meaning ‘pass,’ it can also be used as a directional complement, as shown in sentence (2.3).

(2.3) 走 过 了
zou -guo -le
walk-GUO -LE
‘has passed (the place)’
(From Chao, 1968, p. 21)

Chao introduces the notion of “directional complement” without any explanation.

However, it is worth pointing out that Chao’s analysis of *guo* in (2.3) as a directional complement is in line with Talmy’s analysis of motion events in Mandarin Chinese. Based on Talmy, *zou* ‘walk’ is the main verb denoting the manner of the motion. *Guo* ‘pass’ is the satellite

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5 *Le* is analyzed in next chapter.
(or a directional complement in Chao’s terminology) denoting the path of the motion. Chao provides another example for the directional complement use of *guo*.

(2.4) 说 过 了 就 算 了
shuo-guo -le jiu suan-le
said -GUO -LE then let-it-be
‘having said (one’s) say, let it go at that’
(From Chao, 1968, p. 251)

However, even though Chao represents the uses of *guo* in examples (2.3) and (2.4) as equivalent in terms of functions, specifically, both are simply described as directional complements, from my point of view, the semantics of *guo* in (2.4) are notably different from the semantics of *guo* in (2.3). *Guo* in (2.3) is a directional complement or a satellite indicating the path of the action ‘walking,’ whereas *guo* in (2.4) marks the completion of the action ‘saying.’ Yet, notice that Chao translates both the two sentences in the past tense (as marked by his use of -ed on ‘pass’ and the past tense form ‘said’) and in the imperfective aspect (as marked by his use of *has/have*) without indicating which elements in the Chinese sentences provide these tense and aspect markings.

Chao pushes his analysis further by saying that *guo* in sentence (2.5) is another example of *guo* acting as a complement.

(2.5) 吃 过 了 饭 了
chi-guo -le fan le
eat-GUO -LE food LE
‘have had one’s meal’
(From Chao, 1968, p. 251)

In analyzing sentence (2.5), Chao drops the word “directional,” and only uses the word “complement.” Chao points out that *guo* in (2.5) is a complement “which can take a perfective suffix” (Chao, 1968, p. 251). According to Chao, *guo* in (2.5) is a complement, and -le
immediately following *guo* is a perfective suffix. However, Chao does not define what he means by “perfective.” He also does not explain the semantics of *guo* as a complement that takes the perfective suffix *-le*.

Chao acknowledges that *guo* has multiple meanings and the character for *guo*, 過 in traditional form and 过 in simplified form, can, in fact, be pronounced with a fourth tone as *guò* (as indicated by the mark on top) or a neutral tone as *guo* (as indicated without any mark on top). Chao points out that the neutral tone *guo* “is a pure suffix, with the class meaning of “happened at least once in the past, --ever’” (Chao, 1968, p. 251).  

He provides the following examples.

(2.6) A: 你 吃 过 鱼翅 没有?
Nǐ chī-guo yúchì méiyǒu
‘Have you ever eaten shark’s fin?’

B: 吃 过。
Chī-guo
‘Yes, I have.’
(From Chao, 1968, p. 251)

(2.7) A: 你 吃 过 了 鱼翅 (了) 没有?
Nǐ chī-guò -le yúchì (LE) méiyǒu
‘Have you eaten the shark’s fin? (Are you ready for the next course?)’

B: 吃 了 / 吃 过 了
Chī LE / Chī-guò le
‘Yes, I have.’
(From Chao, 1968, pp. 251-252)

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6 Chao’s term of “the class meaning” is similar to Langacker’s (1987) notion of “type,” e.g., a set of events.
7 This is Chao’s English translation of the Chinese sentence (2.6A). The translation might be interfering with a clear understanding. Based on Chao’s analysis of *guo*’s semantics, a more verbatim translation could be “did you at least once in the past eat shark’s fin?”
8 To me, a better translation of sentence (2.7A) might be “Have you **finished** eating the shark’s fin?”
According to Chao, *guo* with a neutral tone in (2.6) is a pure suffix indicating that the action of ‘eat shark’s fin’ happened at least once in the past, whereas *guò* with a fourth tone in (2.7) is a complement that combines with the perfective suffix -*le* to create the perfect interpretation. However, again, the semantics of *guò* with a fourth tone as a complement in (2.7) remains unanalyzed without any further explanation. Thus, it is not surprising that Chao’s analysis has engendered a number of contradictory, confusing studies. Moreover, note that Chao does not provide a unified analysis that would allow us to see the systematic relationship among the meanings of *guo*.

2.1.2 Shuxiang Lü (1980)

Although Chao (1968) has pointed out that *guo* can be used as a suffix, a verb, a directional complement and a complement, Lü (1980) only analyzes *guo* as a particle. Lü does not define what he means by the term “particle,” but, in fact, it is a term for Chao’s suffix *guo* and complement *guo*. Importantly, Lü uses negation as an analytic device and demonstrates that the two syntactically identical constructions -- the verb-*guo* construction that conveys the completion of a movement or action and the verb-*guo* construction that denotes a past event -- are markedly different. Nevertheless, Lü does not develop a unified account of *guo*. Instead, he works to outline a list of the “can-do” and “cannot-do” elements of *guo* without any in-depth analysis. I present Lü’s findings of *guo* in the following.

According to Lü, *guo* is a particle expressing movement or action. Specifically, *guo* is used after a verb, indicating the completion of the movement or action. This verb-*guo*
construction⁹ is also a kind of verb-resultative construction. Lü claims that different from other verb-resultative constructions, the elements expressing potential or negation, such as de 得 (an element for potential complement construction in Chinese) or bu 不 ‘not’ (an element for negation) respectively, cannot occur between the verb and guo. Unfortunately, he does not explain what causes the difference between the verb-guo construction and the other verb-resultative constructions. Lü also points out that the verb-guo construction can take the modal particle le, and this kind of verb-guo construction, i.e., verb-guo le, has no negative form. It can be seen that Lü differentiates guo and le. For him, guo is a verb complement indicating the completion of a movement or action, whereas le is a modal particle. He does not define what he means by the term “modal particle.”

According to Lü, guo can also be used after a verb to suggest that the event described by the verb used to happen. This kind of verb-guo construction expresses past events without explicit temporal locations (or time words) such as yesterday, two years ago, and just now, etc. The temporal locations may be used in the expression, but must be specific. For instance, two years ago is specific, whereas, one year is not specific. In other words, to Lü, time durations (e.g. one year) are not specific temporal locations and are incompatible with the verb-guo construction expressing past events. This kind of verb-guo construction can be negated by adding the negative particle mei or meiyou ‘not’ right before the construction. Although Lü points out the connection between the verb-guo construction and past events, he does not discuss whether guo plays the role of a past tense marker. Importantly, Lü points out the differences between

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⁹ In this study, I adopt Goldberg’s definition of constructions “Constructions are stored pairings of form and function, including morphemes, words, idioms, partially lexically filled and fully general linguistic patterns” (Goldberg, 2003, p. 219).
negating the verb-\textit{guo} construction that conveys the completion of a movement or action and

negating the verb-\textit{guo} construction that denotes a past event. Here are his examples to illustrate
the differences.

(2.8) Chi-\textit{guo} fan le $\rightarrow$ Hai \textbf{mei} chi ne (Guo indicates completion.)

Eat-GUO food le $\rightarrow$ Still \textbf{not} eat NE\textsuperscript{10}

‘have had (a) meal’ $\rightarrow$ ‘still not eat yet’

(2.9) Chi-\textit{guo} xiaomi $\rightarrow$ 	extbf{Mei} chi-\textit{guo} xiaomi (Guo indicates a past event or the sense ‘used to.’)

Eat-GUO millet $\rightarrow$ \textbf{not} eat-GUO millet

‘have had millet’ / ‘used to have millet’ $\rightarrow$ ‘have not had millet’

Although Lü does not actually analyze the differences, these examples clearly suggest that the

semantics of \textit{guo} appearing in the two syntactically identical constructions are markedly
different.

In addition to verbs, \textit{guo} can also be added after an adjective, generally with a temporal
location. This construction has a sense of comparing with “now” (i.e., the speech time). Below is
an example.

(2.10) Ta xiao-shihou pang-guo.

He little-when fat -GUO

‘He was fat when he was little.’

(From Lü, 1980, p. 216)

Lü claims that this kind of adjective-guo construction can be negated by adding the negative

particle \textit{mei} or \textit{meiyou} ‘not’ right before the adjective-guo construction, as in

Ta xiao-shihou mei pang-guo.

He little-when \textbf{not} fat -GUO

‘He was not fat when he was little.’

\textsuperscript{10} \textit{Ne 呢} is a particle with multiple functions. In example (6), \textit{ne} is a particle used at the end of a declarative sentence indicating continuation of a state or action (from MDBG Word Dictionary).
Lü mainly works to outline a list of the “can-do” and “cannot-do” elements of guo as a particle (in Lü’s terminology). He also points out that the correlating verbs, which do not have a strong sense of motion or action, such as know, think, be, and belong, etc., cannot take guo. Again, he does not analyze the reason behind this linguistic phenomenon.

2.1.3 Charles N. Li and Sandra A. Thompson (1981)

As discussed previously, Chao (1968) differentiates the functions of guo as a suffix, a verb, a directional complement and a complement, but Lü (1980) views guo solely as a particle covering Chao’s suffix guo and complement guo. Li and Thompson (1981) only analyze guo as a suffix indicating experiential aspect. Their analysis reveals important aspects of the suffix guo, including an experiential property, the sense of an “event’s being over now” and being used with repeatable events. However, in their analysis, these notions are arbitrarily assigned to the suffix guo without a systematic, motivated organization. Moreover, Li and Thompson completely neglect guo’s other uses, especially the complement use which tends to cause confusion for learners and teachers of Chinese as a foreign language. In addition, there are major gaps in their discussion on the experiential aspect and perfective aspect. In the following paragraphs, I present Li and Thompson’s analysis and point out the holes.

Li and Thompson define guo as an “aspect suffix,” indicating that “an event has been experienced with respect to some reference time” (Li & Thompson, 1981, p. 226). Li and Thompson do not discuss what the reference time can be, e.g., present, past, or future, but note that “when the reference time is left unspecified, then -guo signals that the event has been experienced at least once at some indefinite time, which is usually the indefinite past” (Li & Thompson, 1981, p. 226). Li and Thompson do not define what they mean with the term
“indefinite past.” I assume this refers to an unspecified time that has occurred before the moment in which the dialogue takes place. Sentence (2.11) is Li and Thompson’s example.

(2.11) 我 吃 过 日本 饭。
Wǒ chī-guo Rìběn fàn
I eat-EXP Japan food
‘I’ve eaten Japanese food (before).’

Li and Thompson’s analysis is essentially the same as Chao’s “indefinite past aspect” (Chao, 1968, p. 251). They develop Chao’s “indefinite past aspect” by emphasizing the experiential property of guo. While Chao differentiates guo as an indefinite past aspect marker (i.e., a pure suffix), an independent verb meaning ‘cross’, a directional complement and a complement, guo is only presented as an aspect suffix in Li and Thompson’s analysis.

While Chao seems to mix aspect with tense by defining guo as a “past aspect,” Li and Thompson distinguish aspect from tense. According to Li and Thompson, tense is the relation between situation time and reference time, whereas aspect concerns different ways of viewing a situation. For Li and Thompson, there are two ways of viewing a situation—viewing the situation as a single whole or viewing the internal temporal constituency of the situation. The former is the perfective aspect, and the latter is the imperfective aspect, as illustrated by sentence (2.12).

(2.12) Rosco was reading when I came in. (Li & Thompson, 1981, p. 184)

The first verbal complex, was reading, is imperfective, meaning the focus is not on the boundaries of the event. The second verbal complex, came in, is perfective, meaning there is focus on the boundaries of the event; here the endpoint, the action of coming in, is completed.11

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11 People may have more ways of viewing a situation. For instance, Radden and Dirven (2007, pp.177-178) argue for three aspectual classes: a. bounded events, such as I came in; b. lasting states, such as Ann lives with her parents; and c. unbounded events, such as Rosco was reading.
According to Li and Thompson, Mandarin Chinese has no tense markers, but does have aspect markers. The perfective aspect is expressed by the marker *le* or a “perfectivizing expression” in Mandarin Chinese. Li and Thompson define *guo* as expressing the experiential aspect, “indicating that a situation has been experienced” (Li & Thompson, 1981, p. 185). However, they do not explicitly say whether *guo* marks the perfective or imperfective aspect. In fact, Li and Thompson propose four categories of aspect for Mandarin Chinese – the perfective aspect, imperfective aspect, experiential aspect, and delimitative aspect. The perfective aspect is expressed by the marker *-le* or “perfectivizing expression.” The imperfective aspect is expressed by the marker *zai* and/or the marker *-zhe*. The experiential aspect is expressed by *guo*. Lastly, the delimitative aspect is expressed by the reduplication of a verb. Since this study focuses on *guo* and *le* (see the next chapter on *le*), I will not discuss the imperfective aspect or the delimitative aspect. The major problem with Li and Thompson’s four categories of aspect is the discrepancy between the four categories and their definition of aspect. Their definition of aspect projects only the perfective aspect and the imperfective aspect, leaving no position for the experiential aspect and the delimitative aspect.

In order to show the differences between the perfective aspect (PFV) and the experiential aspect (EXP), Li and Thompson contrast the following sentences.

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12 For Li and Thompson, the imperfective aspect and the delimitative aspect are different from the experiential aspect. The imperfective aspect is for durative action marked by *zai*, *-zhe* in Mandarin Chinese, which is similar to English progressive action marked by *-ing*. The delimitative aspect is for “doing an action ‘a little bit,’ or for a short period of time.” (Li and Thompson, 1981, p. 232) Here is an example of Li and Thompson’s delimitative aspect.

Ni shi-shi.
You try-try
‘You try it a little. / You give it a try.’
(2.13) a. 他 得到了 一个 和平 奖。
Tā dédào-le yí-gè hépíng jiǎng
He obtain-PFV one-CL peace prize
‘He won a peace prize.’

b. 他 得到 过 一个 和平 奖。
Tā dédào-guo yí-gè hépíng jiǎng
He obtain-EXP one-CL peace prize
‘He has had the experience of winning a peace prize.’
(From Li and Thompson, 1981, p. 227)

According to Li and Thompson, *le* in (2.13a) indicates a bounded event, i.e., ‘win a peace prize’ took place, and therefore, (2.13a) is PFV. Whereas, *guo* in (2.13b) conveys that the situation, ‘win a peace prize,’ has been experienced at least once, and therefore, (2.13b) is EXP.

It seems to me that if *guo* conveys that an event has been experienced at least once, the event can also be considered bounded, i.e., perfective in Li and Thompson’s definition of aspect. That is, *guo* can be both EXP and PFV. From another perspective, (2.13b) can also be translated as “he has won a peace prize.” If this translation is acceptable, *guo* might also be a combination of the imperfective aspect and past tense.

Li and Thompson further point out that the experiential *guo* indicates an event’s “being over now.” This is an important finding and has been widely accepted. Li and Thompson use the sentences below to explain what they mean by “being over now.”

(2.14) a. 他 去年 到 中国 去了。
Tā qùnián dào Zhōngguó qù-le.
He last-year to China go-PFV.
‘He went to China last year.’

b. 他 去年 到 中国 去 过。
Tā qùnián dào Zhōngguó qù-guo.
He last-year to China go-EXP.
‘He went to China last year.’
(From Li and Thompson, 1981, p. 228)
According to Li and Thompson, although sentence (2.14a) and sentence (2.14b) have the same English translation, sentence (2.14a) with the PFV marker -le simply indicates that the event, the subject’s going to China, took place last year, and we don’t know if the subject is still in China or not. In contrast, sentence (2.14b) with the EXP marker guo conveys that the person’s going to China took place at least once last year and it is now over, namely, that the subject is not currently in China now. Li and Thompson analyze this as “the subject’s return is not part of the meaning of -guo, but part of the message of the -guo sentence because we can infer it from the meaning of -guo: if something has been experienced, it is over” (Li and Thompson, 1981, p. 229). However, if guo conveys that the event is now over, this would seem to suggest that guo is acting as a perfective marker, indicating a bounded event that was completed in the past. It raises the question -- Why cannot guo be a PFV marker in Li and Thompson’s analysis? Likewise, if the use of -le cannot suggest if the subject’s going to China is now over, why is -le classified as a PFV marker? It seems that while Li and Thompson try to argue that guo serves as an EXP maker, they actually build a case for guo being a perfective marker and -le being an imperfective marker.

Li and Thompson propose three restrictions on the use of guo.

First, guo does not co-occur with verbs naming events that are not repeatable.

Second, guo typically does not co-occur with imperatives, because the imperatives order someone to do something, but not to experience something.

Third, guo is not used in a context in which the focus is on the simple fact that an event or a series of events occurred. There are contexts that call for a perfective marker, such as -le, or a perfectivizing expression.
To sum up, Li and Thompson have three important findings: a) the experiential property of *guo*, b) *guo* signifying the event’s “being over now,” and c) *guo* co-occurring with repeatable events. However, they unnecessarily narrowed down the experientiality of *guo* to mean an event has been experienced at least once. In fact, *guo* can still be used even if an event has not been experienced, as shown in the subjunctive sentence below.

(2.15) 要是你去过中国，你就不会这么说。
Yàoshí nǐ qù-guo Zhōngguó, nǐ jiù bú huì zhème shuō
‘If you had been to China, you would not say this.’

Another problem is the above-mentioned discrepancy between Li and Thompson’s definition of aspect and their four categories of aspect. Their definition of aspect projects only two categories—the perfective aspect and the imperfective aspect. In addition to these two categories of aspect, they also propose a third category (the experiential aspect) and a fourth category (the delimitative aspect). The question that logically arises is whether the experiential marker *guo* also indicates a bounded event. If so, could the experiential marker *guo* be categorized as a perfective marker? Finally, in addressing the restrictions on the use of *guo*, Li and Thompson’s simple discussion and the fashion of listing the restrictions have given rise to a plethora of objections. For example, based on the first restriction, repeated here that “*guo* does not co-occur with verbs naming events that are not repeatable,” it would be ungrammatical to say sentences below.

(2.16) *他死过。
Tā sǐ -guo.
He die-EXP.
‘*He has died before.’
According to Li and Thompson, death and aging are not repeatable events, and therefore, it is ungrammatical to use the experiential *guo*. Several linguists (e.g., Iljic, 1990) have argued against the first restriction by saying that *guo* can be used for the so-called non-repeatable events, such as the death of Jesus, or the death of an imaginary situation.

2.1.4 Carlota S. Smith (1997)

Smith’s analysis of *guo* is rather complicated as she proposes a two-component theory of aspect that includes a viewpoint aspect and a situation aspect. In her theory, *guo* conveys perfective viewpoint aspect and stative situation aspect. Smith develops Li and Thompson’s (1981) notions of “experiential aspect,” “event’s being over now” and “repeated event” into “experientiality,” “discontinuity” and “repeatability” senses respectively associated with the perfective viewpoint aspect marker *guo*. Moreover, based on the sense of discontinuity and Chao’s (1968) example, Smith finds another sense indicated by the perfective *guo* – “reversibility.” Although Smith acknowledges that *guo* has other functions, such as a verb or complement, she views the aspectual senses as *guo*’s central senses, which does not allow her to establish a motivated account of *guo*’s semantics. In addition, similar to the problem with Li and Thompson’s analysis, ignoring the complement use of *guo* leaves one of the most confusing aspects of *guo*’s semantics unexplored. In the following paragraphs, I present and discuss Smith’s (1997) analysis of *guo* in more details.
Smith (1997) proposes three types of *guo* – the perfective morpheme *guo* with a neutral tone, resultative verb complement (RVC) *guo* with an optional fourth tone, and verb *guo* with a fourth tone. (Smith did not discuss the meaning of *guo* as a verb.) This is basically in line with Chao’s (1968) analysis of the pure suffix *guo* with a neutral tone, complement *guo* with a fourth tone, and verb *guo* with a fourth tone. Different from Li and Thompson (1981) who claim that *guo* marks experiential aspect and -*le* indicates perfective aspect, Smith proposes that *guo* is a perfective morpheme. Smith also argues that the perfective morpheme is a verbal suffix. Smith broadens the notion of aspect by combining the viewpoint aspect (i.e., perfective and imperfective) and temporal properties of situations (also known as “inherent or semantic aspect” [Comrie, 1976, pp. 41-51] or “Aktionsart” [Brinton, 1988, p. 3]). Hence, Smith proposes a two-component theory of aspect that includes the viewpoint aspect and the situation aspect.

According to Smith, there are three types of viewpoint aspects.

*Perfective* viewpoints focus on a situation in its entirety, including both initial and final endpoints.
*Imperfective* viewpoints focus on part of a situation, including neither initial nor final endpoints.
*Neutral* viewpoints are flexible, including the initial endpoint of a situation and at least one internal stage (where applicable).

(Smith, 1997, p. 3)

According to Smith, there are five types of situation aspects – states, activity, accomplishment, semelfactive and achievement. This is essentially in line with Vendler’s (1967) types of verbs, except that Smith adds the type of semelfactive for atelic instantaneous events without result or outcome, such as *blink*. With her two-component aspect approach, Smith proposes two components for the aspect of the perfective morpheme *guo* (i.e., the verbal suffix *guo*). On one hand, there is the perfective viewpoint aspect, and on the other hand the stative situation aspect.
(This analysis is in stark contradiction to Li and Thompson.) I will discuss the two aspect components of the verbal suffix guo in order in the following paragraphs.

According to Smith, the verbal suffix guo conveys the perfective viewpoint aspect, because “guo presents a prior closed situation of any type” (Smith, 1997, p. 266). This is similar to Chao’s (1968) notion of “indefinite past aspect” of guo. By using “prior” instead of “past.” Smith breaks out from the assumption adopted by her antecedents that the suffix guo is only used for events that have already taken place. Smith further points out that the verbal suffix guo conveys that the final state of an earlier event no longer obtains. This echoes Li and Thompson’s (1981) finding that guo indicates that the event is now over. By discussing event states, Smith pushes forward the analysis to reveal an important property of the verbal suffix guo -- guo conveys that the trajector is in a different situation or state after the event marked by the suffix guo. Smith terms this property of guo as “discontinuity.” In other words, guo gives a focus to the action that has already been completed and so the information that the trajector is in a different state than before the action started and when the guo-marked action was taking place. Example (2.18) below illustrates the discontinuity sense conveyed by the suffix guo with a minimal pair. (2.18a) with the suffix -le does not have the sense of discontinuity, i.e., it is unclear if ‘they’ are still in Hong Kong. In contrast, (2.18b) with the suffix guo denotes that the action of going to Hong Kong is completed, and thus, not continued.

(2.18) a. Ta-men shang ge yue qu-le Xiang Gang.
   They last CL month go-LE Hong Kong.
   ‘Last month they went to Hong Kong (they may still be there.)’

13 Smith does not discuss if guo can be used in future events and how.
14 Smith does not explain if this meaning is related to the past tense.
b. Tamen shang ge yue qu-guo Xiang Gang.
    They last CL month go-GUO Hong Kong.
    ‘Last month they went to Hong Kong (they are no longer there.)’
    (From Smith, 1997, pp. 266-267)

Smith also develops Li and Thompson’s (1981) finding of the experientiality conveyed by *guo*. Smith says that “the -guo perfective usually has experiential force, with the effect of a Perfect” (Smith, 1997, p. 266). Smith’s notion of Perfect is inherently the same as Comrie’s (1976) notion of Perfect, that is, the relation between a prior situation and the reference time. The reference time can be the speech time or “the time of the state resulting from a prior situation” (Comrie, 1976, p. 52). For example, *I have eaten*, combines both the present and the past (Comrie, 1976, p. 52) as the present perfect. To me, it is not difficult to see the connection between *guo*’s experiential property and its Perfect interpretation. The word “experience” intrinsically refers to a prior event that is relevant to the present or speech time (Chu, 1998, p. 38). Smith explicitly points out that the Perfect often has the auxiliary *have* in English, and the best English translation for the *guo* construction is the English Perfect, although the English Perfect does not convey the sense of discontinuity. Interestingly, although Smith suggests the English Perfect as the best translation for the *guo* construction, she sometimes translates the *guo* construction into the Past, not the Perfect, as shown by her examples in (2.18).

Smith’s self-contradiction suggests that when the *guo* construction is accompanied with a temporal location, i.e., a time word such as *shang ge yue* ‘last month,’ the temporal location can override the Perfect effect of *guo*. Note that the temporal location that can co-occur with the verbal suffix *guo* is usually a time word indicating a time in the past. That is, when the temporal location overrides the Perfect effect of *guo*, a past interpretation rises. Without the temporal location, the *guo* construction can be translated into the English Perfect as shown in (2.19).
(2.19) Tamen qu-guo  Xiang Gang.
    They  go-GUO Hong Kong.
    ‘They have been to Hong Kong (they are no longer there.)’

Now, let us turn to the second aspect component of the verbal suffix *guo*, the situation type. According to Smith, the verbal suffix *guo* belongs to a stative situation type because the *guo* construction presents a resultant state of event. Smith did not explain what the resultant state of event is and leaves a question – Does the resultant state of event refer to the experiential effect or the change of state or both? Smith also does not explain the differences between the perfective aspect *guo* with a neutral tone indicating a resultant state of event and the resultative verb complement (RVC) *guo* with an optional fourth tone.

Despite the translation issue involved with (2.18b) above, what Smith tries to show with the sentences in (2.18) is the element of discontinuity associated with *guo*. That is, as illustrated by sentence (2.18b), *guo* conveys that the final state – *being in Hong Kong* – no longer obtains. Smith, on one hand, argues that the notion of discontinuity is relevant to both the viewpoint aspect and the situation aspect, and on the other hand, says that the notion of discontinuity is irrelevant for many sentences when facing challenges from Yeh (1993). Below are Yeh’s sentences.

(2.20) a. Lisi da  -guo wangqiu.
    Lisi play-GUO tennis.
    ‘Lisi has played tennis (before).’

    b. Wo  kan -guo na  -ben shu
    I  read-GUO that-CL book
    ‘I have read that book.’
    (Yeh’s sentences in Smith, 1997, p. 267)
Smith agrees with Yeh (1993) that the discontinuity is irrelevant for sentence (2.20a) and sentence (2.20b). Smith explains that for (2.20a), playing tennis is an atelic\textsuperscript{15} event with no change of state, and thus, without the notion of discontinuity. Although reading that book in (2.20b) is a telic event, it has a non-transitory final state that holds permanently, and therefore, is irrelevant to the discontinuity. It seems that Smith’s discussion here suggests that the discontinuity of the verbal suffix guo is decided by the specified event. If the event itself is irrelevant to the notion of discontinuity, guo does not have the discontinuity sense. This is contradictory to her previous analysis that verbal suffix guo has the property of discontinuity. To me, both sentence (2.20a) and sentence (2.20b) suggest discontinuity, and the discontinuity sense comes from verbal suffix guo. Without any context, the only perfective aspect marker that can be used in (2.20a) is guo, not le. Guo conveys that Lisi has had the experience of playing tennis. That is, Lisi’s previous action of playing tennis is over at the speech time, and it is unclear whether Lisi is playing tennis or not at the speech time. Without any context, (2.20b) can take either the perfective aspect marker le or guo. Note that there are only two perfective aspect markers in Smith’s two-component aspect theory, le and guo. (2.20b) can take le but (2.20a) cannot, potentially due to the fact that (2.20b) has a definite object na-ben shu ‘that-CL book’ but (2.20a) does not\textsuperscript{16}. The verbal suffix guo in (2.20b) conveys that the action of reading that book is over at the speech time. To me, the information that the trajector is now in a different

\textsuperscript{15} According to Boogaart and Janssen (2007), the distinction between telic and atelic events is that a telic event has an inherent end point, independently of the grammatical aspect (perfectivity), whereas an atelic event does not have a natural end point at the level of lexical aspect (Aktionsart). When an atelic event “is presented by means of a perfective form, it is understood to have ended at some, relatively arbitrary, point in time” (Boogaart & Janssen, 2007, p. 814).

\textsuperscript{16} This is similar to English, in which the status of the direct object affects aspect. For example, “she built houses” is imperfective, whereas “she built the house” is perfective.
state of the event (i.e., the discontinuity) is conveyed by *guo*, not by the event itself, as shown by the examples listed below.

(2.21) a. Wo kan -le-na -ben shu.
   I read-LE that-CL book.
   ‘I read that book.’

   b. Wo kan -guo-na -ben shu.
   I read-GUO that-CL book.
   ‘I have read that book.’

   c. Wo kan -le-na -ben shu, keshi mei kan wan.
   I read-LE that-CL book, but not read finish.
   ‘I read that book, but did not finish reading it.’

   d. *Wo kan -guo-na -ben shu, keshi mei kan wan.*
   I read-GUO that-CL book, but not read finish.
   * ‘I have read that book, but did not finish reading it.’

Sentence (2.21c) and sentence (2.21d) are identical except for the use of *le* versus *guo*. (2.21d) is not grammatically acceptable because its first clause conveys that the event of *reading that book* is over, i.e., the discontinuity sense coming from finishing the action (*reading that book*), which conflicts with the second clause. Since sentence (2.21c) and sentence (2.21d) have the same event, *reading that book*, the discontinuity sense in (2.21d) must come from *guo*, not from the action itself, otherwise, (2.21c) would also be ungrammatical.

Related to the discontinuity sense is the notion of reversibility. Through analyzing Chao’s (1968) sentences for discontinuity, Smith finds that the suffix *guo* can convey reversibility for events involving motions or paths, such as coming and going, or metaphorical paths, such as a return to a natural or basic state from its opposite state (e.g., sickness and health). The examples below are from Chao (1968).
(2.22) a. Wo shuaiduan-le tui.
    I break -LE leg.
    ‘I broke my leg (it’s still in a cast).’

   b. Wo shuaiduan-guo tui.
    I break -GUO leg.
    ‘I have broken my leg (it has healed since).’

Guo in (2.22b) conveys that my leg has reverted to its natural and normal state from the state of being broken.

As discussed above, Smith categories both the suffixes guo and -le as perfective aspect markers, whereas Li and Thompson claim that the suffix -le is a perfective aspect marker, and the suffix guo is an experiential aspect marker. Despite the differences in categorization, they all agree that in the experiential sense, the suffix guo requires a repeatable event. This is also the first restriction of the use of the experiential guo proposed by Li and Thompson (1981). Following Yeh (1996), Smith suggests that the experiential guo functions like a temporal quantifier, such as always and sometimes, “presents a given situation as a member of a set” (Smith, 1997, p. 268), and thus, signifies the repeatability. In fact, Chao (1968) has also explicitly pointed out that the neutral-tone guo as a pure suffix conveys “a class meaning,” which is similar to Smith’s “a member of a set” view.

In summation, based on Smith’s two-component aspect theory, the aspectual structure of the verbal suffix guo has two levels. At the viewpoint level, guo conveys a perfective viewpoint. At the situation level, guo along with the verb it occurs with conveys a stative situation. Guo can co-occur with verbs of several situation types. Smith illustrates the guo perfective viewpoint with the graph below.
“F” is the final endpoint of the event. “E” stands for event. “F+1” denotes the change of state after the final endpoint of the event.

2.1.5 Summary of the previous studies

There are several gaps in the previous analyses. First, although linguists have pointed out that guo can be a complement, aspect marker and verb, these are not the only functions that guo plays. There are more functions or meanings associated with guo. For example, guo can be used as an adverb meaning ‘after,’ and guo as a verb can mean ‘cross,’ ‘go over,’ ‘pass (time),’ ‘filter,’ etc. The previous analyses have mainly focused on guo as an aspect marker (some also addressed the complement use of guo), which is far from a full picture of guo’s semantics. Second, the previous analyses discussed the different aspects of guo’s semantics, such as experientiality, discontinuity, reversibility and repeatability, as discrete pieces of information. None of the analyses paid attention to the systematicity or motivated organization of guo’s semantics. In other words, the various interpretations of guo were analyzed as a set of homophones. Third, the neglect of guo as a verb is a major gap. The etymology of guo shows that guo was first used solely as a verb in classical Chinese. Without analyzing guo’s verbal usage, it is impossible to truly understand how guo evolved to be such a polysemous linguistic phenomenon.

2.2 The corpus study of GUO

In the diachronic corpus based study, I examined 1877 tokens of guo from eleven books and a corpus – the Center for Chinese Linguistics of Peking University (Modern Chinese
Section) 北京大学中国语言研究中心(现代汉语), covering a history of 3000 years from the early Western Zhou (1046-771 BCE) to modern times (see Table 2.1). The pre-modern texts were obtained from the Chinese Text Project website. The Chinese Text Project database contains texts of 26,073,004 Chinese characters and is one of the largest databases of pre-modern Chinese texts. Since most of the pre-modern texts are in classical Chinese, the tokens that were found using contemporary searching functions (i.e., Ctrl+F) were analyzed manually. The corpus study of guo’s senses and functions in modern and contemporary periods were conducted using the corpus – the Center for Chinese Linguistics of Peking University (Modern Chinese Section) 北京大学中国语言研究中心(现代汉语). I used the searching function provided by the online corpus to find the tokens of guo, and then analyzed the senses of the first 300 tokens of guo one by one manually.

<table>
<thead>
<tr>
<th>Text/Corpus</th>
<th>Period</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Shijing</em> 诗经 (The Classic of Poetry)</td>
<td>Early Western Zhou (1046-771 BCE) to the middle period of Spring and Autumn period (770-ca. 475 BCE)</td>
<td>4</td>
</tr>
<tr>
<td><em>Lunyu</em> 论语 (The Analects)</td>
<td>Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE)</td>
<td>32</td>
</tr>
<tr>
<td><em>Fengsu tongyi</em> 风俗通义 (Folk Legend)</td>
<td>Eastern Han period (25-220 CE)</td>
<td>48</td>
</tr>
<tr>
<td><em>Renwuzhi</em> 人物志 (Biographical Notes and Data)</td>
<td>Three Kingdoms period (220-265 CE)</td>
<td>17</td>
</tr>
<tr>
<td><em>Sanguozhi</em> 三国志 (Records of the Three Kingdoms)</td>
<td>Western Jin dynasty (265-316 CE)</td>
<td>First 200</td>
</tr>
</tbody>
</table>

17 Center for Chinese Linguistics of Peking University 北京大学中国语言研究中心 is available at http://ccl.pku.edu.cn:8080/ccl_corpus/ [last accessed on December 28, 2016].
18 The Chinese Text Project is available at http://ctext.org [last accessed on December 28, 2016].
19 The timeline of Chinese dynasties used in this paper is based on the table of the Timeline of Chinese Dynasties and Other Key Events from http://afe.easia.columbia.edu/timelines/china_timeline.htm [last accessed on October 18, 2016].
As shown in Table 2.1, if the tokens of *guo* in a text are fewer than 200, I examined all of them. If there are more than 200 tokens of *guo* in a text, I examined the first 200 tokens. However, starting from *Sanguo yanyi* 三国演义 (Romance of the Three Kingdoms), I increased the number of tokens examined to the first 300 as this is the text or historical period in which *guo* is first found to be used as a suffix – the bone of contention in the previous studies. Before I move on to the analysis, Figure 2.1 provides the general information on *guo*’s semantic extension (i.e., new senses of *guo* and new words/set phrases created with *guo*) throughout the 3000 years. The graph emphasizes the number of new senses added to the network, not the total number of senses used during any one period. One observation is that new senses were consistently added to the semantic network of *guo* until the modern era. A second observation is that new set phrases or words containing *guo* were consistently added to the network throughout the entire
3000 years and that the number of new set phrases increased markedly in more recent texts. Note that Figure 2.1 only represents *guo*’s semantic development observed from this particular data set.

![Graph showing semantic development of *guo*](image)

**Figure 2.1 The semantic development of *GUO***

In the following sections, I first discuss the proto-scene or the primary sense of *guo*, and then present the findings from each text or corpus. Finally, based on the previous studies and the findings of the corpus-based study, the semantic network of *guo* is established using Tyler and Evan’s (2003) methodology of principled polysemy to show the diachronic grammaticalization paths and synchronic connections between the senses of *guo* in Chinese.

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2.2.1 The proto-scene of GUO

Previous analyses have mainly focused on the meaning of guo as a verbal suffix, though Chao (1968) and Smith (1997) briefly mentioned that guo could also be a verb and a complement. Without knowing the connections and motivations between the verbal suffix guo, the complement guo and the verb guo, the discussions on guo, especially the verbal suffix guo, were confusing or contradictory. I examined three dictionaries to get a deeper understanding about the different senses of guo.

The 1998 version of Ciyuan 词源, the earliest modern encyclopedic Chinese phrase dictionary first published in 1915 by the Commercial Press 商务印书馆, lists seven senses for guo, as shown below in Table 2.2.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pronunciation: guò</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 1. 经过。 | “若白驹之过隙”
‘to pass’ | “like a white pony passing a crevice” |
| 2. 过去 | “三伏适已过，骄阳化为霖。”
‘to pass (time)’ | “The dog-days have passed, the blazing sun changed into continued rain.” |
| 3. 超越。 | “过犹不及。”
‘to surpass/exceed’ | “Going too far is as bad as not going far enough.” |
| 4. 过失。 | “人谁无过？过而能改，善莫大焉。”
‘fault, mistake’ | “Who does not make mistakes? If one can change after making a mistake, there is nothing better.” |
| 5. 责备 | “过有司也。”
‘to blame’ | “Blame You Si.” |
| **Pronunciation: guō** | |
| 6. 古国名 | |
‘the name of an ancient country or state’ |
Table 2.2 (cont.)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. 姓。过国之后。‘the surname of the later generations of the Guo State’</td>
<td></td>
</tr>
</tbody>
</table>

The 1976 version of *Cihai* 辞海, a large-scale Chinese dictionary and encyclopedia, published by the Taiwan Zhonghua Book Company 台湾中华书局 also lists seven senses for guo, as shown below in Table 2.3.

Table 2.3
The senses and examples of GUO from *Cihai* 辞海

<table>
<thead>
<tr>
<th>Sense</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 度也，经过也。‘to step, to pass’</td>
<td>过 孔 氏 之 门 ‘pass the door of Kong family’</td>
</tr>
<tr>
<td>2. 古国名 ‘the name of an ancient country or state’</td>
<td></td>
</tr>
<tr>
<td>3. 姓也。过国之后。‘the surname of the later generations of the Guo State’</td>
<td></td>
</tr>
</tbody>
</table>
| 4. 越也，胜也。‘to surpass, to exceed, to excel’ | 论语先进：“过犹不及。”
Analects advanced: “going too far is as bad as not going far enough.” |
| 5. 过失也，谬误也。‘fault, mistake’ | 孟子公孙丑: “然则圣人且有过与。”
Mencius Gong Sun Chou: “Then, though a sage still fell into error.” |
| 6. 贬也 ‘to blame’ | 吕氏春秋适威: “烦为教而过不识”
Lüshi Chunqiu Moderating Severity: “it irritates them with complicated instructions and faults the people for not knowing them.” |
| 7. 已往曰过，如言过去。‘Foretime is called GUO, just like saying the past.’ | |
The three dictionaries unanimously list the first meaning of *guo* as a verb, meaning ‘pass.’ The aspectual senses conveyed by verbal suffix *guo* are not included in any of the three
dictionaries. *Shuowen jiezi* (Explaining Graphs and Analyzing Characters), an early 2\textsuperscript{nd} century Chinese dictionary from the Han dynasty (206 BCE-220 CE), offers only one meaning for *guo*, that is, ‘to walk or step.’ Figure 2.2 is a photocopy of the page on *guo* from *Shuowen Jiezi* (Explaining Graphs and Analyzing Characters). The heavy line marks character *guo* and its meaning and pronunciation.

![Figure 2.2 GUO from Shuowen Jiezi](image_url)

As we can see from the image above, the Chinese character for *guo* is composed of two components, 辶 on the left and 高 on the right. 辶 is the semantic component of the character, and 高 is the phonetic component of the character. Therefore, the character, i.e. the written form,
of *guo* is called a phono-semantic compound character. According to Luxing Li (2005), about 90% of modern Chinese characters are phono-semantic compound characters. Unger (2004) rates Chinese as a highly logographic language (despite the dispute whether Japanese is more logographic than Chinese) as illustrated by Figure 2.3.

![Figure 2.3 Typology of writing systems](From Unger, 2004, p.32)

The meaning of *guo* is closely related to the meaning of its semantic component 道. 道 is a pictograph, namely, the shape of the character reveals the meaning of the character and people’s mode of thought when creating the character, such as what they valued and their concepts of imagistic analogy. 道 is also composed of two components, one on the top and one at the bottom. Based on *Tushuo xishuo hanzi daquanji* 图说细说汉字大全集 (2010) and a dictionary of pictographs\(^2\), the component on top is from an oracle bone script 甲, meaning ‘intersection’ or ‘big roads that lead to everywhere.’ The component at bottom is also from an oracle bone script 乙, meaning ‘foot/footprint (with three toes and a sole) or stop.’ In oracle bone scripts, 道 is written as 道. Later, the foot/footprint component moved down from the

\(^2\) This is an online dictionary at www.vividict.com.
middle to the bottom and the character transformed into 閭 in seal scripts, and 就 in standard scripts. Wilder and Ingram note that 閭 means “to run and to stop” (Wilder & Ingram, 1974, p.5).

To Wilder and Ingram, the top component of 閭 means “to step with the left foot” and the bottom component of 閭 means “to stop” (Wilder & Ingram, 1974, p.5). It needs to be pointed out that in fact the bottom component of 閭 means ‘the footprint of the left foot,’ and the sense of ‘left foot comes from the vivid oracle bone script \( \text{足} \) with the big tone on the right side. The sense of ‘to stop’ arises as an invited inference (e.g., Bybee et al, 1994) from ‘footprint’. A footprint is generated from the moment of ‘stopping’ in walk cycle. When 閭 was only used as a component of a character, not an independent character, it transformed into 閖, which is the semantic component of guo in the traditional form 過 (used mainly in Taiwan and Hong Kong) and in the simplified form 过 (used in Mainland China). To summarize, the semantic component 閏 of the character guo is a combination of the notions of roads and a foot/footprint/stop.

*Shuowen jiezi* 说文解字 (Explaining Graphs and Analyzing Characters) explains the meaning of 閏 as 乍行乍止步也 ‘the loop of go and stop.’ Figure 4 below is the photocopy of the page on 閏 from *Shuowen jiezi* 说文解字 (Explaining Graphs and Analyzing Characters). The heavy line marks the character 閏 and its meaning.
Figure 2.4 is from Shuowen jiezi 说文解字 (Explaining Graphs and Analyzing Characters)

‘The loop of go and stop’ with a ‘foot/footprint’ forms a walking cycle, i.e., a cycle that has already begun with one leg having started moving forward and then coming down; ready for the next leg to go-stop. ‘To walk/step’ is also the only meaning of guo offered in Shuowen jiezi 说文解字 (Explaining Graphs and Analyzing Characters). Based on the etymology of guo, I would say that the proto-scene of guo is a physical motion event – to move along certain path in the manner of walking [in space through time]. In other words, I am hypothesizing that the central sense of guo is a verb. Following Tyler and Evans’s (2003) methodology of principled polysemy, the proto-scene of guo is diagrammed in Figure 2.5.

In Figure 2.5, the trajector (TR) is represented by the heavy-lined black circle walking or stepping from left to right. The landmark (LM) is represented by the heavy-lined square. Time is represented by a time line with an arrow on the right. There is a time line in the proto-scene of guo to represent a physical motion event in space through time (Langacker’s 1987, 1999, 2008 representation of a verb). The time at which the motion event takes place is profiled by the
heavy-lined span on the time line. The TR crosses the LM in the manner of walking as suggested by the written form of the *guo* character. In a word, the proto-scene of *guo* represented by Figure 2.5 is the TR crossing the LM in the manner of walking in space through time. According to Tyler and Evans (2003), the proto-scene conveys the primary sense.

![Figure 2.5 Proto-scene of GUO](image)

Here is an example of the primary sense of *guo*.

(2.24) 他 过 桥 到 了 河 对岸。

Tā guò qiáo dào le hé duìàn.

He **cross (in the manner of walking)** bridge arrive LE river other-side.

‘He **crossed (in the manner of walking)** the bridge to the other side of the river.’

(This Chinese sentence is from an online dictionary www.dict.cn.)

In sentence (2.24), the TR is *he*, and the LM *the bridge*. The motion event is that the TR crossed the LM in space through time.
2.2.2 Data and analysis of *GUO*

*Shijing* 诗经 (The Classic of Poetry)

*Shijing* 诗经 (The Classic of Poetry)\(^{22}\), the first collection of Chinese poetry, is composed of 305 works from the early Western Zhou (1046-771 BCE) to the middle period of Spring and Autumn period (770-ca. 475 BCE). Four tokens of *guo* are found in *Shijing* 诗经 (The Classic of Poetry) with three senses – ‘see or visit (a person),’ ‘pass or depart (from a place),’ and ‘name of a river.’ In the following, I first present the meaning extension network and then analyze the extended senses with examples.

![Proto-Scene: cross/pass through](image)

**Figure 2.6 GUO’s semantic network 1**

(*Shijing* [The Classic of Poetry], early Western Zhou [1046-771 BCE] to the middle period of Spring and Autumn period [770-ca. 475 BCE])

As illustrated in Figure 2.6, the senses of ‘see or visit (a person)’ and ‘pass (a place)’ are extended from the proto scene or primary sense of *guo* ‘cross or pass through.’ Note that the use of *guo* as a component of a proper noun, i.e. ‘the name of a river,’ is not listed as a distinct sense in the semantic network, nor discussed here. Here are the sentences from the corpus data to show the extended senses of *guo*.

\(^{22}\) *Shijing* 诗经 is also known as “The Book of Poetry” and “The Book of Odes”.

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(2.25) 江 有 沌，之 子 归，不 我 过。
   Jiang you tuo, zhi zi gui, bu wo guo
   River have branch, of person return, not me cross
   ‘(The) river\textsuperscript{23} has forks. (This) lady goes to be married, without (stopping to) see me.’

不 我 过，其 啸 也 歌。
Bu wo guo, qi xiao ye ge
Not me cross, his/her/its cry also sing
‘Without (stopping to) see me, she (will) sing (a) lament (later).’

(From \textit{Shijing, Guo feng, Zhao nan, Jiang you si} 诗经・国风・召南・江有汜)
(The English translation is adapted from Ha Poong Kim’s [2016] translation.)

In example (2.25), the TR is a person, the \textit{lady}, and the LM is also a person, me. The proto-scene of \textit{guo} depicts that the TR crosses the LM (usually locative) in the manner of walking. If the \textit{lady} crosses \textit{me} in the manner of walking, it means that the \textit{lady} walks to see \textit{me} or visits \textit{me}. Hence, \textit{guo} extended to mean ‘see or visit (a person).’ (The data from a later period, the Eastern Han, shows that \textit{guo} was used in the sense of ‘walk to or arrive at [a place where a relevant person lives].’ ) This meaning extension is made possible through the experiential implications involved in the LM being a person versus a spatial location and pragmatic strengthening (Tyler & Evans, 2003). That is, the sense ‘see or visit (a person)’ arises when the context changes from a locative LM to a person, and is conventionalized as a new sense of \textit{guo} through repeated and continued use of \textit{guo} with a person as LM.

(2.26) 独 寐 猗 歌，永 矢 弗 过。
   Du mei wu ge, yong shi fu guo
   Alone sleep wake sing, forever swear not pass
   ‘Alone (he) sleeps, (and) wakes, (and) sings. (He) swears (he will) never pass (from the spot).’

(From \textit{Shijing, Guo feng, Wei feng, Kao pan} 诗经・国风・卫风・考槃)
(The English translation is adapted from Ha Poong Kim [2016]’s translation.)

\textsuperscript{23} The river refers to the Yangzi River.
In sentence (2.26), *guo* means ‘pass or depart (from a place).’ The ‘TR crosses the LM’ may include three phases: the TR moves towards the LM, the TR overlaps with or traverses the LM, and the TR leaves the LM. The proto-scene of *guo* focuses on the middle phase, while the *guo* in sentence (2.26) emphasizes the last phase. The *guo* in the sense of ‘pass or depart (from a place)’ is diagrammed in Figure 2.7. The last phase of the motion event ‘cross in the manner of walking’ is emphasized, as shown by the heavy-lined arrow and heavy-lined TR on the right side.

![Figure 2.7 ‘Pass or depart (from a place)’ sense of GUO](image)

To summarize, two distinct senses of *guo* – ‘see or visit (a person),’ ‘pass or depart (from a place)’ – are found in a text from the early Early Western Zhou (1046-771 BCE) to the middle period of Spring and Autumn period (770-ca. 475 BCE). These two senses are extended from the proto-scene of *guo* ‘pass/cross through’ via entrenched conceptualizations of the LM as a person and highlighting the last phase of the passing/crossing motion event respectively. Both senses become conventionalized as distinct senses in the network through the process of pragmatic strengthening.
**Lunyu 论语 (The Analects)**

It is believed that *Lunyu 论语 (The Analects)* was written by Confucius’s disciples during the Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE), which recorded the discussions of Confucius with his disciples (Legge, 1971). Thirty two tokens of *guo* are found in *Lunyu 论语 (The Analects)* with four distinct senses – ‘cross,’ ‘fault/have a fault/wrong/wrongly,’ ‘surpass/go beyond/exceed,’ and ‘pass by,’ among which the last three senses are new senses (as indicated by the shaded rows in Table 2.5).

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross’</td>
<td>2</td>
<td>6.3%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>5</td>
<td>15.6%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>5</td>
<td>15.6%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>20</td>
<td>62.5%</td>
</tr>
</tbody>
</table>

As shown in Table 2.5, the ‘cross’ sense is the proto-scene or the primary sense, and the other three senses are the new senses of *guo*. *Guo* was mainly used to convey the sense of ‘fault/have a fault/wrong/wrongly,’ with 20 tokens or 62.5% of the total tokens found in the text from the Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE). The sense of ‘fault/have a fault/wrong/wrongly’ is closely linked with the sense of ‘surpass/go beyond/exceed.’ In the following, I first illustrate the extended semantic network of *guo* (see Figure 2.8 on page 79) and then analyze how the new senses – ‘surpass/go beyond/exceed,’ ‘fault/have a fault’ and ‘pass by’ – are evolved one by one.

Figure 2.8 shows that *guo* has extended from the domain of physical motion event (e.g., ‘pass/depart [from a place]’) to the domain of abstract life situations (e.g., ‘go..."
beyond/exceed/surpass,’ ‘fault/have a fault/wrong/wrongly’). This meaning extension is motivated by experiential correlation, i.e., two distinct experiences become correlated or linked at the conceptual level and give rise to conventionalized linguistic readings (Grady, 1997; Tyler & Evans, 2003). Human beings are social animals. We behave in relation to certain norms (LMs). This is especially true in the Chinese society which has a well-defined ritual system spanning three thousand years. When the TR moves beyond the LM which is the normal range or scope defined by certain norms, *guo* has the sense of ‘exceed/surpass,’ as diagrammed in Figure 2.9.

![Figure 2.8 GUO’s semantic network 2](image)

*Figure 2.8 GUO’s semantic network 2*

*Lunyu [The Analects], Warring States period [ca. 475-221 BCE] and the Han dynasty [206 BCE-220 CE]*

![Figure 2.9 ‘Go beyond/exceed/surpass’ sense of GUO](image)

*Figure 2.9 ‘Go beyond/exceed/surpass’ sense of GUO*
Figure 2.9 illustrates that the TR moves **beyond** the LM as shown by the heavy-lined arrow and heavy-lined TR on the right side of the LM and the corresponding heavy-lined span of time.

Although the entire process of the TR passing the LM might be involved or conceptualized, it is not profiled, as indicated by the dashed-line trajectory.

Here are the examples for the ‘exceed/surpass’ sense of *guo*.

(2.27) 子 曰: “由 也好 勇 过 我，[…]

Zi yue: “You ye hao yong guo wo

‘The Master said: “You **exceed** me

(2.28) 君子 耻 其 言 而 过 其 行。

Junzi chi qi yan er guo qi xing

Superior-man shame his word however **exceed** his action

‘(The) superior man is modest (in) his speech, but **exceeds** (in) his actions.’

(From Lunyu, Gong Ye Chang Chapter 5 论语・公冶长第五)

(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

In sentence (2.27), the TR is a person named *You* (who was one of Confucius’s disciples). The LM is the speaker *me*, i.e. the Master Confucius. *Guo* indicates that *You* exceeds *me* in loving valor.

In sentence (2.28), the TR is *junzi* ‘the superior man.’ Although the LM is not explicitly expressed, it is implied that the LM is the normal situation of how common people act. *Guo* indicates that the TR, *junzi* ‘the superior man,’ exceeds the LM, ordinary people, in actions.

---

24 In classical Chinese, *ye* 也 is a modal particle, which can be used in the middle of a sentence to indicate a pause or at the end of a sentence to convey a positive, emphasizing or doubtful tone.

25 In example (2.27), ‘You’ is a Chinese name, not the pronoun ‘you.’
(2.29) 子曰：“师也过，商也不及。”
Zi yue: “Shi ye guo, Shang ye bu ji.”
Master say: “Shi YE go-beyond, Shang YE not reach.’
‘The Master said: “Shi goes beyond (the mean), (and) Shang (does) not come up to (it).”’
(From Lunyu, Xianjin Chapter 11 论语・先进第十一)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

In sentence (2.29), the TR is a person named Shi. The LM is not explicitly stated in the expression, but implied to be the doctrine of the mean, for the expression is Confucius’s comment on two of his disciples. Guo means that the TR, Shi, goes beyond the implied LM, the mean. When the TR goes beyond the LM, it can be good or bad depending on the context or interlocutors’ construal. (Sentence [2.28] above is an example that ‘going beyond’ is good.) In the text, one of Confucius’s disciples, named Zi Gong 子贡, assumed that Shi is better than Shang based on Confucius’s comment. So, Confucius continued saying,

(2.30) “过犹不及。”
Guò yōu bù jí.”
Go-beyond like not reach.”
“To go beyond is as wrong as to be fall short.”
(From Lunyu, Xianjin Chapter 11 论语・先进第十一)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

In sentence (2.30), neither the TR nor the LM are overtly expressed, but it is implied that if a certain TR goes beyond or exceeds certain norms or the normal scope or range defined by the LM, the effect is similar to when the TR does not reach the LM. In other words, if falling short is bad, going beyond can also be bad.

When the focus is on the situation where the overdoing part loses the support of the commonly accepted LM or norm, it is not only negative, but may also be construed as a fault,
having a fault or wrong. Thus, guo develops the senses of ‘fault/mistake’ and ‘have a fault/wrong.’ These senses of guo are illustrated by Figures 2.10 and 2.11.

![Figure 2.10 'Fault/mistake' sense of GUO](image1)

![Figure 2.11 'Have a fault/wrong' sense of GUO](image2)

In Figures 2.10 and 2.11, only the TR beyond the LM (i.e. the norm) is profiled with a heavy-line, indicating the focal part of the trajectory. The focal part that goes beyond the norm and loses the support of the norm depicts the senses of ‘fault/mistake’ and ‘have a fault/wrong.’ (Likewise, the TR that has not reached the LM is also not supported by the norm.) The only difference between Figure 2.10 and Figure 2.11 is that no span of the time line in Figure 2.10 is heavy or profiled because Figure 2.10 depicts a noun ‘fault/mistake,’ whereas in Figure 2.11, the heavy-line profiled time expanse indicates when ‘having a fault’ or ‘being wrong’ exists. Below are the sentences that show the senses of ‘fault/mistake’ and ‘have a fault/wrong’ respectively.

(2.31) 君子之過也，如日月之食焉:
Junzi zhi guo ye, ru ri yue zhi shi yan
Superior-man of fault YE, like sun moon of eclipse YAN
‘(The) faults of (the) superior man (are) like (the) eclipses of (the) sun (and) moon,
过也，人皆见之
*Guo ye, ren jie jian zhi*

Have-faults YE, person all see it
(He) has (his) faults, (and) all men see them’
(From *Lunyu, Zi Zhang* Chapter 19 论语・子张第十九)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

(2.32) 且尔言过矣。
*Qie er yan guo yi*

And you word/speak wrong Y1
‘And you speak wrongly.’
‘And (what) you said (is) wrong.’
(From *Lunyu, Ji shi* Chapter 16 论语・季氏第十六)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

In addition to the senses of ‘go beyond/exceed/surpass’ and ‘fault/have a fault/wrong/wrongly,’ the tokens of *guo* in in *Lunyu* 论语 (The Analects) also show the use of the primary sense of ‘cross or pass through’ and another different but related sense, ‘pass by,’ though they are not the dominant or most frequently used senses in these texts. Here are the examples.

(2.33) 尝独立，鲤趋而过庭。
*Chang du li, li qu er guo ting*

Once alone stand, carp hasten and cross main-hall
‘(He was) standing alone once, (when I) passed (below the) hall (with) hasty steps.’
(From *Lunyu, Ji shi* Chapter 16 论语・季氏第十六)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

Sentence (2.33) demonstrates the primary sense or proto-scene of *guo*. The TR, *I*, crossed or passed the LM, *hall*, in the manner of walking or stepping.

(2.34) 长沮、桀溺耦而耕，
*Chang Ju, Jie Ni ou er geng*

Chang Ju, Jie Ni pair and plow
‘Chang Ju (and) Jie Ni (were) ploughing (the field) together,
The guo in sentence (2.34) depicts a different scene in which there is no overlap between the TR and the LM, as diagrammed in Figure 2.12.

In Figure 2.12, the TR moves along certain path in the manner of walking in space through time. The LM is within the “sphere of influence” of the TR as indicated by the dashed line above the TR (Tyler & Evans, 2003, p. 66). At one point of the motion event, the TR is conceptualized as proximal to the LM, and may have potential contact with the LM (Tyler & Evans, 2003, p. 66), as indicated by the dashed line between the TR and the LM. The time in which the motion event takes place is profiled by the heavy-lined span on the time line.

The ‘pass by’ sense of guo is a natural extension from the proto-scene of guo. A common human experience is to walk on a path with the result of encountering another person or stopping at a particular place along the path. Closely tied to this experience is passing by a place or person.
without stopping. The new sense ‘pass by’ seems a natural extension from the proto-scene, based in everyday experience. While in the proto-scene, the TR and LM overlap (i.e. the TR traverses the LM in the manner of walking), in the ‘pass by’ sense, the TR and the LM are in the ‘sphere of influence’ and may have potential contact. In sentence (2.34), the TR is Confucius, and the LM is the two farmers Chang Ju and Jie Ni. There is no crossing path between the TR and the LM, but the TR, Confucius, was proximal to the LM, Chang Ju and Jie Ni, and subsequently, the contact is that Confucius sent his disciple to ask Chang Ju and Jie Ni for the ford. Here is another example in which guo conveys the sense of ‘pass by.’

(2.35) 楚 狂 接 舆 歌 而 过 孔 子 曰: “[…]”
Chu kuang Jie Yu ge er guo Kong Zi yue
Chu-State mad Jie Yu sing and pass-by Confucius say
‘(The) madman (of) Chu, Jie Yu, passed by Confucius, singing and saying: “[…]”
(From Lunyu, Wei Zi Chapter 18 论语 · 微子第十八)
(The English Translation is adapted from James Legge’s translation obtained from the Chinese Text Project website.)

In summary, three new senses of guo are found in Lunyu 论语 (The Analects), a text from the Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE). These new senses are ‘fault/have a fault/wrong/wrongly,’ ‘surpass/go beyond/exceed’ and ‘pass by.’ This shows that guo has extended from the domain of physical motion events to the domain of abstract life situations.

Fengsu tongyi 风俗通义 (Folk Legend)

Fengsu tongyi 风俗通义 (Folk Legend) was written by Ying Shao from the Eastern Han period (25-220 CE). This book recorded various myths and legendary anecdotes. Forty eight tokens of guo are found in Fengsu tongyi 风俗通义 (Folk Legend) with seven distinct senses – ‘cross or pass through (a place),’ ‘pass by,’ ‘go beyond/exceed/surpass,’ ‘fault/have a
fault/wrong/wrongly,’ ‘see/visit (a person),’ ‘go to/arrive at (a person’s place)’ and ‘name of a person,’ and one fixed expression, *bu-guo* 不过, meaning ‘only, just’ (Table 2.6). In addition to the fixed expression, *bu-guo* meaning ‘only, just,’ there is one new sense, ‘go to/arrive at (a person’s place)’ (as indicated by the shaded rows in Table 2.6). *Guo* in a person’s name is not a distinct sense.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross, pass’</td>
<td>4</td>
<td>8.3%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>2</td>
<td>4.2%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>17</td>
<td>35.4%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>11</td>
<td>22.9%</td>
</tr>
<tr>
<td>‘see, visit’</td>
<td>4</td>
<td>8.3%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>5</td>
<td>10.4%</td>
</tr>
<tr>
<td>‘a person’s name’</td>
<td>4</td>
<td>8.3%</td>
</tr>
<tr>
<td><strong>bu-guo ‘only, just’</strong></td>
<td><strong>1</strong></td>
<td><strong>2.1%</strong></td>
</tr>
</tbody>
</table>

Table 2.6

Occurrence of *Guo* in *Fengsu tongyi* 风俗通义 (Folk Legend)

Similar to the data from *Lunyu* 论语 (The Analects), the senses ‘go beyond/exceed/surpass’ and ‘fault/have a fault/wrong/wrongly’ are still the most frequently used senses in the text from the Eastern Han period (25-220 CE). Moreover, the data shows that *guo* in the sense of ‘go beyond/exceed/surpass’ began to co-occur with a particle *yu* 于 to form a structure of comparison, *guo-yu* 过于, signifying ‘more [adjective] than.’ The particle *yu* 于 functions to introduce the object of comparison. The *guo-yu* construction generates contextual meanings, such as ‘bigger than’ and ‘better than,’ as shown in the following examples.

(2.36) 简子地过于诸侯，权重于晋君。

Jian Zi 地 *guo-yu* zhu hou, quan zhong-yu Jin jun

Jian Zi position *surpass-YU* many/all prince, power heavy-YU Jin emperor

‘Jian Zi’s’ position (is) **higher than** princes, (and his) power (is) **bigger than** (the) emperor (of) Jin (State).’ (From *Fengsu tongyi, Huang ba, Liu guo* 风俗通义・皇霸・六国)
(2.37) 天下殷富，百姓康乐，
Tianxia yin fu, baixing kang le,
Land-under-heaven flourishing rich, ordinary-people healthy happy

其治过于太宗之时。
qi zhi guo -yu taizong zhi shi
his ruling surpass-YU second-emperor of time

‘(The) country is flourishing (and) rich, (and) ordinary people are healthy (and) happy, (therefore) his\textsuperscript{26} governing (is) better than (the) time of Emperor Wen of Han.’
(From Fengsu tongyi, Zhengshi, Xiaowen Di 风俗通义・正失・孝文帝)

In the context of talking about a person’s political position or social status, guo-yu in sentence (2.36) means ‘higher than,’ while in the context of commenting on an emperor’s governing, guo-yu in sentence (2.37) denotes ‘better than.’

In the following paragraphs, I analyze the fixed expression and the new sense of guo.

Guo’s semantic extension is illustrated in Figure 2.13 below.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{guo_network3.png}
\caption{GUO’s semantic network 3}
\end{figure}

\textit{(Fengsu tongyi [Folk Legend], Eastern Han period [25-220 CE])}

\textsuperscript{26} The emperor here refers to Emperor Xiaoxuan 孝宣 of Han.
The fixed expression *bu-guo* ‘only, just’ is formed with a negation adverb *bu* ‘not’ and *guo* in the sense of ‘go beyond/exceed/surpass.’ For instance,

(2.38) 所 载 不 过 囊 衣, 不 蓄 积 馀 财。
Suo zai bu-guo nang yi, bu xu ji yu cai
SUO27 carry only/just sack clothes, not store-up accumulate remaining money
‘(What he) carried (was) only sacks (and) clothes, (this shows that he did) not accumulate (any) extra money.’
(From *Fengsu tongyi, Zhengshi* 风俗通义・正失)

Literally, *bu-guo* means ‘not-go beyond.’ If the TR does not go beyond the LM, there are two possibilities -- the TR either goes to the extend defined by the LM, that is the sense of ‘just,’ or the TR does not reach the full scale defined by the LM, that is the sense of ‘only.’

As discussed previously, *guo* was used to convey the sense of ‘see or visit (a person)’ in the material from the early Western Zhou (1046-771 BCE) to the middle period of the Spring and Autumn period (770-ca. 475 BCE). The material from the Eastern Han period (25-220 CE) shows that *guo* was also used to mean ‘go to or arrive at a person’s place.’ For instance,

(2.39) 后 邑 因 事 过 至 宣 家
Hou Chen yin shi guo zhi Xuan jia
Later Chen because matter cross arrive Xuan home
‘Later Chen went to Xuan’s home on a business’
(From *Fengsu tongyi, Guaishen* 风俗通义・怪神)

In sentence (2.39), *guo* means ‘move through a certain path or LM in the manner of walking’ and *zhi* means ‘arrive.’ The TR is the subject, a person here named *Chen*. For the verb *guo* ‘cross through,’ the LM is not explicitly stated, but it can be inferred that the LM is the road or area from Chen’s home to Xuan’s home. For the verb *zhi* ‘arrive at,’ the LM is ‘Xuan’s home.’ Thus, *guo zhi Xuan jia* actually describes two actions, and literally means ‘cross through a certain path

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27 *Suo* is a particle used before a verb to create a noun clause. For example *suo zai* 所载 ‘SUO carry’ means ‘what (someone) carries/carried’ and *suo shuo* 所说 ‘SUO say’ means ‘what (someone) says/said.’
(and) arrive at Xuan’s home.’ However, *guo* is also found to combine the senses of ‘cross through’ and ‘arrive at,’ as shown in sentence (2.40).

(2.40) 曾过娣饭，留十五钱，默置席下去。

Ceng guo di fan, liu shiwu qian, mo zhi xi xia qu

Once GUO young-wife food, leave fifteen money, silent put table below away‘Once, (he) arrived at (a) young woman (’s house and had a) meal. (He) left fifteen qian28 (by) quietly putting (it) under (the) table.’

(From Fengsu tongyi, Qian li 风俗通义・愆礼)

This use of *guo* conveys the meaning that might be better expressed by *guo zhi* ‘cross through a certain path (and) arrive at.’ Without *zhi*, *guo* alone is associated with two LMs, as diagrammed in Figure 2.14.

![Figure 2.14 ‘Go to/arrive at’ sense of GUO](image)

**Figure 2.14 ‘Go to/arrive at’ sense of GUO**

In Figure 2.14, the TR crosses a certain LM (i.e. lm 1) in the manner of walking and arrives at another LM (i.e. lm 2). The ‘arrive at’ sense of *guo* is profiled as shown by the heavy-lined TR on the right side of LM 1 and the heavy-lined LM 2. Since LM 1 is not stated but rather implied, it is diagrammed in dashed lines. People usually purposefully go through a certain path or LM 1

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28 *Qian* is an ancient unit of money in China.
in order to get to a place, here LM 2. In other words, the end point of the crossing action is the
destination or LM 2. Therefore, I would argue the sense of ‘go to/arrive at’ extends from the
sense of ‘pass/cross (through)’ of guo.

To summarize, in the text from the Eastern Han period (25-220 CE), the senses ‘go
beyond/exceed/surpass’ and ‘fault/have a fault/wrong/wrongly’ of guo, which were already
established in the network, are still the most frequently used senses. I have also shown how the
fixed expression bu-guo ‘only, just’ and the new sense ‘go to/arrive at’ are extended from the
sense ‘go beyond/exceed/surpass’ and the proto-scene respectively.

*Renwuzhi 人物志 (Biographical Notes and Data)*

*Renwuzhi* 人物志 (Biographical Notes and Data) was written by Liu Shao from the state
of Wei during the Three Kingdoms period (220-265 CE). Seventeen tokens of guo are found in
*Renwuzhi 人物志 (Biographical Notes and Data)*. They include five senses: ‘go
beyond/exceed/surpass,’ ‘fault/have a fault/wrong/wrongly,’ ‘too/excessively,’ ‘blame,’ and
‘transfer/give,’ with the last three senses being the new senses (Table 2.7). Figure 2.15 below
illustrates the semantic extension of guo with these three new senses. I analyze how these three
senses are systematically extended from the old senses with examples from the data in the
following paragraphs.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>12</td>
<td>70.6%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>2</td>
<td>11.8%</td>
</tr>
<tr>
<td>‘blame’</td>
<td>1</td>
<td>5.9%</td>
</tr>
<tr>
<td>‘transfer/give’</td>
<td>1</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

Table 2.7
Occurrence of GUO in *Renwuzhi 人物志 (Biographical Notes and Data)*
As shown in Table 2.7, the established sense of ‘go beyond/exceed/surpass’ is still the most frequently used sense with 12 tokens or 70.6% of the total tokens found in the text. It is not surprising that guo extended from a verb meaning ‘go beyond/exceed/surpass’ to an adverb meaning ‘too/excessively.’ Sentences (2.41) and (2.42) demonstrate the adverbial use of guo.

(2.41) 救济过厚，虽取人不贪也。
    Jiu ji guo hou, sui qu ren bu tan ye
    ‘Although (the person who) is way too generous in helping (the people in a disaster with cash or goods) took (the money or goods from) others, (he is) not greedy.’
    (From Renwuzhi, Ba guan 人物志・八观)

(2.42) 同体之人，常患于过誉
    Tong ti zhi ren, chang huan yu guo yu
    ‘(The) person who is perceptive on whether he is right often worries that (people might) over praise (him).’
    (From Renwuzhi, Qi miu 人物志・七缪)

It is also logical that guo in the sense of ‘fault/have a fault/wrong/wrongly’ evolved to convey the sense of ‘blame,’ analogous to how easily faults give rise to blame in actual human
life. The cognitive process underlying this meaning extension is invited inference (Bybee et al., 1994; Evans, 2014). That is, ‘blame’ as a logical consequence or contextual inference of ‘fault/ have a fault /wrong/wrongly’ became associated with the lexical form guo through continued use. Here is the example.

(2.43) 鄙误在人，过而 不迫。
Bi wu zai ren, guo er bu po
Mistake fault in/at/on person, blame however not force
‘(If the) fault (or) mistake (lies) in others, (when you) blame (them), (you should) not force (them).’
(From Renwuzhi, Caili 人物志・材理)

The third new sense of guo which emerged in the material from the Three Kingdoms period (220-265 CE) is the sense of ‘transfer/give,’ as illustrated by example (2.44).

(2.44) 仁出慈恤，施发过与，慎生畏惧
Ren chu ci xu, shi fa guo yu, shen sheng wei ju
Benevolence come-out kind sympathy, grant develop transfer give, careful grow fear fear
‘Benevolence comes out of kindness and sympathy, bestowal develops from transferring and giving, cautiousness grows out of fear.’
(From Renwuzhi, Qi miu 人物志・七缪)

Due to experiential correlation (Tyler & Evans, 2003), guo developed the sense of ‘transfer’ from the proto-scene – the TR moves along a certain path in the manner of walking. When the TR crosses the LM in the manner of walking, he/she transfers himself/herself from one side of the LM to the other side of the LM. When the relationship of moving from one side to the other is abstracted from the motion event, the sense of ‘transfer’ is thus established. The schematic core of this conceptualization of motion events is a path connecting the starting point and the end point. Mandler (1992) finds that infants have developed the cognitive abilities to conceptualize motion events in many different manners in a less detailed form as a path through space. When the TR is not a person, but an object that is transferred from one party to the other, the sense of
‘give’ rises. (More examples of *guo* used in the sense of ‘transfer/give’ are found in the later periods.) The sense of ‘transfer/give’ is diagrammed in Figure 2.16.

![Figure 2.16 ‘Transfer/give’ sense of GUO](The hand image is obtained but modified from dreamstime.com.)

Figure 2.16 has two scenes – the TR walks from one side of the LM to the other, the TR is given from one party to the other – contained in the two boxes. When the two distinct experiences are correlated or linked at the conceptual level representing the TR moves from one side/party to the other through experiential correlation (Tyler & Evans, 2003), *guo* extends from its proto-scene to the sense of ‘transfer.’

In summary, three new senses are found in the text from the Three Kingdoms period (220-265 CE), which are ‘too/excessively,’ ‘blame,’ and ‘transfer/give.’ All of the three senses are systematically extended from the established senses of *guo*. Specifically, the most frequently used sense ‘go beyond/exceed/surpass’ evolved from a verb to an adverb ‘too/excessively,’ and
the senses of ‘blame’ and ‘transfer/give’ are extended from the sense of ‘fault/have a fault/wrong/wrongly’ and the proto-scene of *guo* through pragmatic strengthening and experiential correlation respectively.

*Sanguozhi* 三国志 (Records of the Three Kingdoms)

*Sanguozhi* 三国志 (Records of the Three Kingdoms) was written by a historian, Chen Shou 陈寿, from the Western Jin dynasty (265-316 CE). The text mainly records the history of the Three Kingdoms, and is considered one of the best Chinese historical texts. There are hundreds of tokens of *guo* in the text. I examined the first two hundred tokens and identified thirteen distinct senses, including the familiar already established senses of ‘cross/pass through,’ ‘pass by,’ ‘go beyond/exceed/surpass,’ ‘fault/have a fault/wrong/wrongly,’ ‘too/excessively,’ ‘see/visit,’ ‘go to/arrive at,’ *bu-guo* ‘only/just,’ and the new senses ‘excessive/inappropriate,’ ‘pass time,’ ‘in the past,’ ‘go through a certain situation,’ and a classifier indicating ‘the number of times a certain process goes through’ (Table 2.8).

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>25</td>
<td>12.5%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>84</td>
<td>42.0%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>33</td>
<td>16.5%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>9</td>
<td>4.5%</td>
</tr>
<tr>
<td>‘excessive, inappropriate’</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>‘see, visit’</td>
<td>7</td>
<td>3.5%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>8</td>
<td>4.0%</td>
</tr>
<tr>
<td><em>bu-guo</em> ‘only, just’</td>
<td>12</td>
<td>6.0%</td>
</tr>
<tr>
<td>‘pass time’</td>
<td>12</td>
<td>6.0%</td>
</tr>
<tr>
<td>‘in the past’</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>‘go through a certain situation’</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
Table 2.8 (cont.)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classifier ‘the number of times a certain process goes through’</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

As shown in the shaded rows in Table 8, several important new senses have only one token. Since the next text *Baopuzi* (The Master Embracing Simplicity) is also from the Jin dynasty (265-420 CE), but written slightly later than *Sanguozhi* (Records of the Three Kingdoms), I will analyze the data from the two texts together. In the following, I first introduce the text *Baopuzi* (The Master Embracing Simplicity) and the relevant data, and then analyze the new senses from the two texts together.

*Baopuzi* (The Master Who Embraces Simplicity)

*Baopuzi* (The Master Who Embraces Simplicity) was written by the Jin dynasty master Ge Hong 葛洪. It is composed of *Nei Pian* 内篇 ‘Inner Chapters’ and *Wai Pian* 外篇 ‘Outer Chapters.’ The *Nei Pian* 内篇 ‘Inner Chapters’ is a Daoist text on mystery and immortality, and the *Wai Pian* 外篇 ‘Outer Chapters’ focuses on a discussion of social order. 185 tokens of *guo* are found in the text with 19 respective senses (Table 2.9). (*Guo* used in a person’s name is not considered a distinct sense of *guo.*) There are four new senses found in this text, which are ‘move to the front,’ ‘pass (exam),’ ‘after,’ complement in v-*guo* construction indicating PATH (as indicated by the shaded rows in Table 2.9). In addition to the four new senses, *guo* also appears in three new set phrases.
Table 2.9
Occurrence of GUO in Baopuzi (The Master Embracing Simplicity)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>15</td>
<td>8.1%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>5</td>
<td>2.7%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>62</td>
<td>33.5%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>40</td>
<td>21.6%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>11</td>
<td>5.9%</td>
</tr>
<tr>
<td>‘blame’</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>‘excessive, inappropriate’</td>
<td>6</td>
<td>3.2%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>bu-guo 不过 ‘only, just’</td>
<td>9</td>
<td>4.9%</td>
</tr>
<tr>
<td>‘move to the front’</td>
<td>3</td>
<td>1.6%</td>
</tr>
<tr>
<td>‘pass time’</td>
<td>9</td>
<td>4.9%</td>
</tr>
<tr>
<td>‘be past’</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>‘pass (exam)’</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>classifier ‘the number of times certain process goes through’</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>‘after’</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>v.-guo: verbal complement indicating PATH</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>guo-yu 过于 ‘too, excessively’</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>jing-guo 经过 ‘pass through, pass by’</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>guo-ci(-yi-wang) 过此(以往) ‘except’</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>‘name of a person’</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Both Sanguozhi (Records of the Three Kingdoms) and Baopuzi (The Master Who Embraces Simplicity) are from the Jin dynasty (265-420 CE). As shown by the data (Tables 2.8 and 2.9) from the two texts of the Jin dynasty, the most frequently used three senses are still ‘go beyond/exceed/surpass,’ ‘fault/have a fault/wrong/wrongly,’ and the primary sense ‘cross/pass (through).’ In total, nine new senses of guo and three new set phrases with guo are found from the two texts. Before I analyze the new senses and set phrases with examples, I summarize the trend of the semantic development of guo observed from the data of the Jin dynasty here.
a) *Guo*’s new senses or functions associated with physical motion events and with the most frequently used sense ‘go beyond/exceed/surpass’ become grammatically diversified, expanding from verb function to noun, adjective, and/or adverb functions. Note that some of the new functions of *guo* appear in set phrases. In other words, *guo* is used to create more set phrases. Importantly, *guo* has evolved from a verb describing motion events to a verb complement or satellite in Talmy’s terminology indicating PATH.

b) *Guo* has extended from the domain of physical motion events to the domain of time;

c) *Guo* has developed from describing motion events to expressing general processes and a classifier measuring the number of times a certain process takes place;

d) Along with processes b) and c), *guo* has developed the function of sequencing events, i.e., the sense of ‘after.’

In the following, I first discuss the new senses/functions associated with physical motion events or the proto-scene of *guo*, and then, I analyze the new senses related to the most frequently used sense ‘go beyond/exceed/surpass.’ Finally, *guo*’s temporal senses and the extended senses associated with *guo*’s general process sense will be illustrated. Basically, the discussion follows the grammaticalization chain proposed by Heine et al., PERSON > OBJECT > SPACE > TIME > PROCESS > QUALITY (Heine et al., 1991, p.4).

**Discussions on senses/functions of guo related to physical motion events or the proto-scene:** *Guo*’s function of describing physical motion events has become grammatically more diversified, including a new motion event ‘move to front,’ working with the particle *suo* 所 to create locative noun phrases, fusing with the Chinese character *jing* 忏 ‘pass through’ to create a disyllabic verb *jing-guo* 经过 meaning ‘pass/cross (through),’ and being attached right after
another motion verb to indicate PATH. I analyze these four senses/functions of *guo* in the following paragraphs one by one.

A new motion event described by *guo* found in the data is that the TR moves to the front of the LM without going through it. This sense of *guo* is illustrated in Figure 2.17 and sentence (2.45).

![Figure 2.17 ‘Move to the front’ sense of GUO](image)

(2.45) 禹步法：前举左，右过左，左就右。
Yu step method: front raise left, right move-to-the-front (of the) left (foot), and then the left (foot moves) next to the right (foot).
‘Yu Step method: (make a) step forward (with the) left (foot), (the) right (foot) moves to the front (of the) left (foot), and then the left (foot moves) next (to the) right (foot).’
(From *Baopuzi, Nei Pian, Xianyao* 抱朴子・内篇・仙药)

The ‘move to the front’ sense of *guo* would seem to derive from the primary sense of *guo*, as both of the two scenes described by *guo* contain the same, crucial information: the TR moves from one side of the LM to the other side. For *guo* in the sense of ‘move to the front,’ the TR does not go through the LM, and the directional information ‘front’ comes from the context (the TR and LM), i.e., the basic front-back asymmetry of the human body (specifically, the right and left feet). Embodied meaning (Tyler & Evans, 2003) plays a crucial role in this meaning extension.
In the texts from the Jin Dynasty (265-420 CE), the primary sense of *guo* ‘cross/pass (through)’ co-occurs with the particle *suo* 所 to create a locative noun phrase indicating the place that is crossed or passed through. For instance,

(2.46) 飞所过战克，与先主会于成都。
Fei suo guo zhan ke, yu xianzhu hui yu Cheng Du
Fei SUO cross battle overcome, with early-majesty meet in Cheng Du
‘(Zhang) Fei won (all the) battles (at) the places where he passed through, (and then) met with Liu Bei in Cheng Du.’
(From *Sanguozhi*, *Shu Shu Liu*, *Zhang Fei Zhuan* 三国志・蜀书六・张飞传)

In sentence (2.46), the particle *suo* precedes the verb *guo* ‘cross/pass’ and forms a noun phrase *suo-guo* 所过, referring to the places that were either crossed or passed through. Here is another example.

(2.47) 行东巡，所过存问高年鳏寡孤独，
Xing-xing dong xun, suo guo cunwen gaonian guangua gudu,
Imperial-visit east patrol, SUO cross send-one’s-regards-to elderly widowed lonely,
赐谷帛。
ci gu bo
bestow grain silk

‘(When the) emperor went on an inspection tour (from the capital to the) east, (he) sent his regards to (the) elderly, widowed (people and the people who lived) alone, (and) bestowed grain (and) silk (on them) (at) the places that he passed through.’
(From *Sanguozhi*, *Wei Shu San*, *Ming Di Ji* 三国志・魏书三・明帝纪)

The new disyllabic verb created with *guo* describing motion events found in the data is *jing-guo* 经过 meaning ‘cross/pass through’ or ‘pass by.’ The character *jing* 经 can be used as a verb alone conveying the sense of ‘pass through.’ *Guo* can mean ‘cross/pass through’ or ‘pass by.’ Therefore, the disyllabic word *jing-guo* 经过 conveys ‘cross/pass through’ or ‘pass by.’

Here are the examples.
入山林多溪毒蝮蛇之地，

Enter mountain forest many river-poison venomous-snake of place,

凡人暂经过，无不中伤
ordinary-person temporary path-through, none not suffer injury

‘Entering the mountains and forests where is full of poisonous insects and venomous snakes, none ordinary people who passed through were not injured.’

(From Baopuzi, Nei Pian, Zhil 抱朴子・内篇・至理)

病或有偶愈者，则谓有神,
Sick or there-is accidental recover person, then say there-is spirits

行道经过，莫不致祀焉。
walk road pass-by, not not deliver sacrifice YAN

‘The sick people who recovered by chance said that there were spirits, so the people who passed by the temple all offered sacrifice.’

(From Baopuzi, Nei Pian, Daoyi 抱朴子・内篇・道意)

Although *jing-guo* 经过 is used more like a single disyllabic word, it can also be understood as a verb-complement construction, in which *guo* is a verbal complement or satellite indicating the path of the motion event (Talmy, 2000). The path signaled by the complement *guo* can be interpreted as ‘through’ or ‘by’ depending on the context. (Note that, the path senses of ‘through’ and ‘by’ are derived from the primary sense ‘pass/cross through’ and the ‘pass by’ sense of *guo* established earlier respectively.) Importantly, the verbal complement usage of *guo* emerged more generally during the Jin dynasty (265-420 CE), as shown in sentence (2.50).

积七八年，鲍鱼主后行过庙下，问其故
Accumulate seven eight year, abalone owner later walk by temple under, ask its reason

‘After seven (or) eight years, (the) owner (of the) abalone walked by (the) temple, (and) asked (the) reason’ (From Baopuzi, Nei Pian, Daoyi 抱朴子・内篇・道意)
In sentence (2.50), *guo* is a complement or satellite attached right after the manner verb, *xing* ‘walk,’ to indicate the path of the walking event. This demonstrates that Chinese has developed the features of Talmy’s (2000) satellite-framed language with the main verb conflating the motion and manner and the complement satellite denoting the path since the Jin dynasty (265-420 CE).

Having discussed the new senses or functions of *guo* associated with physical motion events, I analyze the new senses or functions of *guo* related to the most frequently used sense ‘go beyond/exceed/surpass’ in the following section.

**Discussions on senses/functions related to the most frequently used sense ‘go beyond/exceed/surpass’**: In the texts from the Jin dynasty (265-420 CE), *guo* in the sense of ‘go beyond/exceed/surpass,’ in combination with set words/phrases, expands from the verb function to noun, adjective and adverb functions. I demonstrate these three functions in the following paragraphs.

Similar to the situation that *guo* in the primary sense is used after the particle *suo* to form a locative noun phrase, *guo* in the sense of ‘go beyond/exceed/surpass’ appears after the particle *zhi* ‘of’ to form a noun phrase indicating an ‘excessive situation’ or ‘excessiveness.’ Here are the examples.

(2.51) 信陵 汉惠 之 残, 声 色 之 过, 岂 唯 酒 乎!
Xinling Hanhui zhi can, sheng se zhi guo, qi wei jiu hu
‘Xinling (and) Hanhui were destroyed. (Their) excessiveness of music (and) sex were not only (due to) wine!’
(From *Baopuzi, Wai Pian, Jiujie* 抱朴子・外篇・酒诫)
(2.52) Yin yi zhi guo, ri zeng yue shen.
Full overflow of exceed, day increase month very
‘(The) excessive situation increased day by day.’
(From Baopuzi, Wai Pian, Chongjiao 抱朴子・外篇・崇教)

Moreover, guo in the sense of ‘go beyond/exceed/surpass’ expands from verb function to adjective function meaning ‘excessive, inappropriate, exaggerated’ (especially in the form of guo-cha 过差 literally ‘exceed-differ’), and adverb function signifying ‘excessively.’ For instance,

(2.53) Zi xing fan ai, dai xin xin fu tai guo.
do-as-one-pleases temperament flood love, treat trust new attach too excessive
‘(He) does as he pleases and loves everyone, (and) way too excessively trusts the people who recently joined his ranks.’
(From Sanguozhi, Shushu Shisan 三国志・蜀书十三)

(2.54) Chuan zhe guo-cha, bian yan ci shu neng ling mang zhe de jian.
Pass-on person exaggerated, so say this tree can make blind person get see
‘(The) people (who) passed on (the story) exaggerated, so (they) said (that) this tree could make blind people see.’
(From Baopuzi, Nei Pian, Daoyi 抱朴子・内篇・道意)

(2.55) Zi yi guo-cha, bai bing jian jie.
Self forced-labor excessive, hundred illness simultaneous tie
‘(If you) overwork yourself, all kinds of diseases and ailments (will) follow (you) simultaneously.’
(From Baopuzi, Nei Pian, Jiyan 抱朴子・内篇・极言)

One trend in terms of the evolution of guo around the Jin dynasty is that it is fused with other characters to create new expressions/words. I have shown that in the material from the Eastern Han period (25-220 CE), guo in the sense of ‘go beyond/exceed/surpass’ is found to be used together with the particle yu 于 to convey the sense of ‘more adjective than.’ In the material
from the Jin dynasty (265-420 CE). *guo-yu*过于 is used as a fixed expression meaning ‘too, excessively.’ For example,

(2.56) 風 所 以 攻 毁 之 者，過 于 削剝
Er suoyi gong hui zhi zhe, *guo-yu* kebo
And the reason why attack destroy it ZHE29, excessively exploit

‘And the reason why it (i.e. the body) (is) destroyed (is) because (it is) exploited excessively.’

(From *Baopuzi, Nei Pian, Jiyan* 抱朴子・内篇・极言)

*Yu 于* in classical Chinese can be used as a preposition with various meanings, such as ‘in,’ ‘from,’ ‘to,’ etc. When *guo-yu*过于 precedes a verb, it literally connotes ‘go beyond in doing something.’ That is, *guo-yu*过于 describes that the degree, level or extent of an action or situation exceeds the norm or normal situation, and thus, *guo-yu*过于 has the meaning of ‘too, excessively.’

I have discussed the extended senses/functions associated with *guo* describing physical motion events and *guo*’s most frequently used sense ‘go beyond/exceed/surpass.’ The systematic extension of the new senses is illustrated in Figure 2.18. In the following, I analyze how *guo* expands to the domain of time, and how *guo* is extended to express a general process and to be a classifier measuring the number of times a certain process takes place. *Guo*’s new function of sequencing events associated with the temporal sense and the general process sense will also be analyzed.

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29 *Zhe*者 here is a particle indicating cause or explanation.
Discussion on *guo* expressing time:

Another important development of *guo*'s semantics shown in the data from the Jin dynasty (265-420 CE) is that *guo* is used for temporal expressions. When the LM is not a place but time, *guo* extended from the sense of ‘pass (through a place)’ to the sense of ‘pass (time).’ In other words, the experience of time is expressed in terms of motion. According to Lakoff and Johnson, time may not be an entity, but is created by conceptual metaphor. Lakoff and Johnson notes that “time in English is structured in terms of the TIME IS A MOVING OBJECT metaphor” (Lakoff & Johnson, 2003 [1980]). Evans points out, “the truly radical idea at the heart of Conceptual Metaphor Theory is that abstract thought arises from our sensory-motor systems – our eyes, ears, pressure exerted on the skin, our felt sense of movement, our sense of balance, and so on” (Evans, 2015, p. 58). The proto-scene of *guo* ‘pass through a place in the manner of walking,’ as one of our most common experiences of the physical, spatial world, provides the
structure for our conception of time. The ‘pass (time)’ sense of guo is illustrated in Figure 2.19 and sentence (2.57) below.

\[\text{Figure 2.19 ‘Pass (time)’ sense of GUO}\]

(2.57) 然君寿亦不过十年，病不能杀君，
然 jun shou yi bu guo shi nian, bing bu neng sha jun,
However your life also not pass ten year, illness not can kill you

‘However, you have no more than ten years to live, (if the) disease does not kill you, (you will) bear it (for) ten years, (then) you will still die.’

(From Sanguozhi, Weishu Ershijiu, Hua Tuo Zhuan 三国志・魏书二十九・华佗传)

In sentence (2.57), the TR is a person’s life. The LM is a span of time, ‘ten years.’ The LM coincides with the time line, as shown by the heavy-lined expanse on the time line in Figure 9.

When the LM coincides with the time line, guo has the sense of ‘passing time.’ Based on the content of sentence (2.57), the TR cannot go beyond the LM, ‘ten years,’ that is, the subject has no more than ten years to live. Here is another example.

(2.58) 计北军不过十日，尚足坚守。
Ji bei jun bu guo shi ri, shang zu jian shou
Calculate north army not pass ten day, still enough firm defend
‘(I) think (that) Cao Ren’s troops (have been embattled for) no more than ten days, (so they) can still hold out.’

(From Sanguozhi, Weishu Shisan 三国志・魏书十三)

\[^{30}\text{Bei jun ‘north army’ refers to Cao Ren’s troops.}\]
In sentence (2.58), the TR is *bei jun* ‘north army’ (i.e. ‘Cao Ren’s troops’), and the LM is *shi ri* ‘ten days.’ The Chinese expression, *bei jun bu guo shi ri* ‘(the) north army (does) not pass ten days,’ means that ‘(the) north army (i.e. Cao Ren’s troops) has been experiencing a certain situation for no more than ten days (time).’

The data suggests that with time being the LM, *guo* is mainly used to convey the sense of ‘within (a certain time)’ or ‘no more than (a certain time)’ with a negation adverb *bu* ‘not,’ to denote temporal information for the following event, i.e. ‘after (a certain time).’ That is, in the temporal domain, *guo* extends from a verb to an adverb providing temporal information for the main event. In the following examples, *guo* conveys the sense of ‘after (a certain time).’

(2.59) 饮 宴 自 娱, 过 期 一 年, 六十 三 卒。
Yin yan zi yu, guo qi yi nian, liushi san zu
Drink feast oneself amuse, pass period one year, sixty three die
‘(He indulged) himself (in the) pleasure (of) drinks (and) feasts. After one year, (he) died (at the age of) sixty three.’
(From Sanguozhi, Weishu Ershijiu, Zhu Jianping Zhuan 三国志・魏书二十九・朱建平传)

(2.60) 晏 曰: “过 岁 更 当 相 见。”
Yan yue: “guo sui geng dang xiang jian.”
Yan said: “pass year more should together see.”
‘Yan said: “(we) should meet after (one) year.”’
(From Sanguozhi, Weishu Ershijiu, Guan Lu Zhuan 三国志・魏书二十九・管辂传)

If another event (e.g. ‘die’ in [2.59] and ‘meet’ in [2.60]) is expressed along with *guo* in the sense of ‘pass (time),’ and the *guo* clause precedes that event, then the *guo* clause functions to sequence the two events and denote the temporal information for that given event, i.e., when that event takes place. In this construction, the *guo* clause becomes backgrounded, and *guo* loses its verbal sense to simply denote temporal background information for the main event. In other words, *guo* changes from a verbal expression ‘pass (time)’ to an adverbial expression ‘after (time).’ This sense of *guo* is diagrammed in Figure 2.20.
Following Langacker (1987, pp. 427-428), I use two boxes containing two sets of TR and LM to represent two clauses. The unprofiled box on the left stands for the *guo* clause. The heavy-lined profiled box on the right represents the main clause, e.g., ‘die’ in (2.59) and ‘meet’ in (2.60). For the *guo* clause, the LM coincides with the time line representing that the LM is a temporal notion, e.g., ‘one year’ in (2.59) and (2.60). The *guo* clause is profiled under an atemporal construal, i.e., no span of time is profiled, because it conveys a relationship, e.g., ‘after one year’. The *guo* clause precedes the main clause on the time line and evokes the main clause by providing the temporal information for it. The main clause is a temporal construal with a certain expanse of the time line profiled because it describes an event. The *guo* clause functions as an anchor for the main event, i.e., the *guo* clause helps locate the main event within a sequence of events. The main event takes place after the anchor.

In summary, as illustrated in Figure 2.21 below, *guo* has expanded from the domain of physical motion events to the domain of time. In the domain of time, *guo* has the sense of ‘pass (time)’ and when the verbal expression ‘pass (time)’ is used to sequence events, *guo* functions as an adverb meaning ‘after.’
Discussion on *guo* expressing general process:

I have analyzed *guo*’s motion event senses and *guo*’s temporal senses. Another important new sense of *guo*, ‘go through a certain situation or process,’ emerged in the texts from the Jin dynasty. Heine et al. propose a grammaticalization chain PERSON > OBJECT > SPACE > TIME > PROCESS > QUALITY (in Traugott & Heine edited, 1991, p.4). Assuming this is right cross-linguistically reflecting developmental human cognition, this new sense belongs to the PROCESS stage of *guo*’s grammaticalization. When the LM is neither a locative nor a time, but a situation or process, *guo* develops the sense of ‘go through a certain situation or process’ through generalization (Bybee, 1994). That is, part of the specific features of *guo*’s primary sense or an earlier established sense is lost with the consequent expansion of appropriate contexts.

Figure 2.21 *GUO*’s semantic network 6

*Sanguzhi* 三国志 [Records of the Three Kingdoms] and *Baopuzi* 抱朴子 [The Master Who Embraces Simplicity], Jin dynasty [265-420 CE]
of use (i.e. from a place or time as the LM to a situation/process as the LM). Example (2.61) illustrates this new sense of *guo*.

(2.61) 吾所苦渐平，明日鸡鸣，年便五十，
\[ \text{Wu suo ku jian ping, mingri ji ming, nian bian wushi} \]
I SUO bitter gradually heal, tomorrow rooster cry, age then fifty

建平之戒，真必过矣。
\[ \text{Jianping zhi jie, zhen bi guo yi} \]
Jianping of calamity, really must pass YI

‘My distress gradually healed. Tomorrow (when the) roosters cry, (I will be) fifty years old. (I) really (will) surely **go through** (the) calamity (predicted by) Jianping.’

(From *Sanguozhi, Weishu Ershiju* 三国志・蜀书二十九)

In sentence (2.61), the TR is the subject, ‘I.’ However, the LM is neither a locative nor a time, but a situation, ‘calamity.’ For the sentence be interpretable, the semantics of *guo* appear to be no longer constrained to the motion event defined by the proto-scene, instead, it has extended to the general sense ‘go through (certain situation),’ e.g. ‘go through the calamity’ or even ‘experience or survive the calamity’ in (2.61). In other words, when *guo* was used with LMs that were not locative or not typically associated with physical motion events, *guo*’s specific features of meaning for physical motion events were backgrounded and consequently generalized to suit appropriate contexts or target domains, i.e. non-locative LMs. Hence, *guo* developed a less richly defined, contextual meaning (Bybee, 1994), ‘go through a certain situation.’

Moreover, situations that have been gone through prior to the reference time (i.e. the speech time or ‘now’) are past events. Consequently, *guo* conveys the sense of ‘be past’ or ‘past,’ as illustrated by the following examples.

---

31 Yi矣 is a final particle in classical Chinese, which is similar to the particle *le 了* in modern Chinese.
In sentence (2.62), *guo* denotes that ‘a big fire went through.’ However, when the situation or fire event is described in relation to the time when it has ended (as suggested by the second clause), *guo* conveys that ‘a big fire is past.’ Although Chinese has no overt morphological tense marking, “Chinese is not timeless” (Tyler, 2014, personal conversation). *Guo* in this context denotes a past event. As Comrie points out “tense is a deictic category, i.e. locates situations in time, usually with reference to the present moment, though also with reference to other situations” (Comrie, 1976, p. 5). *Guo* in the sense of ‘be past’ can also be used to modify an event as a *past* event, for instance,

(2.63) 知 人 将 来 及 已 过 之 事
Zhi ren jiang lai ji yi guo zhi shi
‘Know person will come and already go-through of thing
‘Know a person’s future and past’
(From *Baopu zi, Nei Pian, Daoyi* 抱朴子・内篇・道意)

In sentence (2.63), *yi guo zhi shi* ‘already go-through of thing’ means ‘the things that have already been gone through,’ namely, ‘past events.’

I have discussed that *guo* can be used to express time, e.g. ‘pass (time),’ and *guo* can denote past events. When the notions of time and past events are combined, the sense of ‘in the past’ is a logical extension of *guo*’s semantics, as shown in sentence (2.64).

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32 *Ye* 也 is a modal particle in classical Chinese. When *ye* 也 is used at the end of a sentences, it denotes assertion and affirmation.
(2.64) 臣 过 受 刘主殊遇，降吴不可，[...]

Chen guo shou liu zhu shu yu, xiang wu bu ke

‘In the past I received special treatment/kindness (from) Lord Liu, (so I) cannot surrender (to) Wu, [...]’

‘I used to receive special treatment/kindness (from) Lord Liu, (so I) cannot surrender (to) Wu, [...]’

(From Sanguozhi, Shushu Shisan, Huang Quan Zhuan 三国志・蜀书十三・黄权传)

In sentence (2.64), guo stands alone to denote a past time for the main event, namely ‘receive special treatment/kindness.’ The LM for guo is the time. The main event took place during a period of time that has passed, i.e. in the past. The sense of ‘past/in the past’ of guo is diagrammed in Figure 2.22.

**Figure 2.22 ‘Past/in the past’ sense of GUO**

Following Langacker’s diagram of the simple past-tense (1987, pp. 250-251), the squiggle line labeled SE is the speech event or the deictic center. The box represents the scene described by the speech, e.g., ‘I received/used to receive special treatment/kindness from Lord Liu’ in (2.64). The TR and LM in the box are not profiled (i.e., are not diagrammed with heavy-
lines) because what has been described is a type of event, not any particular instance of the type. The heavy-lined profiled expanse on the time line represents the temporal sense conveyed by *guo*. When *guo* is used alone as a time word ‘in the past,’ its temporal sense is specifically diagrammed in the oval, which corresponds to the diagram of the ‘pass (time)’ sense of *guo*. Different from the verbal ‘pass (time)’ sense of *guo*, the *guo* as a time word denotes a time that is away from the speech time (SE) or deictic center. (Although not identified in this particular data set, it is worth mentioning here that *guo* can be combined with 往 *wang* ‘go (in a direction)’ to mean ‘(time) pass’ or ‘past/in the past.’ In modern Chinese *guo* is often combined with 去 *qu* ‘go or away from the speaker or the deictic center’ to mean ‘past/in the past.’)

I have discussed how *guo* is generalized to have the sense of ‘go through (process/situation)’ and to indicate past events in the sense of ‘be past/past’ and how *guo* combines the notions of time and past events to convey the sense of ‘in the past.’ Before moving on to analyzed more meanings associated with the sense of ‘go through (process/situation),’ I illustrate *guo*’s semantic development so far in Figure 2.23 (see page 113).

*Guo* in the sense of ‘go through (a certain situation or process)’ further extended to mean ‘pass (an exam),’ in the context where the situation or process is a test or examination. That is, the TR reaches the standard defined by the LM (i.e. the exam). This meaning extension of *guo* demonstrates that once the general sense ‘go through (situation/process)’ is established, it can draw on contextual implicature or inference and develop new senses through pragmatic strengthening (Tyler & Evans, 2003). For example,
(2.65) 能言不必能行，今试经对策
Neng yan bu bi neng xing, jin shi jing dui ce
Can say not necessarily can practice, today test classics answer strategies

虽过，岂必有政事之才乎?
sui guo, qi bi you zheng shi zhi cai hu
although pass, how must have political thing of endowment HU

‘Being able to say (it does) not necessarily (mean) being able to do (it). Although (he can) pass (the) test (on) classics (and) strategies today, it does not mean (that he) really has (the) endowment (in dealing with) political affairs.’
(From Baopuzi, Wai Pian, Shenju 抱朴子・内篇・审举)

 Proto-Scene: cross/pass through
- see/visit (a person)
- pass/depart (from a place)
- go beyond, exceed, surpass
- pass by
- go to, arrive at
- transfer, give
- move to front
- complement indicating PATH
- pass (time)
- go through (situation/process)
- be past/past
- fault, have a fault, wrong, wrongly
- blame
- bu-guo: only, just too, excessively in set phrases: excessive, inappropriate; excessiveness

Figure 2.23 GUO’s semantic network 7
(Sanguozhi 三国志 [Records of the Three Kingdoms] and Baopuzi 抱朴子 [The Master Who Embraces Simplicity], Jin dynasty [265-420 CE])

33 Hu 乎 here indicates a rhetorical question.
Some processes are repeatable on a routine basis. Others are much less likely to be repeated on a regular basis. The data from the Jin dynasty shows that the general notion of ‘go through a certain process’ has also extended to act as a classifier measuring the number of times a certain process reoccurs for the routinely repeatable processes. For instance,

(2.66) 棺 但 漆 际 会 三 过, 饭含 无 以 珠 玉
Guan dan qi jihui san guo, fanhan wu yi zhu yu
‘Only paint (the) gap at joint three times, mouth no use pearl jade’

(From Sanguozhi, Weishu Er 三国志・魏书二)

(2.67) 炼 金 内 清 酒 中, 约 二 百 过
Lian jin nei qing jiu zhong, yue er bai guo
‘Refine gold in clear liquor (for) about two hundred times’

(From Baopuzi, Nei Pian, Jindan 抱朴子・内篇・金丹)

(2.68) 清晨 建 齿 三 百 过 者, 永 不 摇动。
Qingchen jian chi san bai guo zhe, yong bu yaodong
‘(For) people (who) click (their) teeth three hundred times (in the) morning, (their teeth will) never (become) loose.’

(From Baopuzi, Nei Pian, Zaying 抱朴子・内篇・杂应)

In sentences (2.66)-(2.68), guo measures the number of times for the painting process, the refining process, and the clicking process, respectively. All of these processes tend to be repeated.

Following Langacker (1987, p. 166), Figure 2.24 diagrams how guo extends from a verb expressing a process through time into a classifier. The heavy-lined box at the lower left corner represents ‘Number + Classifier.’ As indicated by the scale (LM), the number is three (based on sentence [2.66]). The classifier is the TR. The TR maps onto the action depicted by the image schema at the lower right corner. When the two scenes are integrated, the action is analyzed as a
schematic noun without the notion of time, and thus, a classifier to count the number of times the action takes place.

As mentioned previously, Heine et al. propose a grammaticalization chain PERSON > OBJECT > SPACE > TIME > PROCESS > QUALITY (in Traugott & Heine edited, 1991, p.4). Heine et al. also point out that “the category QUALITY is the most fuzzy of all these entities. It is likely that future research will establish that it forms a kind of catchall for a number of quite
divergent conceptualizations” (in Traugott & Heine edited, 1991, p. 49). I hypothesize that the conceptualization of *guo* as a classifier that measures the number of times a process takes place belongs to the category of QUALITY\(^{34}\), because it is more abstract and grammatically more complex than PROCESS, and provides additional information related to the notion of PROCESS.

Previously, I have shown that *guo* in the domain of time has extended from a verb ‘pass (time)’ to an adverb ‘after (time)’ to sequence events. Similarly, *guo* in the general sense of ‘go through (situation/process)’ has also developed into an adverb ‘after (event)’ to sequence events. Note that *guo*’s senses of ‘after (time)’ and ‘after (event)’ are extended from two different previously established senses ‘pass (time)’ and ‘go through (situation/process)’ respectively, but they exhibit similar developmental paths, i.e., from a verb to an adverb of sequencing event in the sense of ‘after.’ Example (2.69) and Figure 25 illustrate *guo* in the sense of ‘after (event).’

(2.69) **Dan yong fushui ji dan fu qi zhe,**

*But use charmed-water and only inhale qi person*

**jie zuo sishi ri zhong pi sou, guo ci nai jian er**

*all create forty day within weary thin, go-through this then healthy ER\(^{35}\)*

‘However, (the) people (who) use charmed water or only inhale qi all are weary (and) thin within forty days, (but) after this, (they are) healthy.’

\(^{34}\) Some linguists may think that Chinese classifiers are related to the notion of quantify. It seems to me that the functions of Chinese classifiers may differ depending on what they measure. For example, the functions of the Chinese classifiers in 漆这张桌子他用了两罐油漆 ‘He used two cans of paint to paint the table’ and 他把这张桌子漆了两遍 ‘He painted the table twice’ are different. In the first sentence, the classifier ‘can’ is used to measure the quantity of the object ‘paint,’ whereas in the second sentence, the function of the classifier is similar to the function of *guo*, indicating the number of times the painting process took place. The classifier in the second sentence has a closer relationship with the quality of the painting job than the notion of quantity, though admittedly, in certain situations, certain quantity is needed to have quality. Heine et al. do not define what they mean by the notion of “quality.” I interpreted it as a category, which is more abstract and more grammatical than the category of “process.”

\(^{35}\) *Er* 耳 is a modal particle in classical Chinese expressing affirmation.
Example (2.69) describes two situations, ‘be weary and thin’ and ‘be healthy.’ Since the two situations belong to one event complex, they need to be linked in a certain way. Guo appears between the two situations to establish the connection. Thus, the clause, guo ci ‘go through this,’ preceding the situation of ‘be healthy,’ extends to mean ‘after this’ in the larger linguistic context that Chinese arranges events chronologically. Langacker explicitly notes that an array of events and time are the “domains” (Langacker, 2002, pp. 3-4) for ‘after.’ Two events in temporal sequence with the preceding event being gone through or completed constitute the sense of ‘after.’ The ‘after (event)’ sense of guo is diagrammed in Figure 2.25.

![Figure 2.25 ‘After (event)’ sense of GUO](image)

Similar to the ‘after (time)’ sense of guo, the unprofiled box on the left stands for the guo clause, e.g., ‘after this.’ The profiled box on the right represents the main clause, e.g., ‘be healthy.’ The guo clause precedes the main clause. The guo clause is profiled under an atemporal construal, i.e., no span of time is profiled, because it conveys a relationship, e.g., ‘after (this).’ In contrast, the main clause is a temporal construal with a certain expanse of the time line profiled.
because it describes an event. The *guo* clause functions as an anchor to evoke the profiled main clause, and the main event will take place *after* the anchor.

Here is another example in which *guo* has the sense of ‘after (event).’

(2.70) 今 试 用 此 法，治 一 二 岁 之间，[…]
Jin shi yong ci fa, zhi yi er sui zhijian

‘Now (we) try to use this method to manage (the issue) for one to two years. […] After this, (there) must (be) many people (who) cultivate (their) morals and study diligently.’

(From *Baopuzi*, *Wai Pian*, Shenju 抱朴子・外篇・审举)

In sentence (2.70), the clause, *guo ci* ‘go through this,’ appears between a cause event and an effect event to mean that the effect will come ‘after this’ (i.e. ‘after the cause event’).

Note that *guo* in the sense of ‘after (event)’ often appears in combination with the pronoun *ci* ‘this.’ A second sense, ‘except for this,’ is also associated with the expression *guo-ci*.

Moreover, the sense ‘except for this’ is always used in context where the situation referred to by the pronoun *ci* ‘this’ is the best in comparison to others, and all others are relatively inferior. For instance,

(2.71) 荀 或 犹 强 可 与 语，过 此 以 往，皆 木 梗 泥 偶
Xun Yu you qiang ke yu yu, guo -ci -yi -wang, jie mu geng ni ou

‘Xun Yu is intelligent to talk with. Go through this-and-go, all tree branch mud idol’

‘Xun Yu is intelligent to talk with. Except (for) him, all (other people are like) tree branches (and) clay idols’

(From *Baopuzi*, *Wai Pian*, Danmi 抱朴子・外篇・弹祢)

(2.72) […]，与 墨子及 玉女 隐微 略 同，
yu Mozi and Yunü Yinwei lie tong,

with *Mozi* and *Yunü Yinwei* approximately same,
We all have the experience that after we eat something very sweet, then all other less sweet things taste flavourless or even sour. That is, after we have experienced the best, we know that all other similar experiences are not as good. Thus, ‘except for this’ in the sense that ‘this is the best’ is developed from the sense of ‘after this.’

I have analyzed the extended senses associated with the general sense of ‘go through (situation/process) of guo. The systematicity of this section of meaning extension is diagrammed in Figure 2.26 on page 120.

To sum up, as diagrammed in Figure 2.26, the data suggests several important trends in the evolution of guo around the Jin dynasty (265-420 CE). First, guo has evolved from a verb depicting the proto-scene to a verb complement indicating PATH, i.e., the schematic core of the motion event has been abstracted. Second, guo has extended to the domain of time from a verb describing one of the most basic motion events, ‘move along a certain path in the manner of walking,’ reflecting the conceptual metaphor TIME IS A MOVING OBJECT (Lakoff & Johnson, 1980, 2003). Third, guo has been generalized to mean ‘go through (situation/process),’ and thus can be used in more contexts and consequently has developed more extended senses through pragmatic strengthening (Tyler & Evans, 2003). Given that Chinese lacks overt tense marking, the new senses/functions of expressing past events and sequencing events are particularly important. Finally, guo has fused with more characters to form new words and fixed...
expressions with diversified functions (e.g. jing-guo ‘pass through, pass by’, guo-yu ‘too, excessively’ and guo-ci-yi-wang ‘except this’). As Bybee and Pagliuca point out, “As the meaning generalizes and the range of uses widens, the frequency increases and this leads automatically to phonological reduction and perhaps fusion” (Bybee & Pagliuca, 1985, p. 76).

**Figure 2.26 GUO’s semantic network 8**
(Sanguozhi 三国志 [Records of the Three Kingdoms] and Baopuzi 抱朴子 [The Master Who Embraces Simplicity], Jin dynasty [265-420 CE])

*Shishuo xinyu 世说新语 (New Account of the Tales of the World)*

*Shishuo xinyu 世说新语 (New Account of the Tales of the World)* is a collection of anecdotes and dialogues of famous scholars and artists in the Wei and Jin dynasties compiled and edited by Liu Yiqing 刘义庆 et al., during the Liu Song dynasty (420-479 CE). It is a
masterpiece of anecdotal novels from the Southern and Northern dynasties (420-589 CE). Ninety one tokens of *guo* are found in the text with fifteen distinct senses (Table 2.10). There are only two new senses of *guo* (i.e., ‘finish’ and ‘agree’) and a new word formed with *guo* (i.e., *guo-hou* ‘after the event’). The ‘finish’ sense is extended from the sense of ‘go through (process),’ and the ‘agree’ sense is developed from the sense of ‘pass (exam).’ The new word is related to *guo*’s function of sequencing events. In the following, I diagram the extended semantic network of *guo* (see Figure 2.27) and then support it with corpus data and analysis.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>11</td>
<td>12.1%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>8</td>
<td>8.8%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>18</td>
<td>19.8%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>7</td>
<td>7.7%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>7</td>
<td>7.7%</td>
</tr>
<tr>
<td>‘see/visit’</td>
<td>4</td>
<td>4.4%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>1</td>
<td>1.1%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>21</td>
<td>23.1%</td>
</tr>
<tr>
<td><em>bu-guo</em> 不过 ‘only, just’</td>
<td>1</td>
<td>1.1%</td>
</tr>
<tr>
<td>‘pass time’</td>
<td>2</td>
<td>2.2%</td>
</tr>
<tr>
<td>classifier ‘the number of times a certain process goes through’</td>
<td>2</td>
<td>2.2%</td>
</tr>
<tr>
<td>‘go through (non-locative)’</td>
<td>1</td>
<td>1.1%</td>
</tr>
<tr>
<td>v.-<em>guo</em>: verbal complement indicating PATH</td>
<td>4</td>
<td>4.4%</td>
</tr>
<tr>
<td>‘finish’</td>
<td>2</td>
<td>2.2%</td>
</tr>
<tr>
<td>‘agree’</td>
<td>1</td>
<td>1.1%</td>
</tr>
<tr>
<td><em>guo-hou</em>过后 ‘after the event’</td>
<td>1</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
I have analyzed the ‘pass (exam)’ sense of guo with the data from the Jin dynasty (265-420 CE). A related new sense ‘agree’ appears in the text from the Liu Song dynasty (420-479 CE). Here is the example.

(2.73) 迄 于 崇 贵，乡 品 犹 不 过 也。
Qi yu cong gui, xiang pin you bu guo ye
Until to esteem expensive, village evaluation still not pass YE
‘Until (he became a) prominent (official), (the people from the) village still (could) not agree (with him).’
(From Shishuo xinyu, Youhui 世说新语・尤悔)
For the *guo* event in sentence (2.73), the TR is ‘he’ from the context, and the LM is *xiang pin* ‘village evaluation.’ ‘He could not pass the village evaluation’ indicates that ‘he did not meet or comply with the standards, probably moral standards, set by the village people.’ If a person does not meet or comply with the standards established by the people, people usually do not agree with him/her, and vice versa. Thus, *guo* extends from the sense of ‘pass (an exam/a certain evaluation)’ to the sense of ‘agree.’ In other words, if a person passes an exam, it means that the exam grader agrees with his/her answer. This meaning extension is made through changing the TR. If the TR is the person who takes the exam or to be evaluated, *guo* has the sense of ‘pass (exam/evaluation).’ However, if the TR is the person who grades the exam or does the evaluation, *guo* has the sense of ‘agree.’ Thus, there is a shift in construal on the entire scenario of exam taking, from focus on the person taking the exam to the evaluator’s opinion. The different but related TR, the evaluator, implies a different reading of *guo*, ‘agree.’ This new reading becomes conventionally associated with the lexical form, *guo*, as a new sense through continued use of evaluators as the TR. This process is known as pragmatic strengthening (Tyler & Evans, 2003).

Another new sense of *guo* is also a verb, meaning ‘finish.’ This sense of *guo* is derived from the sense of ‘go through a certain situation or process.’ Similar to the motion event described by *guo*, some extended senses focus on or emphasize the last phase or end point of the motion event, such as the ‘go to/arrive at’ sense of *guo*. For the sense of ‘go through a certain situation or process,’ if the end point is emphasized, it is the sense of ‘finish,’ i.e. ‘the event is finished’ or ‘finish the process.’ This is similar to Tyler and Evans’s (2003) analysis of the ‘finish’ sense associated with the English preposition *over*, as in ‘Class is over.’ Once the ‘finish
the motion event’ sense (i.e. ‘arrive at,’ or in English ‘moving from one side of a barrier to the other’) is established, pragmatic strengthening takes place and ‘finish’ becomes an established sense that can apply to non-motion events. The ‘finish’ sense of guo is illustrated in sentences (2.74) and (2.75).

(2.74) 简文为相，事动经年，然后得过。
Jian Wen wei xiang, shi dong jing nian, ranhou de guo
‘When Jian Wen was (the) Prime Minister, (one political) affair took (one) year to be finished.’
(From Shishuo xinyu, Zhengshi 世说新语・政事)

(2.75) 阮光禄赴山陵，至都，不往殷、刘许，过事便还。
Ruan Guanglu fu shan ling, zhi du, bu wang Yin, Liu xu, guo shi bian huan
‘Guanglu Ruan went to (attend the) emperor’s funeral. (When he) arrived at (the) capital (city), (he did) not go to (visit) Yin (and) Liu, (but) returned right after (the) matters were finished.’
(From Shishuo xinyu, Fangzheng 世说新语・方正)

I have analyzed the two new senses found in the text from the Southern and Northern dynasties (420-589 CE). Now, let’s take a look at the new word formed with guo, guo-hou ‘after the event.’ Previously, in the texts from the Jin dynasty (265-420 CE), guo is found to have been used the sense of ‘after’ to sequence events. During that period, guo usually takes a pronoun ci ‘this’ referring to the preceding event to mean ‘after this’ or ‘after the previous event.’ The text from the Southern and Northern dynasties (420-589 CE) shows that guo has fused with a character hou 后 meaning ‘back, behind, after, later, etc.’ and formed a new word guo-hou 过后

36 Guanglu 光禄 is an honorific title in ancient China.
to mean ‘after the event,’ ‘later’ or ‘afterwards.’ The function of the word *guo-hou* is also sequencing events. Here is the example.

(2.76) 陆太尉诣王丞相咨事，过后辄翻异。
LU Taiwei yi Wang Chengxiang zi shi, guo-hou zhe fan yi
Lu Taiwei37 reach Wang prime-minister consult thing, later then turn-over different ‘Taiwei Lu went to Prime Minister Wang to consult (with him on) things, (but Wang always) changed his mind later.’
(From *Shishuo xinyu, Zhengshi* 世说新语・政事)

In sentence (2.76), *guo* means ‘go through the consulting event,’ and *hou* has the sense of ‘after.’ Therefore, the word *guo-hou* literally means ‘after going through the event,’ that is, the sense of ‘after the event,’ ‘later’ or ‘afterwards.’

It is worth mentioning that *guo* is continuously used as a verb complement or satellite to indicate the PATH of the main motion verb. More examples of complement satellite *guo* emerged in the text from the Southern and Northern dynasties (420-589), such as *lai-guo jiang* 来过江 ‘come-across the (Yangzi) river,’ *song-guo Zhejiang* 送过淛江 ‘send-across Zhejiang (region),’ and *xing-guo Wuzhong* 行过吴中 ‘travel/walk-through Wuzhong (region).’ However, there is one sentence that appears to be rather complicated:

(2.77) 公因便还到过任边
Gong yin bian huan dao guo Ren bian
Prime-minister because convenience return arrive cross Ren side

yun: “君出， […]”
say: “you go-out, […]”
‘The Prime Minister found an opportunity, came to Ren (and) said: “(after) you left, […]”
(From *Shishuo xinyu, Zhengshi* 世说新语・政事)

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37 *Taiwei* 太尉 is the tile of the official in charge of military affairs in ancient China.
In sentence (2.77), there are three verbs in a row, i.e. ‘return-arrive-cross.’ However, the three combined verbs have the meaning ‘come to.’ One possible reading is ‘the Prime Minister returned and came to Ren.’ In this reading, *guo* is the complement of *dao* ‘arrive,’ thus, *dao-guo* means ‘arrive-across.’ It seems unnatural because *dao* ‘arrive’ emphasizes the end point of the motion event, however, it is followed by a complement emphasizing the PATH of the motion event. This might be the reason why the combination of *dao-guo* ‘arrive-across’ did not survive through history.

To summarize, two new senses ‘agree’ and ‘finish’ and a new word formed with *guo* are identified in the text from the Southern and Northern dynasties (420-589 CE). All these new senses and the word form are systematically developed from previously established senses of *guo*. Moreover, *guo* as a complement or satellite indicating PATH is found to be used with a wider number of different motion verbs, indicating this meaning is more deeply entrenched in the network.

*Tongdian 通典 (Comprehensive Institutions)*

*Tongdian 通典 (Comprehensive Institutions)* is a Chinese encyclopedia dealing with government written by a Tang dynasty (618-906) politician and historian, Du You 杜佑 (735-812). This book started the discourse on the institutional system and its history in China. There are over eight hundred tokens of *guo* in the text. I examined the first two hundred tokens and identified sixteen senses of *guo* (Table 2.11)\(^{38}\). (*Guo* used in a person’s name is not considered a distinct sense of *guo.*) There are only two new senses of *guo* – *guo* as a complement indicating

\(^{38}\) Three tokens of *guo* are not included in the data for their meanings are not clear. Here are the three tokens.

1. 过此率计，事息即还。 （引自《通典・食货十一・杂税》）
2. 欲追过尧舜邪，则经历圣人。（引自《通典・礼二十・同姓婚议》）
3. 妾姑薄氏过见矜愍，…… （引自《通典・礼二十九・养兄弟子为后后自生子议》）
‘beyond/more than,’ and the sense of ‘put.’ These two new senses are extended from the verb senses ‘go beyond/exceed/surpass’ and ‘transfer/give’ respectively. In the following, I first illustrate the extended semantic network of *guo* (Figure 2.28), and then analyze the two new senses with examples from the corpus data.

### Table 2.11
**Occurrence of GUO in Tongdian 通典 (Comprehensive Institutions)**

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>cross/pass (through)</td>
<td>12</td>
<td>6.0%</td>
</tr>
<tr>
<td>go beyond, exceed, surpass</td>
<td>98</td>
<td>49.0%</td>
</tr>
<tr>
<td>fault, have a fault, wrong, wrongly</td>
<td>22</td>
<td>11.0%</td>
</tr>
<tr>
<td>excessive</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>too, excessively</td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>go to/arrive at</td>
<td>15</td>
<td>7.5%</td>
</tr>
<tr>
<td><em>bu-guo</em> 不过 ‘only, just’</td>
<td>18</td>
<td>9.0%</td>
</tr>
<tr>
<td>pass (time)/after (time)/ <em>bu-guo</em>: within (time)</td>
<td>11</td>
<td>5.5%</td>
</tr>
<tr>
<td>go through (non-locative)</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>v.-guo: verbal complement indicating PATH</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>after (event)</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>v.-guo: verbal complement denoting ‘beyond/more than’</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>pass by</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>pass exam/check</td>
<td>3</td>
<td>1.5%</td>
</tr>
<tr>
<td>give</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>put</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>name of a person</td>
<td>6</td>
<td>3.0%</td>
</tr>
</tbody>
</table>
It has been shown that *guo* can be used as a verbal complement or satellite to indicate PATH. The data from the Tang dynasty (618-906) suggests that *guo* as a verbal complement can indicate the extent of the action. For instance,

(2.78) 不 得 买 过 所 足。

Bu de mai-*guo* suo zu
Not can buy-*beyond* SUO sufficient
‘Cannot buy *more than* what (they) need.’
(From *Tongdian, Shihuo Yi, Tianzhi Shang* 通典・食货一・田制上)

In sentence (2.78), *guo* is a complement attached right after the verb *mai* ‘buy’ to indicate the extent of the buying action. It can be seen that this verbal complement use of *guo* extended from
the verb *guo* meaning ‘go beyond, exceed, surpass.’ Note that the sense of ‘go beyond, exceed, surpass’ is the most frequently used sense of *guo* in the text with 98 tokens or 49% of the total token examined. Heina et al. point out that “linguistic expressions serving as the source of grammaticalization have one pragmatic feature in common: they are of frequent and general use” (Heina et al., 1991, p. 38). Thus, it is not surprising that the verb *guo* in the sense of ‘go beyond, exceed, surpass,’ with such a high frequency of use, is grammaticalized into a verb complement denoting ‘beyond, more than.’

The second new sense of *guo* found in the text from the Tang dynasty (618-906) is ‘put,’ as illustrated in sentence (2.79). The ‘put’ sense of *guo* seems to be extended from the ‘transfer/give’ sense of *guo*. When the object that is transferred lands in a container or on a surface that can support objects, the sense of ‘put’ emerges.

(2.79) 过 之 平 盘 之中。
*Guo* zhi ping pan zhi zhong
‘Put it on a big plate.’
(From *Tongdian, Shihuo Shier, Qingzhong* 通典・食货十二・轻重)

Moreover, the data from the Tang dynasty shows that *guo*’s sense of ‘pass (exam)’ becomes more firmly established. For instance, *guo* in (2.80) conveys the sense of ‘pass certain check (e.g. the check on documents or acceptability of old coins).’ Primarily, this sense of *guo* denotes that the TR meets the standard defined by the LM.

(2.80) 从 关 外 来，勘 样 相似，然后 得 过。
*Cong guan wai lai, kan yang xiangsi, ranhou de guo*
‘(For the coins) coming from (the) outside (of the) Pass, check (its) shape. (if the shape is) similar (to the sample), then (it) can pass.’
(From *Tongdian, Shihuo Jiu, Qianbi Xia* 通典・食货九・钱币下)
To summarize, two new senses of guo are identified in the text from the Tang dynasty (618-906 CE) – guo as a complement denoting ‘beyond/more than’ and guo as a verb meaning ‘put.’ These two senses are systematically derived from the sense of ‘go beyond/exceed/surpass’ and ‘transfer/give’ respectively. In addition, the ‘pass (examination)’ sense of guo becomes more firmly established and broadens to other situations.

Sishu zhangju jizhu 四书章句集注 (A Collection of Comments on Four Books)

Sishu zhangju jizhu 四书章句集注 (A Collection of Comments on the Four Books) was written by a Song dynasty (960-1279) scholar, Zhu Zi 朱熹 (1130-1200). In the book, he gave important comments on the language and content of the Four Books. There are about three hundred tokens of guo in the book. I examined the first two hundred tokens.

Table 2.12
Occurrence of GUO in Sishu zhangju jizhu 四书章句集注 (A Collection of Comments on the Four Books)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>6</td>
<td>3.0%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>9</td>
<td>4.5%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>62</td>
<td>31.0%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>87</td>
<td>43.5%</td>
</tr>
<tr>
<td>‘blame’</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>17</td>
<td>8.5%</td>
</tr>
<tr>
<td>bu-guo 不过 ‘only, just’</td>
<td>12</td>
<td>6.0%</td>
</tr>
<tr>
<td>‘pass (time)/after (time)/bu-guo: within (time)’</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>‘be past’</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>‘pass from a place/depart’</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>fang-guo 放过 ‘let pass’</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>
As shown in Table 2.12, except for a new word, *fang-guo* 放过 ‘let pass,’ no new usage of *guo* is found in the text. *Fang* means ‘release,’ and *guo* means ‘cross/pass.’ Thus, *fang-guo* 放过 means ‘let pass’ or ‘let go.’ Here is the sentence.

(2.81) 学 如 不 及, 犹 恐 失 之, 不 得 放 过。
Xue ru bu ji, you kong shi zhi, bu de fang-guo
Study like not reach, like fear  lose it, not can let pass
‘Study is like chasing something—while chasing, we fear that we cannot reach it; having reached it, we fear that we might lose it, and therefore cannot let it go.’
(From *Sishu zhangju jizhu*, *Lunyu jizhu*, *Taibo Diba* 四书章句集注・论语集注・泰伯第八)

*Sanguo yanyi* 三国演义 (Romance of the Three Kingdoms)

*Sanguo yanyi* 三国演义 (Romance of the Three Kingdoms) is a historical novel written by a novelist, Luo Guanzhong 罗贯中, from the Yuan (1279-1368) and Ming (1368-1644) dynasties. The novel described the history, especially wars, during the late Eastern Han dynasty (25-220) and the Three Kingdoms period (220-265). The search function of the Chinese Text Project website found 513 tokens of *guo* in the text. I examined the first 300 tokens\(^{39}\) and identified 22 senses or forms of *guo* (Table 2.13). This represents 5 new senses and 3 new words formed with *guo*. The data from the Yuan (1279-1368) and Ming (1368-1644) dynasties shows three important trends of *guo*’s semantic development. First, *guo* for motion events as a verb and complement has developed more trajectories of path (e.g. ‘over’ and ‘around’) and has become linked with the direction of movement by co-occurring with the deictic marker *lai* ‘towards the speaker or deictic center’ or the deictic marker *qu* ‘away from the speaker or deictic center.’ Second, we find important extensions from the meaning cluster extended from the ‘go

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\(^{39}\) The important verbal suffix use of *guo* emerged in the text from Yuan and Ming dynasties, therefore, I examined more tokens of *guo* to get more examples of the verbal suffix use.
beyond/exceed/surpass’ sense of guo and the meaning cluster associated with the ‘go through (situation/process)’ sense. Both have had important semantic extensions concerning the verb complement function of guo, e.g., guo has extended to a verb complement indicating ‘completion’ and this verb complement has further extended to a verb suffix denoting ‘indefinite past event’ or ‘experientiality.’ The third trend is that guo has fused with more characters to form new words, but all these new words are based on the previously established senses of guo.

Table 2.13
Occurrence of GUO in Sanguo yanyi 三国演义 (Romance of the Three Kingdoms)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>82</td>
<td>27.3%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>8</td>
<td>2.7%</td>
</tr>
<tr>
<td>‘cross/pass over’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>23</td>
<td>7.7%</td>
</tr>
<tr>
<td>‘fault, have a fault, wrong, wrongly’</td>
<td>14</td>
<td>4.7%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>bu-guo 不过 ‘only, just’</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>‘pass time’</td>
<td>14</td>
<td>4.7%</td>
</tr>
<tr>
<td>‘go through a certain situation/process’</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>‘be past’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Classifier ‘the number of times certain process goes through’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>v.-guo: verbal complement indicating PATH</td>
<td>53</td>
<td>17.7%</td>
</tr>
<tr>
<td>v.-guo: verbal complement indicating completion (or ‘after’)</td>
<td>7</td>
<td>2.3%</td>
</tr>
<tr>
<td>v.-guo: verbal suffix indicating ‘indefinite past’ (4 tokens) or experientiality (2 tokens)</td>
<td>6</td>
<td>2.0%</td>
</tr>
<tr>
<td>v.-guo-qu/lai: verbal complement indicating PATH and direction</td>
<td>39</td>
<td>13.0%</td>
</tr>
<tr>
<td>v.- (bu)-guo: verbal complement indicating ‘(cannot) out-perform’</td>
<td>21</td>
<td>7.0%</td>
</tr>
<tr>
<td>‘get/buy’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>fang-guo-(qu) 放过(去) ‘let go’</td>
<td>4</td>
<td>1.3%</td>
</tr>
</tbody>
</table>
Table 2.13 (cont.)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>guo-fang 过房 ‘adopt’</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>tong-guo 通过 ‘go through’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>cuo-guo 错过 ‘miss’</td>
<td>1</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

In terms of the frequency of *guo*’s functions, *guo*’s complement function with various senses (e.g. indicating PATH, ‘completion’/‘after,’ and ‘[cannot] out-perform’) becomes the dominant or most frequently used function of *guo*. The primary sense of *guo*, ‘cross/pass (though),’ is the second most frequently used function of *guo*. Note that the primary sense of ‘cross/pass (though)’ can be conveyed by the verb *guo* alone or by other disyllabic words built with *guo*, such as *jing-guo* 经过 ‘pass through’ and *lu-guo* 路过 ‘pass through or pass by.’

In the following, I first analyze the new senses or functions of *guo* related to motion events. Then, I discuss the only new sense from the ‘go beyond/exceed/surpass’ cluster, that is, *guo* as a complement denoting whether the TR outperforms the LM. Finally, I demonstrate how *guo* has systematically evolved from a verb and adverb meaning ‘go through (situation/process),’ ‘finish’ and ‘after’ to a verb complement denoting ‘completion’ and ‘after’ and to a verb suffix indicating ‘indefinite past event’ (Chao, 1968) and ‘experientiality’ (Li & Thompson, 1981).

**Senses or functions of *guo* related to motion events:**

A new scene of motion event, ‘cross over,’ is found in the data. Figure 2.29 and sentences (2.82)-(2.84) illustrate this new sense of *guo*.

Figure 2.29 contains two different spatial configurations (a) and (b). However, both of them illustrate the sense of ‘cross over,’ as both of them depict that the TR moves from one side of the LM to the other side following a path higher than the LM (Tyler & Evans, 2003), and there is no contact between the TR and the LM.
(2.82) Xuande yue ma guo xi
Xuande jump horse cross-over creek
‘Xuande, riding a horse, leaped over the rivulet’
(From Sanguo yanyi, 35 三国演义・第 35 回)

Sentence (2.82) describes a scene represented by Figure 2.29(a). The TR, ‘Xuande on his horse,’ crossed over the LM, ‘the rivulet,’ following an arc trajectory.

(2.83) Yun ma zao dao, jiang Chen Ying huo zhuo guo ma,
Yun horse early arrive, JIANG Chen Ying alive cross-over horse,

zhi yu di xia
throw on ground down

‘Yun soon caught up (on a) horse, seized Chen Ying alive (and) threw (him) across (a) horse (and) down to (the) ground.’
(From Sanguo yanyi, 52, 三国演义・第 52 回)

In sentence (2.83), guo describes a scene represented by Figure 2.29(b). The TR is, ‘Chen Ying,’ and the LM is ‘a horse.’ Chen Ying traveled a little bit above a horse. Then, he inevitably fell

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40 Jiang 将 is a marker for direct object.
down to the ground after crossing over the horse due to gravity. The trajectory described by the
\textit{guo} in sentence (2.83) can be understood as part of the arc trajectory represented by Figure
2.29(a).

(2.84) Dun chu she lie, jian Wei zhu lu guo jian
Dun go-out shoot hunt, see Wei chase deer cross-over stream
‘Dun went out hunting, and saw Wei crossed over a stream following a deer.’
(From \textit{Sanguo yanyi}, 10, 三国演义・第 10 回)

In sentence (2.84), the TR is a person ‘Wei’, and the LM is \textit{jian} ‘stream.’ The Chinese word \textit{jian}
usually refers to a stream that is lower than the ground. The ‘over’ sense is generated when a TR
crosses a LM that is lower than the TR. That is the scene depicted in Figure 2.29(b).

The sense of ‘over’ in ‘cross over’ comes from our embodied experience (Tyler & Evans,
2003). The paths that a moving TR can take in relation to a LM includes from the front, the back,
the right side and the left side of the LM, over the LM, and under the LM. While the first set of
paths (e.g., front, back, right and left sides) is covered by the ‘pass by’ sense of \textit{guo}, what left are
the paths of ‘over’ and ‘under.’ Based on our daily experience, the moving TRs that are going
over the LMs are more often observed than the moving TRs that are going under the LMs due to
the fact that the physical world has open, visible space on top. This makes it possible for the
‘cross over’ sense to be extended from the primary sense of \textit{guo}, ‘cross/pass (through),’ as both
of them depict that the TR, following certain path, moves from one side of the LM to the other
side. The difference is that in the sense of ‘cross over,’ the path is higher than the LM and there
is no contact between the TR and the LM.

The text from the Yuan (1279-1368) and Ming (1368-1644) dynasties shows that \textit{guo} for
motion events can be followed by another verb \textit{qu} ‘go’ or \textit{lai} ‘come’ to indicate the direction of
the movement. *Qu* indicates moving away from the speaker or deictic center, and *lai* denotes moving toward the speaker or deictic center. That is, this *qu* and *lai* are actually deictic markers.

In examples (2.85) and (2.86), the deictic markers are attached to the verb *guo*.

(2.85) 许汜，王楷 先过 去 了。
          Xu Si, Wang kai xian guo -qu le
          ‘Xu Si and Wang Kai crossed (away from the speaker or deictic center) first.’
          (From Sanguo yanyi, 19, 三国演义・第 19 回)

(2.86) 令一将下马，双手捧袍 过来。
          Ling yi jiang xia ma, shuang shou peng pao guo -lai
          ‘A general got down off (the) horse, (and) came (toward the speaker or deictic center) (with) both hands holding (his) robe.’

The deictic markers *qu* ‘away from the deictic center’ and *lai* ‘toward the deictic center’ can also be attached to the verbal complement *guo*, as shown in examples (2.87) and (2.88).

(2.87) 玄德麾军直冲过去。
          Xuande hui jun zhi chong -guo -qu
          ‘Xuande signaled the army to dash across (away from the speaker or deictic center) straightly.’
          (From Sanguo yanyi, 2, 三国演义・第 2 回)

(2.88) 你便插翅，也飞不过去！
          Ni bian cha chi, ye fei -bu -guo -qu
          ‘Even if you grew wings, you could not fly over (away from the speaker or deictic center).’
          (From Sanguo yanyi, 27, 三国演义・第 27 回)

In sentence (2.87), *chong* ‘dash’ is the verb, *guo* ‘cross’ is the complement denoting the path of the dashing action, and *qu* ‘go’ is the deictic marker indicating the direction of the dashing action. In sentence (2.88), *guo-qu* is used in a negative potential complement construction to denote the path and direction of the flying motion event that was deemed unfeasible.

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In sentence (2.89), *zhu* ‘chase’ and *sha* ‘kill’ are the main verbs, *guo* ‘cross’ is the complement denoting path, and *lai* ‘come’ is the deictic marker indicating direction.

As mentioned above, *guo* as a verbal complement is the dominant function in the text from the Yuan and Ming dynasties. *Guo* as a complement denoting PATH is attached to a range of verbs in the text, from typical motion verbs that express manner, such as *pao* ‘run,’ *yue* ‘jump,’ *fei* ‘fly,’ *du* ‘ferry,’ *gan* ‘drive,’ *zhuan* ‘turn,’ *chong* ‘dash,’ etc., to non-typical manner verbs, such as *sha* ‘kill/fight,’ *peng* ‘hold,’ *jie* ‘receive,’ *duo* or *shan* ‘avoid/get out of way,’ etc.

When a specific manner verb is used along with *guo*, it overrides the manner of walking in the proto-scene of *guo*, as shown in examples (2.87), (2.88) and (2.89) above. Following Talmy (2000), the manner verb, e.g. *dash* in (2.87), is the main verb, and *guo* is a satellite to the main verb indicating PATH. *Guo* as a satellite is a complement to the main verb. When *guo* co-occurs with another verb that highlights manner, the manner associated with *guo* (i.e. walking) is backgrounded and the PATH component is highlighted. The speaker would choose a first position manner verb in conjunction with *guo* if they wanted to highlight a different manner of motion. Since the verb complement *guo* here is a PATH element, the manner of walking that comes with the written form of *guo* fades out.

In addition, Chinese is known as a language that favors serial-verb constructions. There is a long history of debates on cases like *guo* in examples (2.87)-(2.89) – Which verb is the main verb in the serial-verb construction? Or is *guo* a verb or secondary complement/preposition?
Slobin (2004), for example, recognizes both the manner verb and the path verb as main verbs, and subsequently proposes that Chinese is an equipollently-framed language, not a satellite-framed language.

If *guo* in sentence (2.87) was a verb, it should be construed as a separate event after the event ‘dash,’ namely, a distinct crossing phase after the dashing phase. However, *guo* in sentence (2.87) is a temporally coextensive facet of the event coded by the other verb ‘dash.’ It is the action of dashing that constitutes the action of crossing. Therefore, to me, *guo* in sentence (2.87) is not a verb but a complement or preposition in a secondary status identifying the PATH. This phenomenon is addressed as “extensive conceptual overlap” by Langacker (2011, p. 90).

*Guo*, as a main verb, denotes motion and path; as a verbal complement, it indicates path. The path conveyed by *guo* can be affected by the manner of the motion (e.g. the arc for a jumping event) or defined by the LM. Previously, in most cases, the path conveyed by *guo* is abstracted into a horizontal line with an arrow on the right side indicating the direction of the motion. Additional shapes of path conveyed by *guo* show up in the text from the Yuan and Ming dynasties. For example, two different paths for mountain-shaped LM are diagrammed in Figure 30. Both trajectory (a) and trajectory (b) in Figure 2.30 can be described by *guo* because essentially they both depict that the TR moves from one side of the mountain-shaped LM to the other side.
Here are the examples.

(2.90) 正 行 过 岭， 只 听 得 岭 上 叫
Zheng xing-guo ling, zhi ting-de ling shang jiao
ZHENG\textsuperscript{41} walk-cross mountain-range, only hear mountain-range on call
‘(When he) was going over (the) summit, (he) heard (someone) on (the) summit shouted’
(From \textit{Sanguo yanyi}, 15, 三国演义・第15回)
(The English translation is adapted from the Chinese Text Project website.)

(2.91) 王 忠 赶 来， 转 过 山 坡， 云 长 回 马
Wang Zhong gan lai, zhuang-guo shan po, Yunchang hui ma
‘Wang Zhong followed (him), (and as he just) went around/over (a) hillside, Yunchang (suddenly) wheeled again’
(From \textit{Sanguo yanyi}, 22, 三国演义・第22回)
(The English translation is adapted from the Chinese Text Project website.)

(2.92) 慈 却 不 由 旧 路 上 岭，
Ci que bu you jiu lu shang ling,
Ci however not from old road go-up summit,
竟 转 过 山 背 后。
jing zhuang-guo shan bei hou
surprisingly turn -cross mountain back behind

‘Ci however did not retire along the road by which he had come, but took a path leading \textit{around} the hill instead of over it.’ (From \textit{Sanguo yanyi}, 15, 三国演义・第15回)

\textsuperscript{41} Zheng 正 is a progressive action marker.
In sentence (2.90), the path denoted by *guo* is ‘over.’ However, in sentence (2.91), the path conveyed by *guo* can be ‘over’ or ‘around’. In other words, sentence (2.91) has two readings, as diagrammed in Figure 2.30(a) and 2.30(b). The path conveyed by *guo* in (2.92) is clearly ‘around,’ not ‘over.’

To sum up, *guo* has developed more senses related to physical motion events. As a main verb, the ‘pass/cross over’ sense of *guo* is established. As a verb complement indicating PATH, *guo* can be used with a variety of verbs, and the PATH sense has extended from ‘through’ to ‘over’ and ‘around.’ Moreover, *guo* as a verb and complement both can take the deictic marker *lai* ‘towards the speaker or deictic center’ or *qu* ‘away from the speaker or deictic center.’ The systematicity of *guo*’s meaning extension for motion events is illustrated in Figure 2.31.

**Senses or functions of *guo* related to the sense of ‘go beyond/exceed/surpass’:**

One of the most frequently utilized senses of *guo* from the Western Zhou period to the Yuan and Ming dynasties is ‘go beyond, exceed, surpass.’ This meaning has been part of the polysemy network since the Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE). In the text from the Tang dynasty (618-906 CE), *guo* in the sense of ‘go beyond, exceed, surpass’ is found to be used as a verb complement denoting ‘beyond, more than.’ In the text from the Yuan (1279-1368) and Ming (1368-1644) dynasties, when *guo* occurs in the sense of ‘go beyond, exceed, surpass’, it can be used as a verbal complement and it indicates whether the TR outperforms the LM. The performance is defined by the verb. If a negation adverb *bu* ‘not’ precedes the verbal complement *guo*, it means that the TR cannot outperform the LM. For instance,
(2.93) 牛辅 抵 敵 不 过，败 阵 而 去。
Niu Fu di di -bu -guo, bai zhen er qu
Niu Fu resist enemy -not -surpass, be-defeated battlefield and go
‘Niu Fu couldn’t outmatch (the) enemy, (so he) was defeated and fled.’
(From Sanguo yanyi, 9, 三国演义・第 9 回)

(2.94) 白虎 料 敵 不 过，弃 城 而 走。
Baihu liao di -bu -guo, qi cheng er zou
Baihu guess match-not-surpass, abandon city and go
‘Baihu anticipated (that he) could not outmatch (them), (so he) abandoned (the) city and fled.’
(From Sanguo yanyi, 15, 三国演义・第 15 回)
(2.95) 吾今刑不过，只得供招。
Wu jin xing -bu -guo, zhi-de gong zhao
I today punish-not-surpass, have-to provide confession
‘I cannot endure (the physical) punishment today, (so I) have to speak out.’
(From Sanguo yanyi, 23, 三国演义・第 23 回)

(2.96) 曹操虽被一时瞒过，必然便省悟
Cao Cao sui bei yi shi man-guo, biran bian xingwu
Cao Cao although BEI42 one time conceal-surpass, must then be-aware
‘Although Cao Cao was outsmarted (by us) this time, (but he will) definitely be aware
(of all this).’
(From Sanguo yanyi, 46, 三国演义・第 46 回)

This new sense of guo as a verb complement denoting whether the TR outperforms the LM is
added to the semantic network of guo (Figure 2.32 on page 143).

Senses or functions of guo related to the sense of ‘go through (situation/process)’:

Previously, I have argued that guo in the general sense of ‘go through (situation/process)’
has been extended to mean ‘finish’ and ‘after (event).’ In the text from the Yuan and Ming
dynasties, guo is found to be used as a verb complement denoting ‘completion.’ There are
different angles to understand this ‘completion’ sense of the verb complement guo. First, it is
directly related to the senses ‘finish’ and ‘after (event).’ Second, the complement guo indicates
that the process conveyed by the verb is gone through, i.e., it is completed. Third, the
‘completion’ sense can even be traced back to the proto-scene of guo, the TR moves from one
side of the LM to the other side, completing the walking event. Tyler and Evans point out that
“[t]he end point of any trajectory (which represents the process of moving) is commonly
understood as representing the completion of the process” (Tyler & Evans, 2003, p. 85).

42 Bei 被 is a passive voice marker.
The data suggests that the verbal complement *guo* marking the completion of a particular event is often followed by another event. That is, after the completion of a particular event, another event takes place. In this context, the verbal complement *guo* takes up the role of sequencing the two events, which is similar to the English word ‘after.’ This function of the verbal complement *guo* is similar to the ‘after (event)’ sense and ‘after (time)’ sense of the verb *guo* established in earlier periods. For instance,
(2.97) 操见过皇甫嵩，朱隽，
Cao jian-guo Huangfu Song, Zhu Jun,
Cao see-GUO Huangfu Song, Zhu Jun,

随即引兵追袭张梁、张宝去了。
Suiji yin bing zhui xi Zhang Liang, Zhang Bao qu le
immediately guide soldier pursue attack Zhang Liang, Zhang Bao go LE

‘After (an) interview with Huangfu Song (and) Zhu Jun, Cao led (his) soldiers (and) went in pursuit of Zhang Liang (and) Zhang Bao.’
(From Sanguo yanyi, 1, 三国演义・第 1 回)
(The English translation is adapted from the Chinese Text Project website.)

In sentence (2.97), guo is attached right after the verb jian ‘see, meet’ to mean ‘finishing meeting with Huangfu Song and Zhu Jun by going through the process.’ If a process is gone through, it is done. When another event ‘going in pursuit of Zhang Liang and Zhang Bao’ is expressed along, guo conveys that this event takes place after the prior event that is done; hence, guo functions to sequence the events. In this context, guo is, again, similar to English ‘after.’

The verbal complement guo can be used not only to sequence past events, but also to reference future events or situations that are true regardless of time as shown in examples (2.98) and (2.99).

(2.98) 瑾曰：“贤弟见过吴侯，却来叙话。”
Jin yue: “xian di jian-guo Wu Hou, que lai xu hua.”
Jin say: “virtuous younger-brother see-GUO Wu Marquis, still come express speech.”
‘Jin said: “after (you) have seen Marquis Wu, (you) will (and) tell (me) (your) news.”’
(From Sanguo yanyi, 43 三国演义・第 43 回)
(The English translation is adapted from the Chinese Text Project website.)

(2.99) 看过一遍，便不遗忘。
Kan-guo yi bian, bian bu yiwang
Read-GUO one time, then not forget.
‘After (he) reads (it) once, he won’t forget.’
(From Sanguo yanyi, 47, 三国演义・第 47 回)
In sentence (2.98), ‘seeing Marquis Wu’ is a future action, and **after** this action, another action of ‘telling me your news’ will take place. Although the English translation of sentence (2.99) has an auxiliary verb ‘will,’ the Chinese sentence describes a situation regarding a person’s strong memory, and it holds in the past, now and probably into the future.

An important development of *guo*’s semantics found in the text from the Yuan (1279-1368) and Ming (1368-1644) dynasties is that *guo* is used as a verbal suffix denoting “indefinite past” (Chao, 1968) events that have been completed at least once prior to the speech time. Here are the examples.

(2.100) 关   公[...] 答   曰: “关   某   前   曾   禀   过   丞相,
Guan Gong [...] da     yue:  “Guan mou     qian      ceng   bing -guo   chengxiang,
Guan Gong [...] reply     say: “I     person   before   before   report-GUO   prime minister
今   故   主   在   河   北,   不   由   某   不   急   去。”
jin   gu  zhu zai  he     bei,   bu   you    mou   bu   ji        qu
today old lord in   river north, not allow I       not urgent go

‘Guan Yu [...] replied (and) said: “I **informed** (you) Prime Minister before (that my) former lord is in (the) North (of Yellow) River now, (so) I have to leave at once.”’

(From *Sanguo yanyi*, 27, 三国演义・第 27 回)
(The English translation is adapted from the Chinese Text Project website.)

In sentence (2.100), *guo* is attached right after the verb *bing* ‘report’ to denote that the reporting process or event was completed in the past. Based on the context, it is likely that the subject did the reporting action only once, but it is possible that the subject did it more than just once. That is, differing from the verbal complement *guo* that marks the completion of a particular event, the ‘report’ action marked by the *guo* in (2.100) is not a particular or specific event, but a type of event that the subject went through at least once in the past. This is similar to Chao’s (1968) notion of the “indefinite past.”
(2.101) Cao Cao bì sǐ wu mu, wú yǐ shuō guò zhòngshen bù shè yì mou, Cao Cao force die my mother, I already say -GUO lifelong not set-up one plan

今安肯破兄良策?
jin an ken po xiong liang ce 
today how willing break older-brother good strategy

‘Cao Cao drove my mom (to) death. I have said (I would) never think out a plan (for him). (So) (am I) likely (to) wreck yours now, brother?’
(From Sanguo yanyi, 48, 三国演义・第 48 回)
(The English translation is adapted from the Chinese Text Project website.)

In sentence (2.101), guo is used after the verb shuo ‘say’ to indicate the completion of the saying event, i.e. ‘I have said it.’ However, it is unclear how many times the person enacted the saying action before the speech time. Guo only denotes that the action or event expressed by the verb is done by the time of speech, but it may have been done once or several times by the speech time.

Still, the verb or event marked by guo does not refer to any particular or specific event, instead, it stands for the type of event. The guo in (2.101) conveys that the subject has gone through this kind of event at least once by the speech time.

(2.102) Dang ri Cao Cao guo shì zhòng dài mou, mou yì zhān Yan Liang, That day Cao Cao really is heavy treat me, I already chop Yan Liang,

诛文丑，解白马之围，报过他了。
zhu Wen Chou, jie baima zhi wei, bao -GUO ta le. 
kill Wen Chou, resolve Boma of besiege, repay-GUO him LE

‘(It) is true (that) Cao Cao treated me well that day, (but) I have repaid him (by) killing Yan Liang (and) Wen Chou (two of his most redoubtable opponents), (and) raising (a) siege at Boma.’
(From Sanguo yanyi, 49, 三国演义・第 49 回)
(The English translation is adapted from the Chinese Text Project website.)

Sentence (2.102) is a good example to show the notion of event type conveyed by the verbal suffix guo. The verb bao ‘repay’ marked by guo refers to a type of event. For the ‘repaying’ type
of event, there are three instances – ‘killing Yan Liang,’ ‘killing Wen Chou,’ and ‘raising a siege at Boma.’ The speaker used three particular instances to prove that he has done the ‘repaying’ type of event.

To sum up, different from the verb complement guo indicating the completion of a particular event, guo in examples (2.100)-(2.102) does not refer to the completion of any particular event; instead, it conveys that at least one instance of the type of event expressed by the verb has been completed. To separate this guo from the verb complement guo, I follow the tradition (e.g., Chao, 1968; Li and Thompson, 1981; Smith, 1997) and call this guo a verb suffix. In other words, the verb complement guo has evolved into the suffix guo through describing a particular event to the type of event, though they both appear right after the main verb and both denote completion. Guo’s usage of marking event type is rooted in and reflects Chinese culture and society which emphasize hierarchy and class. In traditional Chinese society, people are divided into different classes and are expected to play their roles compatible with the class to which they belong. Even at home, people are supposed to play their roles as a father, mother, son, daughter, etc. At a restaurant, waiters or waitresses should not tell customers their names, instead, they are all treated as fuwu-yuan “service people,” i.e., the role they play or the category they belong to in the society. The strong sense of class or type is also reflected in how Chinese people understand and interact with objects or things. For example, classifier is an important notion for Chinese nouns, and a classifier denotes a category or type (e.g., the classifier, zhang 张, is used for objects with a flat surface, the classifier, ba 把, is used for objects with handles, and the classifier, wei 位, is used for people to whom the speaker shows politeness). In a word, the notion of type permeates every part of Chinese society, and it is reflected in Chinese thinking.
and language. *Guo* is a linguistic element (i.e. suffix) that marks the type of event that is completed at least once in relation to a reference point. The reference point usually is the time of speech or “now,” but it can also be another event expressed in or implied from the speech or context.

People can gain empirical knowledge or experience from going through a certain situation or process. Merriam-Webster defines “the process of doing and seeing things and of having things happen to you” as “experience.” The “skill or knowledge that you get by doing something” and “the length of time that you have spent doing something” are also central to the notion of “experience” (Merriam-Webster, accessed online on August 23, 2016). *Guo* in the sense of ‘go through a certain situation or process’ is directly related to the notion of experience. The experientiality associated with *guo* in the sense of ‘go through a certain situation or process’ becomes salient through invited inferencing (Geis & Zwicky, 1971; Brinton, 1988; Traugott & Konig, 1991; Bybee et al., 1994) in the appropriate context. For instance,

(2.103) 叔叔自离许都，于路独行至此，
Shushu zi li Xu du, yu lu du xing zi ci,
Brother-in-law since leave Xu city, with road alone travel arrive here

历过多少艰难，未尝要军马相随；
li -guo duo-shao jiannan, wei chang yao jun ma xiangsui
experience-GUO many difficulty, not once want soldier horse accompany

‘Brother-in-law, since (you) left Xu City (and) traveled alone here, (you) have experienced so many dangers, (and) have never wanted (any) military assistance;’
(From *San guo yanyi*, 28 三国演义・第 28 回)
(The English translation is adapted from the Chinese Text Project website.)

(2.104) 二夫人诉说关羽历过之事，
Er furun sus huo Guan Gong li -guo zhi shi,
Two lady narrate say Guan Gong experience-GUO of thing
‘The ladies said (the) things that Guan Yu had experienced/overcome, only then Zhang Fei wept bitterly.’
(From Sanguo yanyi, 28 三国演义・第 28 回)
(The English translation is adapted from the Chinese Text Project website.)

In sentences (2.103) and (2.104), the verb or event li ‘to experience’ marked by the verbal suffix guo refers to the type of event that the person went through during a certain time period. Based on the context of (2.103) and (2.104), there should be more than one instance in the type. Due to the invited inferences from repeated prior actions to experientiality (especially in the context where the action or verb is ‘to experience’), the experiential aspect of guo became salient, namely, guo extended from conveying going through certain situation or process to expressing experientiality. Moreover, the collocation of the verb li ‘to experience’ and the suffix guo also promotes the semantic extension of guo from ‘repeated prior processes/events’ to ‘experientiality.’ That is the meaning of ‘experience’ coming from li becomes associated with guo. Once the experiential sense of guo is established, guo can convey experientiality without li being present.

(Note that Li and Thompson [1981] define guo as an experiential aspect marker. To Li and Thompson, all guos mark experientiality. In this study, I differentiate between the verb complement guo denoting the completion of a particular event, the verb suffix guo conveying Chao’s “indefinite past” [1968], and the verb suffix guo indicating Li and Thompson’s experientiality [1981].) Guo, in the sense of experientiality, is attached immediately after a verb to stress the experiential aspect associated with the type of process described by the verb, and the experiential sense of guo is derived from the repeated processes of the same type of event prior
to the reference point (RP). The reference point usually is the time of speech or “now,” but it can also be another event expressed in or implied from the speech or context. The experiential sense of guo is diagrammed in Figure 2.33.

![Figure 2.33 ‘Experiential’ sense of GUO](image)

In Figure 2.33, each heavy-lined profiled pair of TRs and LMs represents a single instance of the event. The repeated events are illustrated by the other two identical pairs of heavy-lined profiled TR and LM sitting on the same time line – T. All these instances of the same event are conceptualized as a type diagrammed by the heavy-lined profiled box above the three instances. A type of event lacks the notion of instantiation (Langacker, 1987, p. 75), and thus, the TR and LM are not profiled in the “type” box. The type of event is atemporal in nature as indicated by the unprofiled time line going through the “type” box. The use of guo along with a specific activity verb specifies the event’s temporal anteriority to a reference point. The experiential sense starts from the completion of the first instance of the type of event, and

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continues through the reference point (RP), as indicated by the heavy-lined expanse on the time line. In other words, *guo* extended to profile the continuation of a stable relationship in which a certain type of event has previously occurred but remains of current relevance. The stable relationship is experientiality resulting from the previous event or events. The continuation of the relationship, i.e., having the experience, starts from the completion of the first instance of the type of event and lasts through the reference point (RP) or speech time. The experiential sense conveyed by *guo* is stative and durative.

In summary, the texts from Yuan (1279-1368) and Ming (1368-1644) dynasties show important development of *guo*'s semantics. *Guo* has evolved from a verb and adverb meaning ‘go through (situation/process),’ ‘finish’ and ‘after’ to a verb complement indicating that the particular event expressed by the verb has been gone through or is completed, or ‘after’ this particular event. Moreover, the complement *guo* has further extended from describing a particular event to a type of event. Two senses are associated with *guo* expressing event type – “indefinite past” (Chao, 1968) and experientiality (Li and Thompson, 1981). The systematicity of *guo*'s semantic development is illustrated in Figure 2.34 on page 152.

More new words formed with *guo* are found in the text from the Yuan and Ming dynasties, such as *guo-fang* 过房 ‘adopt,’ *tong-guo* 通过 ‘go through’ and *cuo-guo* 错过 ‘miss.’ I discuss them one by one in the following paragraphs.

The ‘adopt’ sense of *guo-fang* is related to the ‘transfer’ sense of *guo*. *Fang* means ‘house.’ When the TR is a child who is transferred from one house to another house, the sense of ‘adopt’ is established. Here is an example.
Figure 2.34 GUO’s semantic network 13
(Sanguo yanyi 三国演义 [Romance of the Three Kingdoms],
Yuan [1279-1368] and Ming [1368-1644] dynasties)

(2.105) 坚 又 过房 俞氏 一 子，名 韶
Jian you  guo-fang  Yu shi yi zi, ming Shao
Jian again  transfer-house  Yu family one son, name Shao
‘Jian (had) also adopted a son (from a) Yu family, (and) named (him) Shao.’
(From Sanguo yanyi, 7, 三国演义・第 7 回)
(The English translation is adapted from the Chinese Text Project website.)
In the word *tong-guo* ‘go through,’ both *tong* and *guo* mean ‘pass though.’ Thus, *tong-gong* means ‘get through,’ and it is not constrained to locative LMs. For instance,

(2.106) 张松候了三日，方才得通过姓名。
Zhang Song waited for three days, just then get through name
‘Zhang Song waited for three days, only then his name went through (to the Prime Minister).’
(From *Sanguo yanyi*, 60, 三国演义・第 60 回)

The word *cuo-guo* ‘miss’ is composed of *cuo* ‘wrong, wrongly’ and *guo* in the sense of ‘pass by without stop.’ When a person passes by a LM without stop wrongly, the sense of ‘miss’ emerges. Here is an example.

(2.107) 今遇将军，如重见天日，岂忍复错过?
Today meet general, like again see sky sun, how bear again wrong-pass
‘Meeting (you), General, is like coming out of the darkness and into the light, (and) how (can I) bear (to) miss (you) again?’
(From *Sanguo yanyi*, 28, 三国演义・第 28 回)
(The English translation is adapted from the Chinese Text Project website.)

To sum up, three important trends of *guo’s* semantic development are found in the texts from the Yuan (1279-1368) and Ming (1368-1644) dynasties. First, *guo* for motion events as a verb and complement has developed more trajectories of path and has become linked with the direction of movement by taking the deictic markers *lai* ‘towards the speaker or deictic center’ or *qu* ‘away from the speaker or deictic center.’ Second, the meaning cluster associated with the ‘go through (situation/process)’ sense of *guo* and the meaning cluster extended from the ‘go beyond/exceed/surpass’ sense of *guo* both have had important semantic extension on the verb complement function of *guo*. Specifically, *guo* in the general sense of ‘go through (situation/process)’ has evolved into a verb complement indicating the particular event expressed by the verb has been gone through or completed, or ‘after’ this particular event. This verb
complement function of guo has further extended from describing a particular instance of event to expressing a type of event (i.e., the function of a verb suffix, not a complement). Two senses are associated with the suffix guo expressing event type – ‘indefinite past event’ (Chao, 1968) and ‘experientiality’ (Li & Thompson, 1981). The verb complement guo associated with the ‘go beyond/exceed/surpass’ sense of guo has extended to denote whether the TR outperforms the LM. The third trend is that guo has fused with more characters to form new words; importantly, all these new words are based on previously established senses of guo.

*Rulin waishi* 儒林外史 (*The Scholars*)

*Rulin waishi* 儒林外史 (*The Scholars*) is one of the greatest traditional Chinese novels written by Wu Jingzi around 1750 during the Qing dynasty (1644-1912). It is an important work for historical linguistic study of Chinese. “For the first time in a major vernacular novel, descriptive passages are completely integrated with the narrative text because they are now recorded in colloquial prose.” (From Hsia Chih-tsing’s forward for *The Scholars* published in 1992). The search function of the Chinese Text Project found 1030 tokens of guo in the text. I examined the first 300 tokens, and identified 24 senses and 12 words or set phrases with guo (Table 2.14). This is a jump of 5 new senses and 8 new words/set phrases (as indicated by the shaded rows in Table 2.14). The other senses and words/set phrases represent continuing uses from at least the previous 2000 years and they are still important. The new senses include guo as a verb meaning ‘live’ and ‘celebrate,’ and the complement constructions v-guo-lai indicating ‘go back to a normal or conscious state,’ v-bu-guo denoting ‘cannot continue doing something,’ and adj-bu-guo expressing ‘extreme degree.’ There are three trends of guo’s semantic development exhibited in the data from the Qing dynasty. First, guo has extended to express human life (e.g.,
‘to live’), mental status (e.g., ‘go back to normal or conscious status’), and emotions (e.g., ‘feel sorry’). Second, the constructions built with *guo* as a complement have developed more meanings and become polysemous. Third, a lot more new words or set phrases are formed with *guo*.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘cross/pass (through)’</td>
<td>40</td>
<td>13.3%</td>
</tr>
<tr>
<td>‘pass by’</td>
<td>5</td>
<td>1.7%</td>
</tr>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td>‘fault, mistake’</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>‘go to, arrive at’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>*bu-*guo 不过 or *wu-*guo 无过 ‘only, just’</td>
<td>14</td>
<td>4.7%</td>
</tr>
<tr>
<td>‘pass time’ or ‘after’</td>
<td>31</td>
<td>10.3%</td>
</tr>
<tr>
<td>‘to live’</td>
<td>5</td>
<td>1.7%</td>
</tr>
<tr>
<td>‘celebrate’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td><em>v.</em>-guo-time</td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td>‘go through a certain situation/process’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td>‘be past’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>‘finish’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td><em>v.</em>-guo: verbal complement indicating PATH</td>
<td>12</td>
<td>4.0%</td>
</tr>
<tr>
<td><em>v.</em>-guo-qua/lai: verbal complement indicating PATH and direction</td>
<td>39</td>
<td>13.0%</td>
</tr>
<tr>
<td><em>v.</em>-guo-lai: verbal complement indicating ‘go back to a normal or conscious state’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td><em>v.</em>-guo: verbal complement indicating ‘verb through a certain process’</td>
<td>4</td>
<td>1.3%</td>
</tr>
<tr>
<td><em>v.</em>-guo: verbal complement indicating completion or ‘after’</td>
<td>62</td>
<td>20.3%</td>
</tr>
<tr>
<td><em>v.</em>-guo: verbal suffix indicating ‘indefinite past’ or ‘experientiality’ (33 out of the 40 tokens)</td>
<td>40</td>
<td>13.3%</td>
</tr>
<tr>
<td><em>v.</em>-(bu)-guo: verbal complement indicating ‘(cannot) out-perform’</td>
<td>3</td>
<td>1.0%</td>
</tr>
</tbody>
</table>
As shown in Table 2.14, in the text from the Qing dynasty, *guo* as a verbal complement indicating completion or ‘after’ became the dominant or most frequently used function with 62 tokens or 20.3% of the total tokens examined. *Guo*’s primary sense ‘cross/pass (through)’ and *guo* as a verbal suffix denoting ‘indefinite past event’ or ‘experientiality’ tie for the second most frequently used senses with 40 tokens or 13.3% of the total tokens examined. (Note that among the 40 tokens of *guo* in the sense of ‘cross/pass (through),’ 27 tokens are in the forms of *guo-qu* 过去 ‘go over’ or *guo-lai* 过来 ‘come over.’ Among the 40 tokens of *guo*’s suffix use, 33 tokens denote ‘experientiality.’)

As we can see, the experiential sense conveyed by the suffix *guo* has increased to be one of the most frequently used senses of *guo* in the text from the Qing dynasty (1644-1912).

Previously I have discussed the experiential sense associated with the suffix *guo* when analyzing
the data from the Yuan (1279-1368) and Ming (1368-1644) dynasties, but not many tokens of 

*guo* are found denoting experientiality in the text from the Yuan and Ming dynasties, and only 

the verb *li* ‘to experience’ takes this verb suffix *guo*. In the texts from the Qing dynasty, more 
tokens of *guo* are identified as expressing experientiality, and the suffix *guo* conveying 
experientiality attached to many different verbs. This demonstrates that the experiential sense of 
the suffix *guo* is more firmly established. Additionally, a new word has been formed with *guo* to 
denote the sense of ‘experience.’ Since the experiential sense of *guo* is very important, it is 
necessary to revisit it with more corpus examples.

In the following paragraphs, I first further discuss the experiential sense of *guo*, and then 
analyze the new senses and new words/set phrases. The new senses and new words/set phrases 
will be addressed following this order: space→time/sequence→human life/situation→mental 
status→emotion.

**The experiential sense of *guo*:**

Note that two senses are associated with the suffix *guo* – ‘indefinite past event’ and 
‘experientiality.’ Experientiality may rise from past events, but not every indefinite past event 
marked by the suffix *guo* conveys experientiality. (Recall that Li and Thompson [1981] believe 
that *guo* only indicates experientiality.) After examining more tokens of the suffix *guo* conveying 
experientiality, it is found that the experiential sense associated with the verbal suffix *guo* is 
limited to the TRs that have the cognitive ability to gain experience and the speaker has the 
desire to focus on or direct the interlocutor’s attention to the TR’s experiential aspect of the 
event. Compare examples (2.108) and (2.109).
In sentence (2.108), the verbal suffix 贡 is attached after the verb 违 ‘violate’ to indicate the person violated the law at least once in the past. The verb 违 marked by the suffix 贡 does not refer to any particular ‘violating’ event but the type of event. In contrast, the verbal suffix 贡 in example (2.109) focuses on experientiality, and this is further illustrated by the context, i.e. the following sentence. Example (2.109) actually means that ‘I would like to consult you on this because you have the experience of working as a government official.’ The verbal suffix 贡 in (2.109) may have the reading of ‘indefinite past,’ but this reading is overridden by the experiential reading.

43 “Shi…de” is a Chinese construction emphasizing the predicate that goes between shi and de.
Often times, experientiality is associated with past events (and this is also the argument that Li and Thompson make). However, the corpus data shows that when the sense of experientiality is entrenched in the suffix *guo*, *guo* can be used for events that have not happened to indicate the TR does not have the experience or in subjunctive expressions. For example,

(2.110) 他 从来 不曾 见 过 官府 的 人，
Ta congclai bu ceng jian-*guo* guanfu de ren,
He all-the-time not before see -GUO feudal-official of person,
害怕 不 敢 来 了。
haipa bu gan lai LE
afraid not dare come LE

‘He *has never seen* (an) official before in his life, (so) he’s afraid (to) come.’
(From *Rulin waishi*, 1 儒林外史・第一回)
(The English translation is adapted from the Chinese Text Project website.)

(2.111) 叫 请 小 弟 进 去，换 了 两 遍 茶，
Jiao qing xiao di jin-qu, huan-le liang bian cha,
Call invite little brother enter-go, change-LE two time tea,
就像 相 与 过 几 十 年 的 一 般。
jiuxiang xiangyu -*guo* ji shi nian de yiban
as-if know-each-GUO several ten year of same

‘(He) invited me in, (and) offered me tea twice, as if (we) had known each (for) many years.’
(From *Rulin waishi*, 4 儒林外史・第四回)
(The English translation is adapted from the Chinese Text Project website.)

After the experiential sense is firmly established in *guo*’s semantics, certain word/set phrase built with *guo* have also begun to denote the sense of ‘to experience.’ Previously, the word *jing-guo* 经过 ‘pass through’ is found to describe physical motion events. In the text from the Qing dynasty, *jing-guo* 经过 is used to convey ‘experience through,’ as shown in sentence (2.112).
(2.112) 严霜烈日皆经过，次第春风到草芦。
Yan shuang lie ri jie jing-guo, ci-di chun feng dao cao-lu
Severe frost burning sun all experience, sequence spring wind arrive thatched-cottage
‘(We) have experienced all kinds of hardships. Good news will come to our home after
that.’
(From Rulin waishi, 9 儒林外史・第九回)

New senses and new words/set phrases: space→time/sequence→human
life/situation→mental status→emotion:

Having discussed guo’s experiential sense, let’s turn to the new senses of guo, the new
senses of the constructions formed with guo, and the new words/set phrases built with guo found
in the text from the Qing dynasty (1644-1912). The discussion is organized following the order
of space→time/sequence→human life/situation→mental status→emotion.

Space:

The data from the Qing dynasty shows that guo is used to create locative expressions. For
example,

(2.113) 那对过河滩塌了几尺
Na dui-guo he -tan ta -le ji chi
That face-GUO river-bank collapse-LE several feet
‘Several feet of the river bank on the other side collapsed.’
(From Rulin waishi, 7 儒林外史・第七回)

The word dui-guo 对过 is a locative expression meaning ‘on the other side.’ Dui means ‘to face’
indicating the direction, and guo denotes the path. Langacker (1987) points out that the notion of
‘path’ can be construed in two different ways as diagrammed in Figure 2.35.
In Figure 2.35(a), the entire path of the TR traversing the LM is profiled. In contrast, in Figure 2.35(b), only the endpoint of an imaginary path is profiled although the entire path is involved. According to Langacker, Figure 2.35(a) expresses a path in an actual physical motion event, and Figure 2.35(b) depicts a path in abstract or fictive motion in which the conceptualizer mentally traces along the path to locate the TR\(^{44}\). When the conceptualizer faces certain direction and mentally traces along the path to locate the TR, e.g., ‘the river bank’ in sentence (2.113), the locative expression *dui-guo* ‘on the other side’ came into being.

**Time/Sequence:**

As discussed previously, *guo* can convey the sense of ‘after’ in various forms, such as when *guo* is followed by a time duration, it can mean ‘after certain time period,’ and when *guo* is used as a verbal complement, it can indicate ‘after the completion of the event,’ and *guo* can appear in a word/set phrase *guo-hou* 过后 denoting the sense of ‘after.’ Another new set phrase

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\(^{44}\) Langacker differentiates between physical motion and abstract motion. According to Langacker (2002), in physical motion, the mover is construed objectively and is differentiated from the conceptualizer (i.e., the speaker and/or hearer), whereas in abstract motion, the mover is construed subjectively and “is none other than the conceptualizer, in his role as the agent (rather than the object) of conceptualization” (Langacker, 2002, p. 12).
guo-le 过了 conveying the sense of ‘after’ is found in the text from the Qing dynasty, as illustrated by the following examples.

(2.114) 过了 喜 事, 一个个 都 要 重 责!

Guo-le xi shi, yi-ge-ge dou yao zhong ze

‘After (the) wedding, everyone will (be) heavily punished.’
(From Rulin waishi, 10 儒林外史・第十回)

(2.115) 过了 此一事, 又有事来, 何日才得分身?

Guo-le ci yi shi, you you shi lai, heri cai de fenshen

‘After this thing, there is another thing. When can (we) attend to anything else?’
(From Rulin waishi, 12 儒林外史・第十二回)

In sentences (2.114) and (2.115), guo has the sense of ‘go through a certain process,’ and le marks the end of the process. Thus, guo-le indicates the completion of the process or event expressed by the verb. Since in both (2.114) and (2.115), the event expressed by guo-le is followed by another event, guo-le extended from expressing completion to sequencing the two events, i.e., when/after one event is completed, another event takes place. Therefore, guo-le has the sense of ‘after.’

Human life/situation:

The two new senses of guo related to people’s lives, ‘live’ and ‘celebrate,’ are all derived from the ‘pass (time)’ sense of guo. Grounding in human experience, when the LM is rizi ‘day,’ the expression guo rizi ‘pass days’ connotes ‘live.’ Similarly, when the LM is a holiday, the expression ‘pass a holiday’ means ‘celebrate a holiday.’ These two new senses of guo are made possible due to embodied meaning (Tyler & Evans, 2003). Here are the examples.
In the future, (you) can live (by) teaching students.
(From Rulin waishi, 7 儒林外史・第七回)

(My) wife and I lit a candle, [...] and celebrated (the) New Year.
(From Rulin waishi, 11 儒林外史・第十一回)

The new words ai-guo 挨过 ‘live (through)’ and guo-huo 过活 ‘make a living, live one’s life’ are also built on the ‘pass (time)’ sense of guo. Still, human experience or embodied meaning play an important role in the meaning extension and building of these new words. When the TR is in a bad condition, such as in a state of illness, dying or incapable of doing something, ai-guo 挨过 ‘live through’ is used. When guo is fused with another character huo 活 ‘living, alive,’ guo-huo 过活 literally ‘pass time alive’ has the sense of ‘make a living’ or ‘live one’s life.’

Previously, I have analyzed how the negative complement bu-guo ‘not-surpass’ is attached to a verb to mean ‘cannot outperform.’ In the text from the Qing dynasty, the negative complement bu-guo ‘not-surpass’ appears to be polysemous with two more senses – denoting ‘extreme degree’ and ‘cannot continue.’ Note that these two new senses are connected. Based on our understanding about the world and events, if the extreme degree is reached, it cannot continue. I analyze these two senses one by one in the following paragraphs.

As shown in example (2.118), the negative complement bu-guo ‘not-surpass’ is attached right after the adjective heqi ‘kind’ to mean the TR’s kindness cannot be surpassed, i.e.,
‘extremely kind.’ (It might be worth mentioning that English also uses this kind of construction, such as unbelievably good, unsurpassed, etc.)

Here is another example in which the complement bu-guo denotes an ‘extreme degree.’

(2.119) He surname Yang, as person loyal and upright ‘His surname is Yang. (He is) extremely loyal (and) upright.’
(From Rulin waishi, 9 儒林外史・第九回)

The second new sense associated with the negative complement bu-guo is ‘cannot continue doing something,’ as shown in sentence (2.120).

(2.120) Whenever (he) got drunk, (he) would make this kind (of) comment. Lou Tongzheng could not continue listening (to it, as Lou was) afraid (that this could) cause trouble.’
(From Rulin waishi, 8 儒林外史・第八回)

In (2.120), the negative complement bu-guo is attached to the verb ting ‘listen.’ In this case, guo has the sense of ‘go through a certain process.’ If a person cannot go through the listening process, it means that s/he cannot continue listening. (Note that this use of the negative complement bu-guo is replaced by another negative complement bu-xia-qu literally ‘not-down-go’ in modern Chinese.)
There are two new words created with *guo* expressing life situations. Based on the ‘transfer’ sense of *guo*, another word for ‘adopt’ *guo-ji* 过继 is formed. From the ‘let pass, let go’ sense of *guo*, the word *shu-guo* 恕过 ‘forgive’ is created.

**Mental status:**

Previously, the construction verb-*guo-lai* ‘verb-cross-come/toward the speaker or deictic center’ is only used to describe physical motion events. It is found to express mental status, i.e., the sense of ‘go back to a normal or conscious state,’ in the text from the Qing dynasty. For instance,

(2.121) 往后一交跌倒，牙关咬紧，不醒人事。
Wang hou yi jiao diedao, yaguan yao jin, bu xing ren shi
Toward back one slip fall-down, teeth bite tight, not wake human thing

老太太慌了，慌将几口开水灌了过来。
Lao taitai huang le, huang jiang ji -kou kai shui guan-le –*guo* -lai
Old woman nervous LE, hurry use several-CL boiled water pour-LE-cross-come

‘(He) stepped back and fell down in a dead faint. His mother hastily poured some boiled water between his lips, whereupon he recovered consciousness.’
(From *Rulin waishi*, 3 儒林外史・第三回)
(The English translation is adapted from the Chinese Text Project website.)

In example (2.121), the verbal complement *guo* along with the deictic marker *lai* ‘toward the deictic center’ is attached after the verb *guan* ‘pour’ to indicate the result of the ‘pouring boiled water’ action – the person reversed from an unconscious, fainted state to his normal, conscious state. (In the text from the Qing dynasty, no token of the verbal complement *guo-qu* ‘cross-away from the deictic center’ is found to denote reversibility, but it is used in modern Chinese to convey that the TR reverses from a normal, active state to an inactive, negative state.) Figure 2.36 below diagrams the reversibility sense of complements *guo-lai* and *guo-qu.*
The white area of the sphere on top represents the normal/positive, active state of a TR. The bottom area of the sphere is the inactive, negative state of the TR. The complement *guo-qu* is used to describe the situation when the sphere/TR rotates in a way that the normal/positive state moves down, away from the deictic center (DC) or conceptualizer. That is, the negative state turns up and become active. When the sphere continues to rotate, the complement *guo-lai* is used to describe the situation when the normal, positive state moves up towards the DC, and regains its active state. This is evidenced by the fact that verb-*guo-lai* can co-occur with an adverb *又 ‘again’* even if verb-*guo-lai* is used to describe an event for the first time.

Here is another example of verb-*guo-lai* denoting reversibility.

(2.122) 众邻居一齐上前，替他抹胸口，捶背心，[...],
Zhong lingju yiqi shang qian, ti ta mo xiongkou, chui beixin, [...]
Many neighbor together go-up front, for him rub chest, beat back, [...]

渐渐喘息过来，眼睛明亮，不疯了。
Jianjian chuanxi-*guo-lai*, yanjing mingliang, bu feng le
gradually breath -cross-come, eye bright, not crazy 

‘The neighbors pressed round to rub his chest and massage his back, [...], until he could breath again. His eyes were clear and his madness had passed.’ (From *Rulin waishi*, 3 儒林外史・第三回) (The English translation is adapted from the Chinese Text Project website.)
Emotion:

An important direction of evolution of guo’s semantics is that guo is used to form new words or fixed expressions that express emotions. For example, in the expressions bu-guo-yi 不过意 ‘not-pass-feeling’ and guo-yi-bu-qu 过意不去 ‘pass-feeling-not-go,’ the LM is a feeling or emotion. If the TR is entangled in certain feelings or emotions, s/he may ‘feel sorry’ or ‘feel bad,’ which is the meaning conveyed by the two expressions, bu-guo-yi and guo-yi-bu-qu. Similarly, the word nan-guo 难过 ‘hard pass’ also conveys ‘feel sorry’ or ‘feel sad.’ In summary, the data from the Qing dynasty (1644-1912) shows that the semantics of guo, in conjunction with the words and constructions formed with guo, has expanded mainly in the domain of human life, including mental status and emotions. Certain constructions formed with guo have developed more meanings, and thus, become polysemous, and more words and set phrases are built with guo. Figure 2.37 (see page 168) illustrates how the new senses found in the text from the Qing dynasty are systematically extended from the previously established senses.

The Corpus of Center for Chinese Linguistics of Peking University (Modern Chinese Section)

I examined the first 300 tokens of guo and their contexts extracted from the Modern Chinese Corpus of the CCL. Six uses of guo and twelve words formed with guo are found. All the six uses are previously established, but nine words created with guo are new (as indicated by the shaded rows in Table 2.15).
Figure 2.37 GUO’s semantic network 14
(Rulin waishi 儒林外史 [The Scholars], Qing dynasty [1644-1912])
<table>
<thead>
<tr>
<th>Sense</th>
<th>Occurrence</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘go beyond, exceed, surpass’</td>
<td>9</td>
<td>3.0%</td>
</tr>
<tr>
<td>chao-guo 超过 v. ‘to surpass, exceed’</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>guo-cuo 过错 n. ‘fault, mistake’</td>
<td>44</td>
<td>14.7%</td>
</tr>
<tr>
<td>zui-guo 罪过 n. ‘fault, mistake’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>‘too, excessively’</td>
<td>15</td>
<td>5.0%</td>
</tr>
<tr>
<td>guo-yu 过于 adv. ‘too, excessively’</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>bu-guo 不过 adv. ‘only, just’</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>jing-guo 经过 v. ‘to go through certain situation/process’</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>jing-guo 经过 prep. ‘through, via’</td>
<td>7</td>
<td>2.3%</td>
</tr>
<tr>
<td>jing-guo 经过 n. ‘course, process’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>guo-cheng 过程 n. ‘course, process’</td>
<td>80</td>
<td>26.7%</td>
</tr>
<tr>
<td>guo-qu 过去 v. ‘(time) pass’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>guo-qu 过去 ‘(in the) past’</td>
<td>13</td>
<td>4.3%</td>
</tr>
<tr>
<td>guo-shi 过时 adj. ‘old-fashioned’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>v.-guo-time</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>v.-guo-lai: verbal complement indicating ‘go back to normal or conscious state’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>v.-guo: verbal suffix indicating ‘indefinite past’ or ‘experientiality’ (10 out of the 18 tokens)</td>
<td>18</td>
<td>6.0%</td>
</tr>
<tr>
<td>tong-guo 通过 v. ‘to pass (an exam or check)’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>tong-guo 通过 v. ‘to pass/adopt (a law or regulation)’</td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td>tong-guo 通过 prep. ‘through, via’</td>
<td>73</td>
<td>24.3%</td>
</tr>
<tr>
<td>guo-guan 过关 v. ‘to pass (a certain examination)’</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>guo-du 过渡 v. ‘to carry out the transition‘, adj. ‘transitional, interim’</td>
<td>5</td>
<td>1.7%</td>
</tr>
<tr>
<td>guo-lü 过滤 v. ‘to filter’</td>
<td>1</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

As shown in Table 2.15, several words created with guo have developed polysemous meanings, e.g., the word jing-guo 经过 can be used as a verb meaning ‘go through
(situation/process), a preposition denoting ‘through/via’ and a noun meaning ‘course/process.’ In
the data from the Modern Chinese Corpus of the CCL, guo appears mostly in disyllabic words,
while maintaining the important suffix uses denoting ‘indefinite past’ and ‘experientiality.’ All
of the disyllabic words are created based on the senses of guo found in previous time periods,
especially on the senses of ‘go beyond, exceed, surpass,’ ‘fault, mistake,’ ‘go through (a certain
process),’ ‘pass (an examination)’ and ‘pass (time).’

Since no new senses of guo are found in the data from the modern Chinese corpus, I will
only analyze the words built with guo that have developed new functions and the newly
identified words created with guo. It means that no new senses will be added to the semantic
network of guo. Roughly, the new words are associated with the following three meaning
clusters of guo.

- ‘go beyond/exceed/surpass’ → ‘fault/mistake’
- ‘cross/pass (through)’ → ‘pass (time)’
- ‘cross/pass (through)’ → ‘go through (process)’ → ‘pass (examination)’

The discussion on the words formed with guo is organized based on these three meaning clusters.

**On the cluster of ‘go beyond/exceed/surpass’ → ‘fault/mistake’:**

Previously, guo alone can convey the sense of ‘go beyond/exceed/surpass.’ However, in
the modern Chinese data, the newly identified disyllabic verb chao-guo is used more often than
the monosyllabic verb guo to convey the sense of ‘go beyond/surpass/exceed.’ The character
chao also has the sense of ‘surpass/exceed.’ This collocation reinforces the similar senses
conveyed by the two verbs (similar to the English expression – *little, tiny [object]*). Moreover,
the sense of ‘fault, mistake’ is expressed solely through disyllabic words/forms guo-cuo and zui-
guo, in which cuo means ‘mistake’ and zui denotes ‘sin, guilt.’ Again, these two words are formed through collocating two characters with similar meanings. These fused collocations reinforce the meanings associated with guo found in earlier texts. The words/forms created through collocation may appear to be redundant. However, Chao points out that “The redundancy in language and other symbolic systems has two useful functions: one is for safety in communication and the other is for the convenience of sender and receiver. […] Thus, there is no language which does not make use of a certain degree of redundancy. According to one way of figuring, English is supposed to have a redundancy of 50%” (Chao, 2012 [1961], p. 635).

Although the word guo-yu denoting ‘too/excessively’ has been found in earlier texts, it is worth mentioning that this disyllabic word has replaced the monosyllabic word guo in expressing the adverb sense in the modern Chinese data. Moreover, the data suggests that guo in the sense of ‘go beyond/surpass/exceed’ tends to fuse with monosyllabic objects to form verb-object compounds, such as guo-ren ‘surpass-(the ordinary) person,’ guo-liang ‘surpass-(the normal) amount,’ guo-du ‘surpass-(the normal) degree’ and guo-fen ‘surpass-(one’s) division’/‘surpass-(the normal) degree.’

On the cluster of ‘cross/pass (through)’ → ‘pass (time)’:

Previously, guo is found to be used as a verb meaning ‘pass (time)’ and as a temporal expression meaning ‘in the past’ or ‘past.’ In the modern Chinese data, these senses are conveyed by a disyllabic word/form guo-qu. Guo mean ‘pass (time)’ and qu means ‘go’ or ‘away from the speaker or deictic center.’ The ‘passing time’ that is away from the speaker or deictic center is a time ‘in the past’ or ‘past.’ Moreover, the modern Chinese data suggests that when guo-qu is used as a verb, it denotes ‘(time) pass,’ that is, the moving TR is time. (Note that,
previously, time is conceptualized as the LM, and the moving TR is implied to be the conceptualizer. This may be related to the “moving time” and “moving ego” phenomena in language. However, due to the scope of this dissertation, no in-depth analysis in this direction will be offered here.) Another new word found in the modern Chinese data is an adjective *guo-shi* meaning ‘old-fashioned.’ The character *shi* means ‘time.’ Thus, *guo-shi* literally means ‘pass (the) time.’ If the TR past the time, it is ‘out of date,’ or ‘old-fashioned.’

**On the cluster of cross/pass (through)’ → ‘go through (process)’ → ‘pass (examination):**

As discussed previously, the disyllabic verb *jing-guo* has evolved from ‘pass through (place)’ to ‘go through (process)’ and ‘experience through.’ In modern Chinese, it is further used as a preposition meaning ‘through, via’ and a noun meaning ‘course, process.’ Here are the examples from the Modern Chinese Corpus of the CCL.

(2.123) 经过 上面 简要 的 分析，我们 可以

**Jing-guo** shangmian jianyao de fenxi, women keyi

*Through* above brief **DE** analysis, we can

dui shenme shi jiaoyu jinxing kexue de shuoming le
to what is education carry-out scientific **DE** explanation **LE**

‘*Through* (the) brief analysis above, we can have (a) scientific explanation on what education is.’

(2.124) 直接 从事 生产 的 劳动者

**Zhijie congshi shengchan de laodongzhe**

Direct engage-in produce **DE** laborer

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45 *De* 的 is a possessive or modification particle.
(2.125) 保存和恢复历史原状，
Conserve and restore history original-state

说明事件发生经过或人物活动情况
Explain event happen or figure activity situation

‘Conserve and restore (its) original state (in) history, (and) explain (the) course (of the) event or (the) situation (of) people’s activities’

In sentences (2.123) and (2.124), *jing-guo* functions as a preposition meaning ‘through, via.’ It can also be understood as ‘going through the process of analyzing’ and ‘going through the process of training’ respectively in sentences (2.123) and (2.124). In other words, the prepositional function of *jing-guo* is derived from its verb use. As Langacker points out, the difference between a verb and a preposition “does not lie in the conceptual content of the expressions, but rather in how this content is accessed” (Langacker, 2002, p. 152). Based on Langacker (2002), for the same scene (i.e. the conceptual content), it can be accessed or construed differently. When the conceptualizer employs “sequential scanning” viewing the situation state by state, the verb sense arises. The corresponding preposition sense represents “summary scanning for the same series of states” (Langacker, 2002, p. 80), which provides an atemporal relation. Moreover, we have the cognitive ability to construe the same situation “as an abstract region” (Langacker, 2002, p. 98), therefore yields the noun sense. In sentence (2.125), *jing-guo* is a noun meaning ‘course, process,’ which is derived from the verb sense of ‘go through (certain process).’
Although *jing-guo* can be used as a noun indicating ‘course, process,’ another word created with *guo, guo-cheng,* is the dominant word for ‘course, process’ with 80 tokens or 26.73% of the total tokens of *guo* examined. (Note that *guo-cheng* is solely used as a noun.) *Guo* means ‘go through (a certain process)’ and *cheng* has the meaning of ‘journey’ or ‘procedure.’ Thus, *guo-cheng* means ‘process, course.’ For instance,

(2.126) 这种系统性表现两方面：
Zhe zhong xitongxi biaoxian zai liang fangmian:
This kind systematicity display in two aspect:

一 是传播过程的系统性。
yi shi chuanbo guo-cheng de xitongxing
one is disseminate process of systematicity

‘This kind (of) systematicity shows in two areas: one is (the) systematicity in (the) process of dissemination.’

(2.127) 各地在实施义务教育的过程中，
Ge di zai shishi yiwu jiaoyu de guo-cheng zhong,
Each place in carry-out compulsory education of process in

取得丰富经验。
Qude-le fengfu de jingyan
obtain-LE plenty of experience

‘Every place (has) obtained plenty of experience in (the) process of carrying out compulsory education.’

Another verb *tong-guo* found in earlier texts has also developed new senses and functions. Previously, *tong-guo* is found to have the sense of ‘go through.’ In the modern Chinese corpus, it is used to mean ‘pass (an examination)’ and ‘pass/adopt (a certain law or regulation).’ These two senses are made possible due to our embodied experience (i.e., the embodied meaning), and pragmatic strengthening (Tyler & Evans, 2003) plays an important role in promoting the meaning extension from locative LMs to examinations and rules. That is, if we
can successfully go through a LM that is an examination, it means that we can pass the examination. Likewise, if we can go through a LM that is a law or regulation without serious problems, that means the law or regulation is acceptable to us. (Note that a new disyllabic word guo-guan is created for the sense of ‘pass [an examination].’ Guo means ‘go through’ and guan means ‘mountain pass.’ Guan ‘mountain pass’ is a metaphorical use for ‘examination.’) Here are two examples in which tong-guo denotes ‘pass/adopt (a certain law or regulation).’

(2.128) 于是 在 1958 年，美国 通过了《国防教育法》
Yushi zai 1958 nian, Meiguo tong-guo-le “guo-fang jiaoyu fa”
‘Therefore in 1958, America passed “the national defense education law”

(2.129) 英国 在 1988 年 7 月 通过一 项 教育 改革 法
Yingguo zai 1988 nian 7 yue tong-guo yi-xiang jiaoyu gaige fa
‘England passed an education reform law in July, 1988’

As shown in sentences (2.128) and (2.129), when the LM is a law or regulation, tong-guo has the sense of ‘adopt.’ That is, the law or regulation passed the check of certain legislature.

Moreover, similar to jing-guo, tong-guo has also extended from a verb to a preposition meaning ‘through/via,’ as both jing-guo and tong-guo can convey ‘go through.’ The preposition use of tong-guo is represented in examples (2.130) and (2.131).

(2.130) 学校 是 通过 培养 人 来 为 社会 服务 的。
Xuexiao shi tong-guo peiyang ren lai wei shehui fuwu de.
‘Schools serve the society through cultivating people.’

(2.131) 他 认为 人 总是 首先 通过 观察 事物 本身、
Ta renwei ren zongshi shouxian tong-guo guancha shiwu benshen,
‘He think person always first through observe thing itself

46 “Shi…de” construction is used to add emphasis to the predicate.
He thinks (that) people always obtain knowledge first through observing things (and) from (the) origins (of) things.’

Other disyllabic words created with guo in the sense of ‘go through (process)’ found in the modern Chinese data include guo-lü 过滤 ‘to filter’ and guo-du 过渡 ‘to carry out transition’ or ‘transitional.’ In these two words, guo has the general sense of ‘go through (certain process).’ However, the other component, lü or du, has specific meaning. Lü means ‘to filter’ and du means ‘to ferry, cross.’ When guo in the general sense ‘go through (certain process)’ collocates with another verb that specifically describes the nature of the process, the collocated form actually means ‘it is a process – to filter’ or ‘it is a process – to ferry.’ When the two verbs are fused as one word, the sense ‘to filter’ or ‘to ferry’ with more information or more specific content is preserved.

In summary, in the data from the Modern Chinese Corpus of the CCL, guo appears mostly in disyllabic words/forms. All these disyllabic words/forms are built on the earlier established senses of guo. No new senses of guo are found in the modern Chinese data. Among the disyllabic words, there are old ones with extended senses and/or functions, and there are newly identified ones. Many of the disyllabic words are formed through collocation of characters that have similar meaning or are compatible in meaning and/or function. The extended functions, such as preposition and noun uses, do not represent new conceptual content, instead, they demonstrate our cognitive abilities to access or construe the same situation from multiple perspectives.
2.3 The principled polysemy network of GUO

In this corpus-based study, I have examined texts from the early Western Zhou (1046-771 BCE) to modern times, including eleven books and a corpus -- Center for Chinese Linguistics of Peking University (Modern Chinese Section). 1877 tokens of guo are examined and over 40 senses or functions of guo are identified. I have analyzed the proto-scene of guo and how the distinct senses have extended systematically from the proto-scene through a history of 3000 years. Following Tyler and Evans’s principled polysemy methodology (2003), the systematicity of guo’s semantic development is illustrated in guo’s semantic network period by period, which has led to a unified account of guo as shown in guo’s semantic network 14 (Figure 2.37), repeated here (see page 178). I discovered a startlingly consistent pattern of extension, with each new sense deriving from a sense already found in the established network.

The semantic network of guo shows how the distinct senses are extended from the proto-scene. It is organized clockwise to roughly represent the diachronic evolution of the senses of guo. For example, based on the proto-scene or primary sense of guo ‘cross or pass (through),’ the first extended sense found in the data is ‘see or visit (a person),’ and the next identified extended sense is ‘pass or depart (from a place),’ and so on. The senses at the end of the meaning clusters are also established (or found) in later periods. As shown in guo’s semantic network 14, there are four major meaning clusters that are formed based on four important distinct senses of guo -- ‘go beyond/surpass/exceed,’ verb complement indicating PATH, ‘pass (time)’ and ‘go through (situation/process),’ as indicated by the arrows with a thick line. All these four distinct senses extended from the proto-scene or primary sense of guo, a physical motion event -- the TR moves along a certain path in the manner of walking from one side of the LM to the other side.
The discussions on *guo* in the literature mainly focused on the meaning cluster of ‘go through (situation/process)’ → complement indicating ‘completion’ or ‘after’ → suffix
indicating ‘indefinite past’ or ‘experientiality.’ However, as we can see in Figure 2.37, except for the proto-scene or the primary sense of *guo*, none of any other of the extended senses, regardless how frequently they are used in modern Chinese, can function as the overarching concept of *guo* to unify or explain all the senses associated with *guo*, although they are all related. Heine et al. (1991) propose four source propositions that have been exploited to describe less concrete phenomena. The proto-scene of *guo*, the TR moves along a certain path (in the manner of walking) from one side of the LM to the other side, is one of the four source propositions. The proto-scene of *guo* represents a basic human experience that gives rise to over forty senses ranging from concrete motion events in altered configurations to temporal expressions and life situations. The meaning extension is systematic and motivated based on the embodied experience, i.e., the human experience of the world mediated by the kind of the bodies we have and the ways how human perceptual and conceptual systems work (Tyler & Evans, 2003, p. 23).

Linguists from different approaches, including the mainstream generative approach, all agree that “it is essential to consider language as a cognitive (mental) system” (Goldberg, 2003, p. 219). Human cognition is constantly changing and evolving. As Langacker (2002) points out, linguistic semantics is not an autonomous enterprise, but represents developmental cognition. Across time, I expect the semantic network of *guo* to continue to evolve. That is, the current semantic network of *guo* will most likely be modified by adding new senses or even new clusters of senses. As Tyler and Evans (2003) note, this should not be seen as a flaw of the semantic network. The semantic network is not static, but reflects the dynamics of the language. No matter how the semantic network evolves, it shows the systematicity and motivations among the senses.
Note that although *guo* can convey senses such as ‘indefiniteness,’ ‘repeatability,’ ‘discontinuity’ and ‘reversibility,’\(^\text{47}\) these senses might not be distinct senses, because they are all derived from the senses of the ‘indefinite past’ and ‘experientiality’ of *guo* and are all intertwined with each other. Since these senses could not stand alone as distinct senses of *guo*, they are not included in the semantic network.

Although all the senses are directly or indirectly associated with the proto-scene and the same Chinese character, 過 for the traditional form and 过 for the simplified form, they may be pronounced in differently ways. The Chinese character 過/过 can be pronounced in three different ways *guò* with fourth tone as indicted by the falling mark on top, *guo* with neutral tone as indicted without any tone mark on top, and *guō* with first tone as indicted by the horizontal mark on top. Except for some individual variation, for most Mandarin Chinese speakers, in general, *guo* as a suffix is pronounced with a neutral tone, *guo* as a complement can be pronounced with fourth tone or neutral tone, and *guo* as a verb or in all other usages in the semantic network is pronounced with fourth tone. *Guo* with first tone is only used for the name of an ancient state (located in modern Shandong Province, China) and as the surname for the later generations of the Guo State. The phonological reduction of *guo* from a lexical word with a fourth tone to a complement with an optional fourth tone and to a suffix without a tone (i.e., neutral tone) also reflects the grammaticalization of *guo* (Bybee et al., 1991, 1994).

\(^{47}\) The ‘reversibility’ derived from the verbal suffix *guo* is different from the ‘reversibility’ of the verbal complement *guo-lai* or *guo-qu*. For example,

*Wo shuai-shang-guo tui*

我 摔 伤 过 腿

*I fall hurt 过 腿*

‘I have the experience of hurting my legs from falling down.’

In this example, *guo* is the suffix indicating experientiality, but it also denotes that ‘my legs’ have reversed to the normal, healthy condition.
Chapter 3 On LE

In the previous chapter, I have shown how the principled polysemy methodology (Tyler & Evans, 2003) can be used to analyze *guo* and provide a systematic and motivated explanation of the various senses of *guo*. In this chapter, I analyze *le*, which is closely related to *guo* and is also highly polysemous. It is believed that there are two perfective markers in Chinese – *guo* and *le* (e.g., Li & Thompson, 1987; Smith, 1997; Pan & Lee, 2003). Linguistic researchers have struggled to clearly define the two markers and L2 Chinese learners struggle to learn how to appropriately use them. As we saw in the last chapter, *guo* has many more uses than just aspect marking. Similarly, besides indicating the perfective aspect, *le* also functions to denote a wide range of senses, such as a temporal relation (i.e., ‘after’), a conditional relation (i.e., ‘if’), a ‘peak event,’ a ‘new situation’/‘now,’ an ‘excessive degree,’ a ‘selection,’ a ‘past event,’ ‘progression in a story,’ a ‘consequent clause to indicate situation,’ ‘obviousness,’ a ‘command in response to a new situation,’ ‘Currently Relevant State’ (CRS) (Li & Thompson, 1981), ‘correcting a wrong assumption,’ ‘reporting progress so far,’ ‘determining what will happen next,’ ‘being the speaker’s total contribution to the conversation,’ ‘termination,’ and ‘marking boundary or opposition between having the event or event complex and not having the event or event complex’ (Chao, 1968; Li & Thompson, 1981; Huang & Davis, 1989; Smith, 1997; Chu, 1998; van den Berg & Wu, 2006). Note that *le* seems to overlap with *guo* in conveying the perfective aspect, the sense of ‘after,’ and the sense of an ‘excessive degree.’ Oftentimes, it is hard for learners of the Chinese language to distinguish the proper use of *guo* from that of *le* as no difference can be readily discerned from the English translations. For instance,
Examples (3.1a) and (3.1b) are a minimal pair. The only difference is that (3.1b) has *le*, whereas (3.1a) does not. Without *le*, (3.1a) expresses ‘experientiality,’ i.e., ‘he has the experience of going to Beijing.’ In contrast, (3.1b), with the particle *le*, focuses on the closure of the event of going to Beijing, that is, ‘he is done with going to Beijing (and does not need to do it again).’

Examples (3.2a) and (3.2b) seem to suggest that *guo* and the first *le* are interchangeable. In fact, even Chinese textbooks state that when *guo* signifies ‘completion,’ it is interchangeable with *le* (see *Integrated Chinese, Level 2 Part 2*, by Liu et al., 2010, pp. 50-51). However, the first *le* in (3.2b) does not necessarily suggest ‘completion;’ instead, it can denote ‘termination’ (Smith, 1997) as shown by the fact that (3.2b) can be followed by another clause *keshi mei chi wan* ‘but didn’t finish eating all of it.’ Examples (3.3a) and (3.3b) both express a bounded situation. However, (3.3b), with *le*, conveys that the event, ‘pass several days,’ is over in relation to the speech time or ‘now,’ i.e. a past event, whereas (3.3a) does not have this sense.

As shown above, many senses or functions associated with *le* have been found in the literature. However, none of the previous studies have paid attention to the systematicity among
the senses or have tried to account for the motivation underlying the semantic extension of *le*, which results in a list of discrete, confusing abstract senses of *le*. Using the methodology of principled polysemy (Tyler & Evans, 2003) and diachronic corpus data, this chapter argues for a proto-scene or primary sense for *le* – ‘a new born baby without arms,’ which is the earliest attested meaning of *le*. By emphasizing the proto-scene and the cognitive processes that give rise to distinct senses or promote meaning extension, such as embodied meaning, invited inferencing, experiential correlation, pragmatic strengthening and generalization (Tyler & Evans, 2003; Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher, 2002, 2010), this chapter demonstrates how the various senses or functions are systematically extended from the proto-scene, and therefore, provides a unified, motivated and accessible account of *le*.

This chapter is organized as follows. In section 1, I examine four important works in the literature of *le* – Chao (1968), Li and Thompson (1981), Huang and Davis (1989) and Smith (1997), and identify the gaps. In section 2, I present my diachronic corpus-based study with the aim of filling the gaps and establishing a motivated, systematic account of *le* using Tyler and Evans’s (2003) methodology of principled polysemy. In the diachronic corpus study, I examined 1,026 tokens of *liaot*/*le* from eleven books and the Corpus of the Center for Chinese Linguistics of Peking University (Modern Chinese Section) 北京大学中国语言研究中心语料库 (现代汉语)49, covering a history of 3000 years from the early Western Zhou (1046-771 BCE) to modern times. Over thirty distinct senses or functions of *liaot*/*le* are identified and analyzed from a

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48 *Liao* is the earliest attested pronunciation of 了 character.
49 The Corpus of the Center for Chinese Linguistics of Peking University 北京大学中国语言研究中心语料库 is available at http://ccl.pku.edu.cn:8080/ccl_corpus/ [last accessed on January 23, 2017]. This corpus is also referred to as 北京大学 CCL 语料库.
cognitive, usage-based approach (Langacker, 1987). Finally, in Section 3, the principled polysemy network of liaolıe is established, which shows the synchronic relationship among the distinct senses of liaolıe and the diachronic grammaticalization paths of liaolıe from its proto-scene – a newborn baby without arms – to its various meanings or functions. The concept of inter-lexical polysemy (Evans, 2015) of guo and le will be discussed in the next chapter.

3.1 Previous studies of LE

3.1.1 Yue Ren Chao (1968)

Chao’s analysis of le in his book, A grammar of spoken Chinese (1968), sets up the foundation for the subsequent, modern studies of le. Chao does not have a section devoted to le in his 1968 book. Rather, his discussions on le are scattered throughout his analysis of other linguistic elements of the Chinese language. Chao observed that the senses of le vary with sentential location – after an adjectival predicate, after an adjectival verb complement, after a stative verb, after a verb of action, after the verb in dependent clause, right after the verb in a past action with quantified object, and so on. He distinguishes between the particle le and suffix -le.

To him, the particle le and the suffix -le are homophones50 (Chao, 1968, pp. 246-247). He observes that the particle le conveys several senses including ‘a new situation’/‘now,’ ‘excessive degree,’ ‘selection,’ ‘past event,’ ‘progress in a story,’ ‘completed action as of the present,’ ‘then,’ ‘obviousness’ and ‘command in response to a new situation.’ In contrast, the suffix -le, with the meaning of ‘completed action,’ marks the perfective aspect and can indicate a temporal

50 According to Chao, the particle le is derived from the verb lai 来 ‘come,’ whereas the suffix -le is “a weakened form” of the verb liao 了 ‘finish’ (Chao, 1968, p. 246). To support his claim that the particle le is derived from the verb lai 来 ‘come,’ Chao provides two pieces of evidence – “(1) in the Ningpo dialect the verb ‘comes’ and the particle in question are both pronounced [le]. (2) In certain old texts 来 occurs where a modern 了 would be expected, […]” (Chao, 1968, p. 246).
relation (i.e., ‘after’) or a conditional relation (i.e., ‘if’). These are important findings of le’s semantics. However, Chao presents an unorganized list of interpretations or uses for le, with minimal analysis justifying his labels for the various meanings/uses of le. (Note that, in Chao’s analysis, several senses of le seem to overlap with guo, such as ‘excessive degree,’ ‘past event,’ ‘completed action,’ and ‘after.’) I present Chao’s analyses of the particle le and the suffix -le in the following sections, respectively.

**The particle le**

Chao observes that when the particle le appears immediately after an adjectival predicate or an adjectival verb complement, it provides several senses including ‘a new situation’/‘now,’ ‘excessive degree,’ and ‘selection.’ Here are Chao’s (1968) examples.

(3.4) a. 这 瓜 甜。
   Zhei gua tian
   ‘This melon is sweet.’

b. 这 瓜 甜 了。
   Zhei gua tian le
   ‘This melon is sweet now (previously it wasn’t ripe).’

Chao uses the minimal pair of (3.4a) and (3.4b) to show that the adjectival predicate in sentence (3.4a) without le is contrastive, i.e., ‘this melon is sweet (not sour or bitter),’ whereas, the adjectival predicate in (3.4b) with the particle le implies a change from a previous situation, i.e., ‘this melon becomes sweet from not being sweet previously.’ Chao claims that the particle le after an adjectival predicate or an adjectival verb complement generally conveys the sense of ‘become’ or ‘begin to be’ (i.e., ‘a new situation’).
Chao also observes that the particle *le* is often used to express ‘an excessive degree’ (Chao, 1968, p. 89), as shown in examples (3.5)-(3.7).

(3.5) 这屋子黑了（漆的太黑了）。
This room black le (paint DE too black le)
‘This room is (too) dark (painted too dark).’

(3.6) 鞋（买、做）小了。
Shoe (buy or make) small le
‘These shoes are (have been bought or made) (too) small.’

(3.7) 这话差远了。
This word differ far le
‘This remark misses by (too) far.’

Chao points out that “the force of the particle *le* is to imply that the quality in question was increasing and now it is excessive” (Chao, 1968, p. 89). Chao defines the ‘excessive degree’ conveyed by the particle *le* as “excess over some expected norm” (p. 692). He notes that when the particle *le* expresses ‘excessive degree,’ the Chinese word *tai* ‘too, excessively’ is not necessary. Here are more examples from Chao (1968).

(3.8) 这东西贵了。
This thing expensive le
‘This thing is too expensive.’

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51 Note that Chao provides contexts in parentheses for sentences (3.5) and (3.6). Without context, these two sentences have two readings – ‘this room is dark now’ or ‘this room is too dark;’ ‘these shoes are small now’ or ‘these shoes are too small’ respectively.

52 Chao does not provide context for sentence (3.8). To me, without any context, sentence (3.8) has two readings -- ‘this thing is expensive now (it was not expensive previously)’ or ‘this thing is too expensive.’ However, if the word *tai* 太 (‘too, excessively’) is added, sentence (3.8) will only have the ‘excessive degree’ reading.
(3.9) 汤 咸了。
   Tang xian le
   Soup salty le
   ‘The soup is too salty.’

(3.10) 袖子长了。
   Xiuzi chang le
   Sleeves long le
   ‘The sleeves are too long.’

According to Chao (1968), the le after an adjectival verb complement can be the particle le or the suffix -le. Chao explicitly notes, “Homophonous expressions can occur in V-R constructions, since a resultative complement will normally require le in any case” (1968, p. 692). For instance,

(3.11) 裁缝把袖子剪短了。
   Caifeng ba xiuzi jian -duan le
   Tailor BA sleeves cut -short le
   ‘The tailor has cut the sleeves too short’ or ‘The tailor has shortened the sleeves (as desired).’

In (3.11), the verb is jian ‘cut’ and the adjective duan ‘short’ is a resultative complement. Sentence (3.11) has two readings as indicated by the two English translations. According to Chao, the ‘excessive degree’ reading is from the particle le.

Chao (1968) further proposes that the particle le following the superlative degree of an adjective implies ‘selection’ among possible candidates (p. 693). For instance,

(3.12) 这儿的医生当中牛医生最出名了。
   Zher de yi.sheng dangzhong Niu yi.sheng zui chuming le
   Here DE doctor among Niu doctor most famous le
   ‘Among the physicians here Dr. Niu is the most famous.’

(3.13) 他 自己做错了一又怪人最讨厌了。
   Ta ziji zuo -cuo le you guai ren zui taoyan le
   He self do -wrong le again blame person most annoying le
   ‘It’s most annoying when he blames others for his own mistakes.’
According to Chao, the particle *le* in sentences (3.12) and (3.13) denotes ‘selection.’ In the case of (3.12), ‘Dr. Niu’ was selected as the most reputable among all famous doctors there. In the case of (3.13), ‘blaming others for his own mistakes’ was selected among his other annoying traits.

I have illustrated Chao’s (1968) analysis of the particle *le* after a predicative adjective and a complementary adjective. Let us turn to his analysis of the particle *le* after verbs. Chao (1968) proposes that the verb *you* ‘has/have, there is/are’ with the particle *le* can also express a change of situation. *You le* means ‘there is now (where there was not before),’ namely ‘appearance.’ *Mei you le* means ‘there is no more (where there was before),’ namely ‘disappearance’ (Chao, 1968, p. 729). Although Chao explicitly points out that the *le* after the verb *you* ‘has/have, there is/are’ can be a particle, he does not talk about whether it can be a suffix.

Chao elucidates that “Chinese adjectives are primarily verbs” (Chao, 1968, p. 698). He further proposes that similar to adjectives, Chinese status verbs often take the particle *le* because status verbs are usually associated with change from a previous status or condition into a new one. Here are Chao’s examples.

(3.14) 管子塞住了。
  Guanzi sai -zhu le
  ‘The pipe is stopped up.’

(3.15) 现在通了。
  Xianzai tong le
  ‘It goes through now, -- is open now.’

(3.16) 饭糊了。
  Fan hu le
  ‘The rice is getting (has got) burned.’
To me, the verb in example (3.14), *sai-zhu* ‘plug-up, stop-up,’ is a V-R construction, which can describe an action or status. Moreover, although Chao (1968) thinks that *hu* ‘get-burned, be-burned’ in (3.16) is a status verb, it functions more like an adjective to me. Again, similar to his analysis of the verb *you* ‘has/have, there is/are,’ Chao does not mention whether the *le* after status verbs can be a suffix.

Chao (1968) claims that with verbs of action, the particle *le* is used for past events. For instance,

(3.17) 今天 天 晴，昨天 下雨 了。
\begin{verbatim}
Jin.tian  tian  qing,  zuo.tian  xia -yu  le
\end{verbatim}
‘Today the day[/atmosphere] is fine; yesterday it rained.’

Based on Chao, the predicate of the second clause in (3.17) is a V-O construction with a verb of action, and the particle *le* indicates a past event. This use of the particle *le* is called an ‘isolated event in the past’ by Chao. Here arises a salient question – How do we know that the ‘past’ sense comes from the combination of an action verb and the particle *le* given the context where a time word, such as *zuotian* ‘yesterday,’ is already explicitly stated?

For past events, Chao proposes that the particle *le* can also function to denote ‘progress in [a] story’ (Chao, 1968, p.798). Her are Chao’s examples.

(3.18) 后来 天 就 晴 了。
\begin{verbatim}
Houlai  tian  jiu   qing  le
\end{verbatim}
‘And then the weather cleared.’

(3.19) 他 就 说了：“[…]”
\begin{verbatim}
Ta  jiu   shuo  le
\end{verbatim}
‘Then he said: “[…]”’
Again, here surfaces another similar question – How do we know that the sense of indicating ‘progress in a story’ is from the particle *le* given the context where the adverbs, such as *houlai* ‘later’ and *jiu* ‘then,’ are present?

Chao further proposes that the particle *le* is used for a ‘completed action as of the present,’ as illustrated by example (3.20).

(3.20) 我 教 书 教 了 四十年 了。
Wo jiao shu jiao -le sishi nian le
‘I have been teaching for 40 years.’
(From Chao, 1968, p. 799)

According to Chao, in example (3.20), the first *le* is a perfective-aspect suffix, and the second *le* is a sentence particle. The particle *le* indicates a ‘completed action as of the present,’ and thus, the event is often translated into the perfect tense in English. In contrast, the perfective-aspect suffix *-le* corresponds to the preterit in English, as shown by example (3.21).

(3.21) 我 教 了 四十年 的 书。
Wo jiao -le sishi nian de shu
‘I taught for 40 years.’(and am now retired)
(From Chao, 1968, p. 799)

Chao further claims that the particle *le* is used in a ‘consequent clause to indicate situation’ and “is often translatable as ‘then’,” with or without the adverb *jiu* ‘then’ in Chinese (Chao, 1968, p. 799). For example,

(3.22) 你 一 擀 门 铃, 他 就 来 开 门 了。
Ni yi en men ling, ta jiu lai kai men le
‘As soon as you ring the doorbell, he will come and open the door.’
I only demonstrate one example here. But similar to the above questions, in all of Chao’s examples of ‘consequent clause to indicate situation,’ there is the adverb jiu ‘then’. In this context, how do we thus know that the sense of ‘then’ comes from the particle le?

According to Chao, the particle le can, additionally, indicate ‘obviousness’ (Chao, 1968, p. 800). Below are his examples.

(3.23) 这个你当然懂了。
Zhe ge ni dangran dong le
‘This one you of-course understand le
‘This you understand of course!’

(3.24) 再好没有了！
Zai hao mei you le
Again good not have le
‘Nothing can be better than that!’

Still, for sentence (3.23), how do we know that the sense of ‘obviousness’ stems from the particle le when the adverb dangran ‘of course’ is present? Moreover, for the particle le in sentence (3.24), I do not ascertain the reading of ‘obviousness,’ but the meaning of an ‘excessive degree.’

Finally, Chao points out that the particle le is also used in ‘a command in response to a new situation’ (Chao, 1968, p. 798), as illustrated in example (3.25).

(3.25) 吃饭了！
Chi fan le
Eat food le
‘Let’s eat now!’

The suffix -le

Having surveyed Chao’s analysis of the particle le, let us turn to his discussion of the suffix -le. Chao claims that the suffix -le “should be distinguished from a homophonous particle le, probably a weak form of lai ‘comes’, with various meanings such as ‘new situation’,

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‘progress in the story’, and so on’ (Chao, 1968, pp. 246-247). The suffix -le “is a weakened form of the verb 了 liao ‘finish’ and can be suffixed to it like any other verb” (Chao, 1968, p. 246).

For example,

(3.26) 了 了 一 件 事
Liao -le yi -jian shi
Finish -le one -CL thing
‘[H]ave finished a business [matter]’

According to Chao, the suffix -le marks a perfective aspect and “has the class meaning of ‘completed action’” (Chao, 1968, p. 246). Here are Chao’s examples of the perfective aspect suffix -le.

(3.27) 辞 了 行 再 动 身!
Ci -le xing zai dong -shen
Bid-farewell -le posture-in-walking again move -body
‘After having taken leave, (and only then) [to] depart, -- Don’t depart without having taken leave!’

(3.28) 怎么 了 碰 了 杯子 也 不 喝?
Zenme peng -le beizi ye bu he
‘How come, having touched glasses, you don’t drink?’

Chao does not define what he means by ‘class meaning.’ Examples (3.27) and (3.28) show that the perfective aspect suffix -le is attached right after the verb and before the object, and can be used for future and past events. Chao notes that there are other ways of expressing a ‘completed action’ in which the perfective aspect suffix -le is optional. He uses the verb wanncheng 完成 ‘to complete’ and the verbal complement 掉 diao ‘off, away’ as examples, but does not really discuss how wanncheng ‘to complete’ and diao ‘off, away’ function without the perfective aspect suffix -le.
Chao claims that the perfective suffix -le is obligatory for a past action with a quantified object (Chao, 1968, p. 248 & p. 702), but does not explain the rationality. Here is his example.

(3.29) 我 昨儿 碰见 了一 个 老 朋友, 他 请 我 吃 了一 顿 饭。
Wo zuor peng.jian -le yi -ge lao peng.you, ta qing wo chi -le yi -dun fan
Yesterday touch.see -le one -CL old friend, he invite me eat -le one -CL food
‘Yesterday I met an old friend and he invited me to a dinner.’

I disagree with Chao on this. For a past action with a quantified object, although the suffix -le is preferable, it is, notably, not always required. Taking his sentence for example, the first suffix -le in the first clause in sentence (3.29) can be omitted although “yesterday I met an old friend” is a past event with a quantified object.

Chao observes that the perfective suffix -le in a dependent clause can indicate a time relation corresponding to the English ‘after’ (Chao, 1968, p. 120) as shown in sentence (3.30).

(3.30) 我 吃 完 了 你 吃。
Wo chi -wan -le ni chi
‘You eat after I have finished eating.’

Based on this observation, Chao further proposes that the perfective suffix -le can be used to signal condition due to the analogous relationship between condition and time (Chao, 1968, p. 117). For instance,

(3.31) 我 死 了 丧事 从 简。
Wo si -le shang.shi cong -jian
‘When I die, the funeral should be simple.’

(3.32) 我 死 了 你 顶 好 再 嫁。
Wo si -le ni ding hao zai jia
‘If I die, you’d better marry again.’
According to Chao, in the context that the subject is an aged parent, as in (3.31), the perfective verbal suffix *-le* indicates a time relation, whereas in the context that the subject is a young husband in (3.32), the perfective verbal suffix *-le* signals condition.

Chao claims that “resultative complements take the perfective suffix *-le* in normal use” (Chao, 1968, p. 438), except, that is, for negatives, progressives, the indefinite past expressed by *guo* 过, and commands with a reduplicated verb or cognate object (Chao, 1968, pp. 439-440).

Here are Chao’s examples.

(3.33) 你 把 画儿 挂 歪 了。
Ni ba huar gua -wai -le
You BA picture hang -askew -le
‘You have hung the picture crooked.’

(3.34) 再 等 一 个 钟头 就 等 腻 了。
Zai deng yi -ge zhongtou jiu deng -ni -le
Again wait one -CL hour then wait -tired-of -le
‘(If one) waits another hour, (one) will get tired of waiting.’

In sentences (3.33) and (3.34), the adjectives *wai* ‘askew’ and *ni* ‘tired of’ are the resultative complements of the verbs, which take the perfective suffix *-le*. Chao does not explain why the *le* after resultative complements is normally the perfective suffix *-le*, not the particle *le* indicating ‘a new situation.’ Moreover, Chao explicitly states that “commands with V-R complements usually take [the suffix] *-le* just as in statements” (Chao, 1968, p. 439) as shown by sentences (3.35a) and (3.36a). Chao observes that commands with a reduplicated verb or cognate object cannot take the perfective suffix *-le*, as illustrated in example (3.35b) and (3.36b) respectively, unfortunately, he does not offer any further in-depth analysis.

(3.35) a. 洗 干净 了！
Xi -ganjing -le
Wash -clean -le
‘Wash (it) clean!’
b. 洗洗干干净!
Wash.wash -clean
‘Wash (a) wash clean, -- give it a clean washing!’

(3.36) a. 拿稳了!
Hold -stable -le
‘Hold (it) steady!’

b. 拿稳一点儿!
Hold -stable yi.dianr
‘Hold steady a little, --hold it steadier!’

Summary

To sum up, Chao (1968) believes that the particle le and the suffix -le are, essentially, homophones. The particle le is more complex than the suffix -le. The suffix -le, with the meaning of ‘completed action,’ can mark the perfective aspect and indicate a temporal relation (i.e., ‘after’) or a conditional relation (i.e., ‘if’). To Chao, the suffix -le is normally used in a V-R construction (except for several exceptions) and is obligatory for a past action with a quantified object. The particle le, occurring after a predicative or complementary adjective, conveys several senses including ‘a new situation’/’now,’ ‘excessive degree,’ and ‘selection.’ The particle le following a stative verb indicates a change from a previous status or condition into a new one. The particle le after an action verb signals a past event. The particle le is also used to indicate ‘progress in a story,’ ‘completed action as of the present,’ ‘consequent clause to indicate situation,’ ‘obviousness,’ and ‘command in response to a new situation.’

Chao’s (1968) important findings established the foundation for the subsequent studies of le. However, there are several problems in his analysis.
First, if the suffix -le and the particle le are homophones, why are they so closely related, such as the suffix -le indicates ‘completed action’ and the particle le signals ‘completed action as of the present;’ and both the suffix -le and the particle le can convey a past event?

Second, if the suffix -le and the particle le are homophones, how should one properly decide when to use the suffix -le or the particle le after a complementary adjective, i.e., a V-R construction with an adjective as the resultative complement?

Third, for several senses of the particle le, such as ‘progress in a story,’ ‘consequent clause to indicate situation’ and ‘obviousness,’ his examples do not sufficiently demonstrate that these meanings do not actually derive from the context, but rather, from the particle le.

Fourth, most of the meanings of the particle le are discussed as discrete, separate pieces of information. Thus, the systematicity or motivated organization of the semantics of the particle le is largely neglected.

3.1.2 Charles N. Li and Sandra A. Thompson (1981)

Li and Thompson also distinguish between the suffix -le and the particle le. However, they do not address the relationship between the suffix -le and the particle le, e.g., whether they are homophones or not, and how they are related to each other. Li and Thompson define the suffix -le as indicating a perfective aspect (PFV), namely, “an event is being viewed in its entirety or as a whole” (Li and Thompson, 1981, p. 185). This is in line with Comrie’s (1976) definition of the perfective aspect. Li and Thompson focus on exploring perfective events in which the PFV suffix -le can be used. They propose that if an event is bounded by a quantified direct object, a definite or specific direct object, a verb with an inherent endpoint in meaning, or being the first event in a sequence, the event is perfective and can be marked by the perfective
aspect suffix -le. They also list the situations in which the perfective aspect suffix -le cannot be used, including with stative verbs in unbounded events, with ongoing actions, with habitual or repeated events, with potential verb complements, with experiential aspect suffix -guo, and in negative sentences. Li and Thompson analyze the particle le only as the sentence-final particle le. They define the sentence-final particle le as expressing a ‘Currently Relevant State’ (CRS). They work to unify the different senses conveyed by the particle le under the overarching concept of CRS. They propose that the CRS le indicates ‘a changed state,’ ‘correcting a wrong assumption,’ ‘reporting progress so far,’ ‘determining what will happen next,’ or ‘being the speaker’s total contribution to the conversation.’ Li and Thompson have important observations regarding the environments in which the suffix -le appears. However, they mistakenly equate the environments in which the suffix -le tends to appear (e.g., certain types of objects or verbs) with the concept of bounded/perfective events. Moreover, they completely neglect the relationship between the suffix -le and the particle le. In the following sections, I present Li and Thompson’s analyses of the suffix -le and the particle le and point out the holes in their analyses.

The suffix -le

To Li and Thompson, an event is viewed in its entirety if the event is bounded temporally, spatially, or conceptually (Li & Thompson, 1981, p. 185). Li and Thompson work to determine “bounded events” for which the perfective aspect suffix -le can be used. They propose four ways in determining bounded events.

A. By being a quantified event;
B. By being a definite or specific event;
C. By being inherently bounded because of the meaning of the verb;
D. By being the first event in a sequence.

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53 Based on Li and Thompson, if an event is bounded spatially, it is perfective. However, *I am having a class in Intercultural Center at Georgetown University* is an event bounded spatially, but it is not perfective.
According to Li and Thompson, the “quantified event” means “the event signaled by the verb is limited by overt phrases naming the extent to which that event occurred, the amount of time it took, or the number of times it happened” (Li & Thompson, 1981, p. 186). Although Li and Thompson do not overtly state the relationship between the quantified event and the past tense, it seems that the quantified event should be a past event in order to take the perfective aspect suffix \(-le\) as defined by “occurred,” “took,” and “happened” in the definition. Here are Li and Thompson’s examples.

(3.37) 你高了一点。
        Ni gao-le yidian
        You tall-PFV a:little
        ‘You’ve gotten a little taller.’

(3.38) 我在那里住了两个月。
        Wo zai there zhu-le liang-ge yue
        I at there live-PFV two-CL month
        ‘I lived there for two months.’

(3.39) 我把门踢了三脚。
        Wo ba men ti-le san jiao
        I BA door kick-PFV three foot
        ‘I gave the door three kicks.’

According to Li and Thompson, sentences (3.37), (3.38) and (3.39) express quantified events as they are bounded by the extent to which the event occurred (e.g., yidian ‘a little’), the amount of time the event took (e.g., liang-ge yue ‘two months’), and the number of times the event happened (e.g., san jiao ‘three kicks’) respectively. Therefore, the perfective aspect suffix \(-le\) is used.

54 For sentence (3.37), there is another reading – ‘You are a little too tall.’ In this reading, the \(le\) is a particle expressing ‘excessive degree’ based on Chao’s (1968) analysis.
However, it seems to me that being a quantified event alone does not necessarily entail the use of the perfective aspect suffix -le. It is, conversely, just one of the environments in which the perfective aspect suffix -le can be used. Let’s consider three counter examples below.

(3.40) 你 高 一点。
Ni  gao  yidian
You tall  a:little
‘You are a little taller.’

(3.41) 我 在 那 里 住 两 个 月。
Wo  zai  nail  zhu  liang  -ge  yue
I at there live two -CL month
‘I (will/plan to) live there for two months.’

(3.42) 你 把 门 踢 三 脚。
Ni  ba  men  ti  san  jiao
You BA door kick three foot
‘You give the door three kicks.’ (Command)

Li and Thompson claim that the quantified event can be a state if its extent is limited (Li & Thompson, 1981, p. 188), as shown by the sentences below.

(3.43) 这 个 地方 不 错, 就 是 吵 了 一 点
Zhei -ge  defang  bu  cuo,  jiushi  chao -le  yidian
This -CL place not bad, just noisy -PFV a:little
‘This place is not bad, it’s just a little noisy.’

(3.44) 他 年 纪 比 我 大 了 几 十 岁。
Ta  nianji  bi  wo  da  -le  ji  -shi  sui
He age COMP I big -PFV several -ten years
‘He is older than I by a few decades.’

According to Li and Thompson, the phrases yidian ‘a little’ and ji-shi sui ‘a few decades’ set the limits for the states chao ‘is noisy’ and bi wo da ‘older than I’ respectively in (3.43) and (3.44). Therefore, they are quantified or bounded events in which the perfective aspect suffix -le is used. In other words, to Li and Thompson, a state can be marked perfective if there is a phrase limiting its extent. Note that Li and Thompson adopt the traditional definition of the perfective aspect –
“an event is being viewed in its entirety or as a whole” (Li & Thompson, 1981, p. 185). Here surface two questions – (a) Are Li and Thompson trying to say that expressions such as \textit{that place is noisy} or \textit{he is older than I} are not perfective, but expressions such as \textit{that place is a little noisy} or \textit{he is older than I by a few decades} are perfective? (b) The perfective aspect suffix \textit{-le} can be omitted in sentence (3.44). Hence, what is the difference between using the perfective aspect suffix \textit{-le} and not using it?

Li and Thompson claim that the quantified direct object can also bound the event signaled by the verb, and therefore, usually occurs with the perfective aspect verbal suffix \textit{-le} (Li & Thompson, 1981, p. 189). For instance,

\begin{verbatim}
(3.45) 她 今天 买了 很多书。
Ta jintian mai -le hen duo shu
She today buy -PFV very many book
‘She bought a lot of books today.’
\end{verbatim}

\begin{verbatim}
(3.46) 墙 上 挂 了 一幅画。
Qiang -shang gua -le yi -fu hua
Wall -on hang -PFV one -CL picture
‘A painting was hung on the wall.’ or ‘A painting had been hung on the wall.’
\end{verbatim}

According to Li and Thompson, sentences (3.45) and (3.46) are bounded by \textit{hen duo shu} ‘a lot of books’ and \textit{yi-fu hua} ‘a painting’, and thus, take the perfective aspect verbal suffix \textit{-le}. They explicitly state, “It is perfectly normal to use \textit{-le} where the message being communicated has to do with bounding an event by naming a specific quantity of the direct object” (Li & Thompson, 1981, p. 191).

However, in actual language use, quantified direct objects alone do not necessitate the use of the perfective aspect suffix \textit{-le}. For instance, future events may contain quantified direct objects, but usually do not have the perfective aspect suffix \textit{-le}. I agree with Chao (1968) that
sentences, such as (3.45) and (3.46), use the perfective suffix -le because they describe a ‘past action with a quantified object.’

Interestingly, when Li and Thompson (1981) propose that the perfective aspect suffix -le can also be used for a process or a state, one of their examples is the same as sentence (3.46) but with a different English translation – ‘On the wall hangs a painting.’ Li and Thompson claim that “-le cannot be characterized as expressing completion. Typically, of course, an action that is bounded is also complete, but -le need not necessarily signal completed action” (Li & Thompson, 1981, p. 215). On one hand, Li and Thompson argue that sentence (3.46) is perfective as it is bounded by a quantified direct object, and thus, the perfective aspect suffix -le is used. (Note that their English translation is in the past tense – ‘A painting was hung on the wall’ or ‘A painting had been hung on the wall.’) On the other hand, they claim that the perfective aspect suffix -le in sentence (3.46) does not convey completion, but a state because the verb gua ‘hang’ describes a stative situation. (Note that they provide an English translation in the present tense – ‘On the wall hangs a painting.’)

To Li and Thompson (1981), the second way to determine a bounded or perfective event in which the perfective aspect suffix -le can be used is to see if it is a definite or specific event. A definite or specific event indicates that “the direct object is understood as a definite noun phrase” (Li & Thompson, 1981, p. 192). Li and Thompson provide many examples to show various types of definite direct objects, including a name, pronoun, genitive modifier (e.g., ta-de ‘his/her’), demonstrative modifier (e.g., nei-ge ‘that’), relative clause modifier (e.g., ta mai de shu ‘the book that he bought’) and noun phrase with ba (marker for direct object that usually is definite or specific).
Similar to the problem of a quantified direct object discussed above, to me, the presence of a definite direct object does not entail a bounded or perfective event. Definite direct objects can occur in future events in which the perfective aspect suffix -le is not used.

Li and Thompson’s third way to identify a bounded or perfective event is to see if it is inherently bounded by the verb that “has its end point built into its meaning” (Li & Thompson, 1981, p. 195). They discuss two Chinese verbs si ‘die’ and wang ‘forget.’ These two Chinese verbs both emphasize the endpoint in meaning; thus, they are incompatible with the durative aspect. Although expressions such as he is dying or I am forgetting my French are grammatical in English, they are not acceptable in Chinese. Li and Thompson generalize that Chinese verbs that are inherently bounded, such as si ‘die’ and wang ‘forget,’ usually occur with the perfective aspect marker -le, unless they appear in irrealis mode. Li and Thompson define the irrealis mode as “the infinitive verb phrase following such verbs as want, like, prefer, hope, expect, and so forth” (Li & Thompson, 1981, p. 196). Li and Thompson claim that “irrealis verbs in general do not occur with the perfective aspect marker -le because they are not describing events viewed in their entirety” (Li & Thompson, 1981, p. 197). However, to me, the following counter examples are very common in Chinese.

(3.47) 我 宁愿 死 了, 也 不 愿意 找 一个 不 喜欢 的 人。
Wo ningyuan si -le, ye bu yuanyi zhao yi -ge bu xihuan de ren
I prefer die -LE, also not willing look:for one -CL not like NOM person
‘I’d rather die than marry a person that I don’t like.’

(3.48) 他 想 忘 了 过去。
Ta xiang wang -le guo-qu
He want forget -LE pass-go
‘He wants to forget the past.’
Based on Li and Thompson, sentences (3.47) and (3.48) are in irrealis mode, however, contrary to Li and Thompson’s analysis, they both have the suffix -le. Without the -le, sentence (3.48) is ungrammatical.

In order to support their claim that the verbs with inherent endpoints in meaning generally occur with the perfective aspect suffix -le, Li and Thompson (1981) provide the following examples.

(3.49) 他 睡 着 了 吗?
Ta  shui -zhao -le ma
He  sleep -succeed -PFV Q
‘Did he fall asleep?’

(3.50) 盖子 掉 了。
Gaizi  diao -le
Lid  fall:off -PFV
‘The lid fell off.’

(3.51) 这 个 椅子 坏 了。
Zhei -ge  yizi  huai -le
This -CL chair  broken -PFV
‘This chair broke.’

Again, similar to the discussion of quantified direct objects and definite and specific direct objects above, to me, the -le is not necessary for verbs with an inherent end point when describing future events. Also, all of their examples are in the past tense, which leads to the question – How do we know that the multiple les used in their examples are due to the inherently bounded meaning of the verb, but not due to the past event viewed as a whole? This question leads to another question – How do we know that the le used in their examples are the perfective aspect suffix -le, not the particle le? Moreover, to me, huai ‘broken’ in sentence (3.51) is often used as a predicative adjective, not a verb specifying the endpoint. In other words, huai ‘broken’
in sentence (3.51) is stative to me with the translation of ‘this chair is broken.’ In this case, the le in (3.51) is Chao’s (1968) particle le indicating change of state.

Li and Thompson propose that an event can be bounded, and thus, take the perfective aspect suffix -le by being the first event in a sequence (Li & Thompson, 1981, p. 198). In this case, the first event is often translated with the English ‘when,’ ‘after,’ or ‘now that.’ This is in line with Chao’s (1968) proposal of the suffix -le in a dependent clause conveying a temporal relation (e.g., ‘after’) or a conditional relation (e.g., ‘if’).

Li and Thompson also claim that sometimes an adverbial expression signaling when or where an event takes place can function to bound the event (Li & Thompson, 1981, p. 201). Here are their examples.

(3.52) 她早上理了发。
She morning cut -PFV hair
‘She got a haircut in the morning.’

(3.53) 他在加州发了财。
He in California issue -PFV wealth
‘He got rich in California.’

According to Li and Thompson, fa ‘hair’ and cai ‘wealth’ in (3.52) and (3.53) respectively are not quantified direct objects, and therefore, cannot bound the event. Sentences (3.52) and (3.53) are grammatical with the perfective aspect suffix -le because the time expression zaoshang ‘morning’ and the locative expression zai Jiazhou ‘in California’ function to bound the events. To Li and Thompson, sentences (3.52) and (3.53) would be incomplete or odd without the time or locative expressions as they would be unbounded and incompatible with the perfective aspect.
suffix \textit{-le}. Here arises another question – How do we know that the bounded sense comes from the time or the locative expression, but not from the simple fact of being a past event?

Li and Thompson point out that imperatives generally do not have \textit{-le}, but when \textit{-le} is used in imperatives, it signals ‘urgency’ for the action to take place, “especially when something is to be disposed of or gotten rid of” (Li & Thompson, 1981, p. 207), as shown in example (3.54).

(3.54) a. 关掉它。
\begin{verbatim}
guan -diao ta
turn:off -off 3sg
‘Turn it off (e.g., the radio).’
\end{verbatim}

b. 关了它！
\begin{verbatim}
guan -le ta
turn:off -PFV 3sg
‘Get rid of that nose (e.g., the radio)!’
\end{verbatim}

Li and Thompson (1981) further claim that \textit{-le} normally does not occur in negative imperatives, except when it serves as a ‘warning’ to the listener (p. 210). For instance,

(3.55) 别碰了炉子！
\begin{verbatim}
bei peng -le luzi
Don’t touch -le stove
‘Don’t touch the stove!’
\end{verbatim}

**The sentence-final particle \textit{le}**

Li and Thompson (1981) propose that in communication the sentence-final particle \textit{le} basically indicates a ‘Currently Relevant State’ (CRS), namely, “a state of affairs has special current relevance with respect to some particular situation” (p. 204). Specifically, ‘currently/current’ means the state of affairs is relevant \textit{now}, at the speech time, or with respect to a particular situation. Here are Li and Thompson’s examples.

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(3.56) 她出去买东西了。
She exit -go buy thing CRS
‘She’s gone shopping.’

(3.57) 那天她出去买东西了。
That day she exit -go buy thing CRS
‘That day she went out shopping.’

Based on Li and Thompson, the sentence-final particle *le* in sentence (3.56) conveys that the state of ‘her having gone shopping’ is relevant to the present or the speech time because there is no other particular situation stated. In contrast, the sentence-final particle *le* in sentence (3.57) signals that the state of ‘her having gone shopping’ had special relevance with respect to the situation of *nei tian* ‘that day’ in the past (Li & Thompson, 1981, p. 240).

Li and Thompson (1981) claim that ‘the situation’ to which the state of affairs is relevant can be past, present, future or hypothetical. For instance,

(3.58) 下个月我就在日本了。
Next -CL month I then at Japan CRS
‘Next month I’ll be in Japan.’

(3.59) 我是美国人就不会说这么糟的英文了。
I be America person then not likely speak such bad NOM English CRS
‘If I were an American, then I wouldn’t be speaking such bad English.’

The sentence-final particle *le* in sentence (3.58) indicates that the state of ‘my being in Japan’ will be current with respect to the situation of ‘next month.’ The sentence-final particle *le* in sentence (3.59) denotes that ‘my not being speaking such bad English’ would hold in the hypothetical situation -- ‘I were an American.’
Li and Thompson (1981) point out that the current relevance is largely determined by the context and can mean ‘a new discovery’ (p. 243). This is in line with Chao’s (1968) notion of ‘a new situation,’ and they also use ‘the melon is (very) sweet (now)’ as an example of ‘a new discovery.’

Li and Thompson propose that the situations involved in the Current Relevant State signaled by the sentence-final particle le fall into five categories.

A. Is a changed state  
B. Correct a wrong assumption  
C. Reports progress so far  
D. Determines what will happen next  
E. Is the speaker’s total contribution to the conversation at that point  
(From Li & Thompson, 1981, p. 244)

Chao (1968) also points out the sense of a changed state is conveyed by the particle le. Li and Thompson (1981) define the changed state as “some state of affairs holds now which didn’t hold before” (p. 244). Li and Thompson propose that when the sentence-final le is attached right after an adjective that has an inherent endpoint in meaning, the le is “a combination of the perfective -le and the CRS le” (Li & Thompson, 1981, p. 251). They also use the ‘broken chair’ sentence as an example, repeated here:

(3.51) 这 个 椅子 坏 了。  
Zhei -ge yizi huai LE  
Zhei -CL chair broken PFV/CRS  
‘This chair broke.’

Previously, Li and Thompson claim that huai ‘broken’ is a verb with an inherent endpoint in meaning, and thus, the perfective aspect suffix -le is used. Now, they propose that huai ‘broken’ is an adjective with an inherent endpoint in meaning; therefore, the le in (3.51) is a combination

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55 Note that this sentence can also be translated into ‘This chair is broken.’
of the perfective aspect suffix -le and the CRS sentence-final particle le. They list many examples containing a combination of the perfective aspect suffix -le and the CRS sentence-final particle le without any detailed analysis. Here are two more examples from Li and Thompson (1981, p. 252).

(3.60) 她 怀孕 了。
   Ta huaiyun LE
   She pregnant PFV/CRS
   ‘She got pregnant.’

(3.61) 领子 撕 破 了。
   Lingzi si -po LE
   Collar tear -broken PFV/CRS
   ‘The collar tore.’

Following Chao (1968), Li and Thompson (1981) reconfirm that the change of state signaled by the sentence-final particle le does not always indicate a change in the objective situation, but can be a change in the speaker’s mental state, such as ‘a new realization.’ For example,

(3.62) 下 雨 了。
   Xia yu le
   Descend rain CRS
   ‘It’s raining.’
   (Chao, 1968, p. 798)

Similar to Chao (1968, p. 798)’s analysis, Li and Thompson note that sentence (3.62) has two distinct readings – ‘it has just begun to rain’ or ‘the speaker has just discovered that it is raining’ (Li & Thompson, 1981, p. 259).

Li and Thompson state, “Another common way in which a state of affairs becomes relevant to a particular situation is when that state of affairs is different from what the hearer has

56 Note that this sentence can also be translated into ‘She is pregnant.’
been assuming” (Li & Thompson, 1981, p. 263). Thus, the second situation in which the sentence-final particle *le* can convey CRS is ‘correcting a wrong assumption.’ Li and Thompson use a minimal pair of sentences to demonstrate this use of the particle *le*.

(3.63) a. (child pointing to soda)
   我要喝。
   *Wo yao he*
   ‘I want to drink it.’ (neutral)

   b. (child to mother, who does not think the child wants his/her soda)
   我要喝了。
   *Wo yao he le*
   ‘(But) I want to drink it.’ (contradicting the mother’s belief.)

To me, the particle *le* in (3.63b) indicates Chao’s (1968) ‘change of state or situation’/ ‘now.’ Sentence (3.63b) can be understood as ‘I want to drink it now.’ Moreover, the child might not know his/her mother’s assumption. In other words, the child might not be able to purposefully use the particle *le* to correct his/her mother’s assumption. Here is another Li and Thompson’s example.

(3.64) 我有一个月没看电影了。
   *Wo you yi -ge yue mei kan dianying le*
   ‘I haven’t seen a movie for a month (until now) (i.e., you’re wrong in assuming that I’ve been keeping up with the latest films).

Still, to me, the sentence-final particle *le* in (3.64) indicates ‘now’ or ‘until now.’ The sense of ‘correcting a wrong assumption’ might be an inference drawn from the sense of ‘now’ and the context, but it does not always stand or it can hardly stand alone as an independent function of the particle *le*.
Li and Thompson (1981) claim that the third situation in which the particle *le* conveys CRS is ‘reporting progress so far’ (p. 270). This is similar to Chao’s (1968) notion of ‘progress in a story.’ While Chao’s particle *le* of ‘progress in a story’ corresponds to the English word ‘then,’ Li and Thompson’s particle *le* of ‘reporting progress so far’ includes a wide range of situations, as illustrated by their examples 3.65-3.69.

(3.65) (talking about the “project” of my living arrangements)

```
我 在 那 里 住 了 两 个 月 了。
Wo zai nali zhu -le     liang -ge yue     le
I     at there live -PFV two -CL month CRS
‘I’ve lived there for two months (now).’
```

Li and Thompson point out that the event reporting progress so far are usually a bounded or perfective event. Therefore, the perfective suffix -*le* often co-occurs with the CRS *le* that “brings the hearer up to date on the progress made so far in a more extensive project or venture about which both speaker and hearer know” (Li & Thompson, 1981, p. 270).

(3.66) (3.66) (talking about the “project” of my living arrangements)

```
飞机 出 了 毛病 了。
Feiji        chu -le     maobing  le
Airplane exit -PFV trouble    CRS
‘The airplane has developed some trouble. (the progress report with respect to our plane trip getting under way)’
```

(3.67) (discussing a specific action of a character in relation to a series of ongoing events in a play)

```
他 太 自私 了！
Ta tai   zisi      le
He too selfish CRS
‘He is too selfish.’
```

Li and Thompson think that the particle *le* in sentence (3.67) is the CRS *le* reporting progress so far. However, in Chao’s (1968) analysis, this *le* indicates an ‘excessive degree.’ While Li and Thompson state that the sense of ‘reporting progress so far’ of the CRS *le* is usually associated
with bounded or perfective events, to me, sentence (3.67) describes a state, not a bounded or
perfective event.

(3.68) 别 又 弄 脏 了。
    Bie     you   nong -zang  le
    Don’t again make -dirty  CRS
    ‘Don’t get (them) dirty again.’

Li and Thompson claim that in sentence (3.68), the adverb you ‘again’ relates one event to
another, and can signal progress in a larger project that involve both of the two events.

Therefore, the sentence-final particle le indicates progress so far. Here emerge two questions –
(a) If the adverb you ‘again’ functions to signal progress so far, why cannot the particle le be
omitted? (b) What is the difference between the particle le in sentence (3.68) and the particle le
expressing ‘warning’ in the negative imperative expression proposed by Li and Thompson
previously?

(3.69) 那 我们 明天 再见了。
    Na    women mingtian  zai     jian le
    ‘Then we’ll meet again tomorrow (i.e., that’s the situation at the moment with regard to
    our ongoing relationship).’

The particle le in sentence (3.69) is identical with Chao’s (1968) ‘progress in [a] story’ le.

According to Li and Thompson (1981), the fourth situation in which the CRS le is used is
‘determining what happens next’ (p. 278), as illustrated by the minimal pair of sentences below.

(3.70) a. 我 吃 过 木瓜。
      Wo chi –guo  mugua
      I    eat    -EXP papaya
      ‘I’ve eaten papaya (i.e., I’ve had the experience).’

b. 我 吃 过 木瓜 了。
      Wo chi –guo  mugua  le
      I    eat    -EXP papaya  CRS
      ‘I’ve had (my) papaya (so please don’t keep asking me to have more papaya now).’
Li and Thompson also observe that the CRS *le* can convey that “a new state of affairs is just about to be realized” (Li & Thompson, 1981, p. 280), as shown by sentence (3.71).

(3.71) (coming to answer the door)

来 了，来 了！
Lai le, lai le  
Come CRS, come CRS
‘I’m coming, I’m coming (so don’t be impatient)!

The last function of the CRS *le* is ‘closing a statement’ (Li & Thompson, 1981, p. 283).

Li and Thompson point out that the CRS *le* functions to close a statement, like a “sentence-final punctuation marker” (p. 283). Without it, the statement sounds unfinished. They further claim that the CRS *le* can also function to ‘wrap up a story’ (p. 287). When facing the question why some statements have the CRS *le*, but others don’t, they explain that the CRS *le* in the use of ‘closing a statement’ indicates that the statement is the speaker’s total contribution to the conversation or why the statement is made. When the sense of a ‘total contribution to the conversation’ is not relevant, such as a response to another person’s statement, the CRS *le* is not required. Li and Thompson use the following examples to demonstrate the point.

(3.72) A: (to child)

你 为什么 肚子 这么 大?
Ni weishenme duzi zheme da  
You why abdomen this big
‘Why are you so big in the abdomen?’

B: 我 吃 得 太 饱。
Wo chi de tai bao  
I eat CSC too full
‘I am too full from eating.’

(3.73) (to a friend, as an afterthought after a banquet)

我 吃 得 太 饱 了。
Wo chi de tai bao le  
I eat CSC too full CRS
‘Let me tell you, I am too full from eating.’
To me, the difference between sentence (3.72B) without the particle *le* and sentence (3.73) with the particle *le* is that sentence (3.72B) states a reason which might be an abstraction of events or a particular event; thus, the *le* is not required (but can be added); whereas sentence (3.73) describes a particular event; therefore, the *le* is used to indicate a new state, i.e., the extreme degree, of the particular event.

**Summary**

Li and Thompson (1981) differentiate between the perfective aspect suffix -*le* and the sentence-final particle *le*. To them, the suffix -*le* in general conveys a perfective aspect (PFV). Therefore, they focus on exploring perfective events in which the PFV -*le* can be used. They propose that if an event is bounded by a quantified direct object, a definite or specific direct object, a verb with an inherent endpoint in meaning, or being the first event in a sequence, the event is perfective and can be marked by the perfective aspect suffix -*le*. They also list the situations in which the perfective aspect suffix -*le* cannot be used, including with stative verbs in unbounded events, with ongoing actions, with habitual or repeated events, with potential verb complements, with experiential aspect suffix -*guo*, and in negative sentences. Li and Thompson (1981) analyze the particle *le* only as the sentence-final particle *le*. They define the sentence-final particle *le* as expressing a ‘Currently Relevant State’ (CRS). They work to unify the different senses conveyed by the particle *le* under the overarching concept of CRS. They propose that the CRS *le* indicates ‘a changed state,’ ‘correcting a wrong assumption,’ ‘reporting progress so far,’ ‘determining what will happen next,’ or ‘being the speaker’s total contribution to the conversation.’
Li and Thompson (1981) try to use the two overarching concepts, PFV and CRS, to unify the various uses of the suffix -le and the particle le. They established a more unified system of le than previous researchers, but there are several problems in their analysis.

First, they did not address the relationship between the PFV -le and the CRS le.

Second, according to Li and Thompson (1981), quantified direct objects, definite or specific direct objects, verbs with inherent endpoint in meaning, and locative expressions all function to bound the events in which the PEV -le can be used. However, all these elements can appear in future events where the PEV -le usually is not used.

Third, to Li and Thompson (1981), the particle le equals the sentence-final CRS le. However, the particle le does not have to appear at the sentence-final position in actual language use. Moreover, although they used the overarching concept of the CRS le to encapsulate the five senses of the particle le, they did not address the interrelationship among the senses.

3.1.3 Lillian Meei-jin Huang and Philip W. Davis (1989)

Different from Chao (1968) and Li and Thompson (1981) who distinguish between the suffix -le and the particle le, to Huang and Davis (1989), there is only one le in modern Chinese, the particle le. Under their analysis, the particle le can appear at a postverbal position or a postsentential position. They propose that the particle le (or the only le) belongs to the Chinese aspectual system. However, the semantics of the particle le do not conform to the traditional dichotomy of the perfective aspect and imperfective aspect (Comrie, 1976). To address this seeming gap, Huang and Davis distinguish between event and proposition. Each event has its boundaries delimited, whereas the proposition is a chain of events with only a boundary signaled after the last event of the chain for the whole event complex (Huang & Davis, 1989, pp. 135-
136). The particle le indicates the ‘boundary,’ or ‘opposition’ between having the event or event complex and not having the event or event complex. The boundary marking function of le is an important finding concerning le’s semantics. However, Huang and Davis try to use this single function to unify all the other uses of le, which not only overgeneralizes the boundary marking function of le, but also oversimplifies the semantics of le. I illustrate Huang and Davis’s analysis in the following paragraphs.

Huang and Davis use the minimal pair of sentences below to illustrate the boundary marking function of le.

(3.74) a. 李四 跳 了 绳 了。
Lisi tiao le sheng le
Lisi jump LE rope LE
‘Lisi has jumped rope now.’

b. 李四 跳 绳 了。
Lisi tiao sheng le
Lisi jump rope LE
‘Lisi has jumped (a) rope.’
‘Lisi has begun jumping a rope.’
‘Lisi jumped rope.’

Sentence (3.74a) has both the postverbal le and the postsentential le. The postverbal le marks the boundary for the event of tiao ‘jump’, and thus, the event of tiao ‘jump’ is bounded or complete. The postsentential le indicates ‘now.’ In other words, the event of tiao ‘jump’ is complete ‘now,’ and thus, the present perfect English translation. The opposition is between ‘jumping a rope before’ and ‘not jumping a rope now.’ In contrast, sentence (3.74b) only has the postsentential le. Without the postverbal le to mark the boundary, the event of tiao ‘jump’ in (3.74b) may have been implemented/completed or not; therefore, both ‘jumping’ and ‘not jumping’ are possible for ‘now,’ as reflected in the three English translations.
Huang and Davis (1989) point out that without the postverbal *le*, the event boundary may be perceived due to other factors. For instance,

(3.75) 李四 跳 河 了。
Lisi  tiao he le
Lisi jump river LE
‘Lisi has jumped into a river (now).’
‘Lisi jumped into a river.’
*‘Lisi has begun jumping into a river.’

According to Huang and Davis (1989) the inceptive reading in sentence (3.75) is unacceptable, for the event *tiao he* ‘jump (into a) river’ has an instant achievement of the end with the onset being hardly discerned. In other words, *he* ‘river’ establishes the boundary for the event *tiao* ‘jump’. Huang and Davis (1989) further propose that a specification of time (e.g., *san-ge xiaoshi* ‘three hours’) may also function to create the boundary.

Huang and Davis observe that “certain events, e.g. *si* (‘die’) and *shuai* (‘fall down’), are essentially characterized by the instantaneous accomplishment of some state, thereby rendering an inceptive gloss unacceptable” (Huang & Davis, 1989, p. 138). In contrast, some events, such as *zhidao* ‘know’ and *zuo* ‘act as,’ are semantically characterized by entering a certain state, therefore allowing only the inceptive reading.

Huang and Davis (1989) agree with Li and Thompson (1981) that the postverbal *le* in example (3.54), repeated here, indicates perfective. The ‘urgency’ or “something is to be disposed of or gotten rid of” (Li & Thompson, 1981, p. 207) denoted by the *le* motivates the use of the *le* in marking the boundary between the radio’s being on and off which do not have to be actualized yet.
(3.54) a. 关掉它。
guan -diaot a
turn:off -off 3sg
‘Turn it off (e.g., the radio).’

b. 关了它！
guan -leet a
turn:off -PFV 3sg
‘Get rid of that nose (e.g., the radio)!’

Huang and Davis (1989) use their ‘boundary’ theory to explain Chu and Chang’s (1987) finding that the postverbal le can index the peak event. According to Huang and Davis, the events are blended in a clause chain without a boundary marking between the events. When the post verbal le is used for one of the events, it marks the boundary of the event so prominently that it makes the event protrude as the peak of the event sequence.

Different from Li and Thompson’s (1981) claim that the verbal suffix -le indicates bounded or perfective events, Huang and Davis propose that “[the] postverbal le seems perfectly balanced between [the] two categories of **perfective** and **imperfective**, pointing precisely at the fact of discreteness, a break between two contrasting conditions or occurrences” (Huang & Davis, 1989, p. 142; emphasis in the original).

To Huang and Davis, the postsentential le also marks the boundary. The difference between the postverbal le and the postsentential le is “a matter of the extent of the content which the speaker assumes within his/her purview” (Huang & Davis, 1989, p. 143). Huang and Davis claim that the boundary marked by the postverbal le belongs to the verbal domain, whereas the boundary marked by the postsentential le is propositional. The effect is that an event marked by the postverbal le can blend with other events to form a clause chain or proposition, whereas an event marked by the postsentential le is the end of a proposition which cannot blend with other events.
Huang and Davis (1989) apply their ‘boundary’ theory to analyzing Li and Thompson’s (1981) proposal of the five senses denoted by the sentence-final CRS *le* – ‘a changed state,’ ‘correcting a wrong assumption,’ ‘reporting progress so far,’ ‘determining what will happen next,’ and ‘being the speaker’s total contribution to the conversation.’ According to Huang and Davis (1989), the sentence-final particle *le* marks a boundary between being in a state and not being in a state, and thus, the sense of ‘a changed state.’ The sentence-final particle *le* indicates a boundary that sets off a supposed belief from an assertion, namely, the sense of ‘correcting a wrong assumption.’ Furthermore, the sentence-final particle *le* places a boundary which is a point in an extensive project, therefore, the sense of ‘reporting progress so far.’ The sentence-final particle *le* indicates a boundary right after an event, i.e., a boundary between the event and a void. It is the context that fills this boundary, namely determines what will happen next. Thus, the sentence-final particle *le* indicates a boundary following an assertion, “but the boundary extends its relevance beyond the propositional content to the speech situation marking the boundary between one speaker’s contribution and his readiness to accept that of another” (Huang and Davis, 1989, p. 145), and therefore, the sense of ‘being the speaker’s total contribution to the conversation.’ Based on this, Huang and Davis further propose that the aspect conveyed by the postsentential *le* may exceed beyond the event being viewed externally as single a whole or internally for its internal temporal constituency (Comrie, 1976, p. 25) to a “larger extent of happening, including primary experience” (Huang & Davis, 1989, p. 149).

Huang and Davis (1989) also challenge Li and Thompson’s (1981) proposal of the ‘Currently Relevant State’ (CRS) using Li and Thompson’s example below.
To Li and Thompson (1981), sentence (3.76) does not have the sentence-final CRS le, for it expresses a general truth with no change involved (pp. 291-192). However, Huang and Davis (1989) think that the state of affairs expressed by sentence (3.76) is ‘current’ with respect to ‘now’ or the speech context. In other words, to Huang and Davis, sentence (3.76) denotes the CRS but cannot use the CRS le, which means that Li and Thompson’s proposal of the CRS le is problematic.

To sum up, Huang and Davis (1989) unify the verbal suffix -le and the sentence particle le with the concept of ‘boundary.’ To them, what have traditionally been defined as’ the verbal suffix -le and the sentence particle le function as a single particle. They are differentiated with sentential locations postverb or postsentence. The postverbal le marks a boundary within a proposition/utterance, whereas the postsentential le signals a boundary for a proposition/utterance. The boundary signaled by the postsentential le may exceed the substance of the proposition/utterance to the domain of speaker’s experience or speech situation. Based on this, Huang and Davis propose that the aspect indicated by the Chinese le goes beyond the dichotomy of the perfective and imperfective, i.e., viewed externally and viewed internally.

Huang and Davis (1989) argue for a unified system of le with the ‘boundary’ concept. However, how do we know for which event the postverbal le should be used within a proposition (i.e., a chain of events) as the postverbal le has other functions or senses except for marking the peak event? Also, similar to their argument against Li and Thompson (1981) that there are CRS
expressions in which the CRS *le* cannot be used. Moreover, there are expressions denoting ‘boundary’ in which *le* cannot be used. For instance,

(3.77) (correcting a friend’s wrong assumption that I came here by plane)

```
我开车来的。
Wo kai che lai de
'I drove (here).'  
```

Sentence (3.77) denotes a discrete point, i.e., a boundary, between an assumption and an assertion; however, the sentence particle *le* cannot be used. In addition, Huang and Davis focus on establishing a unified system of *le* under the overarching concept of ‘boundary,’ but leave many other senses conveyed by *le* undiscussed. In other words, Huang and Davis’s analysis of *le* is far from a full account of *le*’s functions or senses.

### 3.1.4 Carlota S. Smith (1997)

Smith (1997) notes that the perfective morpheme aspect suffix -*le* and the independent particle *le* are different, but she only analyzes the perfective suffix -*le*. Smith’s analysis is based on Vendler’s (1967) event types. Smith claims that the perfective suffix -*le* can be used for all types of events, such as activities, accomplishments, achievements and states, “presenting a closed event” (Smith, 1997, p. 264), i.e., the termination of an event. Importantly, Smith separates the notion of termination from completion. To Smith, completion is conveyed by Resultative Verb Complements in Chinese; what the perfective suffix -*le* expresses is a simple closure, i.e., termination. One exception to this generalization is the stative event type. In this case, the suffix -*le* “shifts” from expressing the perfective aspect to conveying an inchoative situation, “presenting the coming about of a state” (Smith, 1997, p. 265). (This is in line with Chao’s particle *le* expressing a new situation.) In other words, the perfective suffix -*le* “shifts” to
be an independent particle -le\[^{57}\] with stative verbs to express an independent meaning of an
inchoative situation. However, Smith does not discuss the so-called “shifted” -le (i.e., the particle
le). Here are Smith’s examples.

(3.78) 我 昨天 写 了 给 张三 的 信， 可 是 没 写 完。
       Wo zuotian xie -le gei Zhangsan de xin, keshi mei xie wan
       I yesterday write -LE give Zhangsan NOM letter, but not write finish
       ‘I wrote a letter to Zhangsan yesterday but I didn’t finish it.’ (p. 265)

Smith (1994) uses sentence (3.78) to illustrate that the suffix -le conveys closure, not completion,
though the English translation is contradictory. Sentence (3.79) is Smith’s example of the
“shifted” -le (i.e., the particle le).

(3.79) 我 病 了。
       Wo bing -le
       I sick -LE
       ‘I got sick.’ (p. 265)

According to Smith (1997), the suffix -le does not co-occur with stative type of verbs.

However, the situation type may shift from stative to dynamic as shown by the sentence below.

(3.80) 我 在 那 里 住 了 两 个 月。
       Wo zai nali zhu -le liang -ge yue
       I at there live -LE two -CL month
       ‘I lived there for two months.’

In sentence (3.80), the verb zhu ‘live’ is stative. However, the adverbial expression liang-ge yue
‘two months’ marks a final endpoint for the stative situation; therefore, the perfective suffix -le
can be used.

\[^{57}\] Smith (1994) sometimes uses le with a dash, i.e., -le, for the independent particle. This might suggest that, to
Smith, the suffix -le and the particle le are not homophones, and the particle le is derived from the suffix -le.
Although Smith does not analyze the particle *le*, she follows Li and Thompson (1981) saying that the independent particle *le* appears at the end of a sentence and primarily conveys the speaker’s attitude and the discourse context (Smith, 1997, p. 266).

3.1.5 Summary of the previous studies

Chao’s (1968) seminal work established the foundation for the modern study of Chinese *le*. To Chao, the verbal suffix *-le* and the sentence particle *le* were homophones. Chao made important findings on the senses/functions of the suffix *-le* (e.g., ‘completed action,’ ‘after,’ ‘if,’ and ‘past action with a quantified object’) and the particle *le* (e.g., ‘a new situation’/‘change of state’/‘now,’ ‘excessive degree,’ ‘selection,’ ‘past event,’ ‘progress in a story,’ ‘completed action as of the present,’ ‘consequent clause to indicate situation,’ ‘obviousness,’ and ‘command in response to a new situation’). Li and Thompson (1981) tried to use the concept of the perfective aspect (PFV) to unify the senses of the verbal suffix *-le*, and the notion of the Current Relevant State (CRS) to unify the senses of the sentence-final particle *le*; however, the crucial relationship between the verbal suffix *-le* and the sentence-final particle *le* was neglected. In addition, the senses/functions of the sentence-final particle *le* under the overarching concept of the CRS were still listed and discussed as discrete pieces of information (e.g., ‘a changed state,’ ‘correcting a wrong assumption,’ ‘reporting progress so far,’ ‘determining what will happen next,’ and ‘being the speaker’s total contribution to the conversation.’) To Huang and Davis (1989), there is only one *le*, which is the particle *le*. Huang and Davis (1989) used the ‘boundary’ marking function of *le* to unify the postverbal particle *le* and the postsentential particle *le*. They established a unified system of *le*, but it is far from a complete account of *le* with many senses of *le* undiscussed.

Smith (1997) focused on analyzing the suffix *-le*, but left the “shifted” *-le* (i.e., the particle *le*)
mysterious and nebulous in meaning. To me, the neglect of the primary sense of le is a major gap in the previous studies. Without analyzing the primary sense of le, it is challenging to truly understand the suffix -le and/or the particle le, and how le evolved to be such a polysemous linguistic phenomenon, and consequently, it is impossible to discover the systematicity or motivated organization of the semantics of le.

3.2 The corpus study of LE

The survey of previous studies on le has identified many different meanings or functions associated with le. The diachronic corpus-based study aims to explore more meanings of le and the historical evidence of the grammaticalization path of le. In the diachronic corpus study, I examined 1026 tokens of le using the same corpora employed in the analysis of guo (see Table 3.1).

Table 3.1
Texts and tokens of le (liaolle) examined in the corpus study

<table>
<thead>
<tr>
<th>Text/Corpus</th>
<th>Period</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Shijing</em> (The Classic of Poetry)</td>
<td>Early Western Zhou (1046-771 BCE) to the middle period of Spring and Autumn period (770-ca. 475 BCE)</td>
<td>0</td>
</tr>
<tr>
<td><em>Lunyu</em> (The Analects)</td>
<td>Warring States period (ca. 475-221 BCE) and the Han dynasty (206 BCE-220 CE)</td>
<td>0</td>
</tr>
<tr>
<td><em>Fengsu tongyi</em> (Folk Legend)</td>
<td>Eastern Han period (25-220 CE)</td>
<td>0</td>
</tr>
<tr>
<td><em>Renwuzhi</em> (Biographical Notes and Data)</td>
<td>Three Kingdoms period (220-265 CE)</td>
<td>1</td>
</tr>
<tr>
<td><em>Sanguozhi</em> (Records of the Three Kingdoms)</td>
<td>Western Jin dynasty (265-316 CE)</td>
<td>9</td>
</tr>
<tr>
<td><em>Baopuzi</em> (The Master Embracing Simplicity)</td>
<td>Jin dynasty (265-420 CE)</td>
<td>43</td>
</tr>
<tr>
<td><em>Shishuo xinyu</em> (New Account of the Tales of the World)</td>
<td>Liu Song dynasty (420-479 CE)</td>
<td>22</td>
</tr>
</tbody>
</table>

58 The timeline of Chinese dynasties used in this paper is based on the table of the Timeline of Chinese Dynasties and Other Key Events from http://afe.easia.columbia.edu/timelines/china_timeline.htm [accessed October 18, 2016].
As shown in Table 3.1, if the tokens of liaolle in a text are fewer than 300, I examined all of them. If there are more than 300 tokens of liaolle in a text, I examined the first 300 tokens. Figure 38 below provides the general information about liaolle’s semantic extension (i.e., new senses of liaolle and new set phrases or words created with liaolle) throughout the 3000 years. The graph emphasizes the number of new senses added to the network, not the total number of senses used during any one period. As shown in Figure 3.1, new senses and new set phrases or words were consistently added to the semantic network of liaolle from the Three Kingdoms period (220-265 CE) until the modern era. While the number of new set phrases or words created with liaolle increased, the number of new senses of liaolle declined markedly in modern times. Note that Figure 3.1 only represents liaolle’s semantic development observed from this particular data set.
Before I move on to the analysis, it is necessary to define two important terms associated with *le* – **suffix** and **particle**. As shown in the literature review, many linguists propose a suffix -le and a particle le (e.g., Chao, 1968; Li & Thompson, 1981; Smith, 1994); whereas other linguists analyze *le* only as the particle *le* (e.g., Huang & Davis, 1989). In my analysis, I will use the notions of the suffix -le and the particle le. However, different from Chao (1968) who claims that the suffix -le and the particle le are homophones, the corpus data reveal that the suffix -le and the particle le are systematically derived from the same proto-scene or primary sense. There are three reasons why I differentiate between the suffix -le and the particle le. First, they exhibit syntactic differences. For instance, if there is an object, the suffix -le goes after the verb and before the object, whereas the particle le appears after the verb and object. Second, semantically,
the suffix -le marks the verb, whereas the particle le marks the entire proposition. Third, the diachronic data reveal that most of the senses or functions associated with the particle le emerged later than the senses or functions of the suffix -le. The differences between le as a suffix and le as a particle are summarized as follows, which also serve as the criteria for determining when le is a particle versus suffix in this study.

- On the surface, the suffix -le is suffixed to a verb. If there is an object, it goes after the suffix -le. In contrast, the particle le appears after the verb, object and other elements at the clause or sentence final position. If there is no object, it can be difficult to categorize le based on the surface linguistic features.

- Le as a suffix only governs the verb or event expressed by the verb; whereas le as a particle governs the entire event chain or proposition (Huang & Davis, 1989), and therefore, may signal speaker stance (Dancygier & Moder, to appear).

- Based on the corpus data, le’s suffix use and particle use are both derived from le’s verbal sense – ‘finish/complete/put to an end.’ Therefore, le as a verb suffix, along with the sense of ‘completion,’ can indicate completed event prior to the reference point (if the reference point is the speech time or ‘now,’ it means a past event), but this is not the only sense or function associated with le as a suffix. In contrast, le as a particle marking the completion/closure of the entire event chain usually alludes to a situation or state change (Chao, 1968), and thus, has a stative reading. In addition to the sense of situation/state change, le as a particle has developed several other senses or functions.

- The corpus data reveal that most of the particle uses of le are established later than the suffix uses.
Finally, the terms, suffix and particle, are essentially labels to categorize part of le’s senses or functions for the sake of analysis and teaching. There are situations in which le may be analyzed as a suffix or particle, especially in cases where the larger context or overt linguistic cues (e.g. an object) are not available. In these cases, the two different interpretations of le reflect different construals of the same situation or event. But often times, a particular reading is defined by the context or speaker and hearer’s understanding or knowledge of the situation.

In the following sections, I first discuss the proto-scene or the primary sense of le, and then present the findings from each text or corpus. Finally, based on the previous studies and the findings of the corpus-based study, the semantic network of le is established using Tyler and Evan’s (2003) methodology of principled polysemy to show the diachronic grammaticalization paths and synchronic connections between the senses or functions of le in Chinese.

3.2.1 The proto-scene of LE

Le is the pronunciation of the Chinese character 了 used nowadays. The earliest Chinese dictionary, Shuowen jiezi 说文解字 (Explaining Graphs and Analyzing Characters), defines the Chinese character 了 as “Liao, following the character of child but without arms” (尦也從子無臂). Liao is the earliest attested pronunciation of the Chinese character 了. The Chinese character 了 (liao, le) was created to mean a child without arms (compared with the Chinese character 子 (zi) which means a child with arms); thus, ‘a child without arms’ is taken as the primary sense of liaole. Here is the liao character in seal script59.

59 The image is from the online dictionary of ctext.org.
3.2.2 Data and analysis of LE

*Renwuzhi* 人物志 (Biographical Notes and Data)

No *liao* was found in *Shijing* 诗经 (The Classic of Poetry), *Lunyu* 论语 (The Analects), nor *Shisu tongyi* 风俗通义 (Folk Legend). There is only one token of *liao* found in *Renwuzhi* 人物志 (Biographical Notes and Data) written during the Eastern Han period (190-249 CE). This token of *liao* is a verb meaning ‘know’ or ‘understand.’ Here is the sentence.

(3.81) 欲人之聴己，人亦以其方思之故，
不己意，則以為不解。

‘(You) want others to listen to you, (however) because they were thinking just now, (and) did not know your meaning, then (you) thought (mistakenly that they) did not understand (you).’

(From *Renwuzhi* 人物志)

Although *liao* was created to describe a newborn baby without arms, it signifies 'know' in usage. This meaning extension is possible due to “invited inferences,” i.e., when using *le*, the writer evokes implications and invites the reader to infer them (Traugott & Dasher, 2002, 2010; Bybee, Perkins & Pagliuca, 1994). When people see a newborn baby without arms, they would immediately know that it will be difficult for the child to survive, and they could quickly imagine the death (i.e., the end of the life) of the newborn baby, especially in the formidable natural and living conditions two thousand years ago. A newborn baby without arms is a rare occurrence. It
is my hypothesis that the Chinese character was created to convey that people completely know
the fate of anyone in that particular situation.

**Sanguozhi 三国志 (Records of the Three Kingdoms)**

Nine tokens of *liao* are found in *Sanguozhi 三国志 (Records of the Three Kingdoms)*
written during the Western Jin period (265-316 CE). Among the nine tokens, *liao* was used for
three different functions or senses, as a lexical verb to mean ‘know/understand’ and
‘finish/complete/put to an end,’ and as a particle after a verb-object (V-O) structure to indicate
that the event described by the V-O structure has already been decided and may not be changed
easily. The newly identified senses of *liao* are marked by shaded cells in Table 3.2. The meaning
of ‘finish/complete/put to an end’ is the dominant sense, i.e., the most frequently used sense of
*liao*, with 55.6% of the occurrence of *liao* in the text and is closely connected to the meaning of
the proto-scene I describe above. The invited inference of the proto-scene ‘a new born baby
without arms’ in the formidable natural and living conditions two thousand years ago is that the
child’s life is finished or will soon to be finished. Therefore, *liao* has the sense of
‘finish/complete/put to an end.’ The verbal usage of *liao* is the dominant function of *liao*, with
88.9% of the occurrence of *liao* in the text (Table 3.2).

**Table 3.2**

<table>
<thead>
<tr>
<th></th>
<th>‘understand/know’</th>
<th>‘finish/complete/put to an end’</th>
<th>‘decided or unchangeable event’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liao</strong></td>
<td>3 (33.3%)</td>
<td>5 (55.6%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><strong>V-O liao</strong></td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (11.1%)</td>
</tr>
</tbody>
</table>
Here are three examples representing the three meanings denoted by \textit{liao} from \textit{Sanguozhi} (Records of the Three Kingdoms).

(3.82) 欲使学者寻省易了也。
\begin{quote}
Yu shi xuezhe xun sheng yi \textit{liao} ye.
\end{quote}
\begin{quote}
‘Want make scholar seek easy understand YI\textsuperscript{60}
\end{quote}
\begin{quote}
‘Want (to) make scholars seek easy (ways and) understand easily.’
\end{quote}

(3.83) 亮数出军,仪常规画分部, [...]，
\begin{quote}
Liang shu chu jun, Yi chang guihua fen bu, [...].
\end{quote}
\begin{quote}
Liang several go-out army, Yi often program divide troops, [...],
\end{quote}
\begin{quote}
斯须便了。 
\end{quote}
\begin{quote}
a-very-short-time then \textit{finish}
\end{quote}
\begin{quote}
‘Liang sent army (for) several (times), (and) Yi often programed (and) divided troops, [...], then (they) \textbf{finished} (it in) a very short time.’
\end{quote}

(3.84) 裔答洪曰: “公留我了矣, 明府不能止。”
\begin{quote}
Yi da Hong yue: “Gong liu wo \textit{liao} yi, ming fu bu neng zhi.”
\end{quote}
\begin{quote}
Yi reply Hong say: “Mister keep me \textbf{LIAO} YI\textsuperscript{61}, bright mansion not can stop.”
\end{quote}
\begin{quote}
‘Yi relied Hong (and) said: “(the) Prime Minister \textbf{has decided} (to) keep me (as an adjutant), (and) you cannot stop (it).’
\end{quote}

\textsuperscript{60} \textit{Ye} 也 is “an emphatic final particle of strong affirmation or identity” (Wiktionary online dictionary) in classical Chinese.

\textsuperscript{61} \textit{Yi} 矣 is a particle denoting completion in Classical Chinese. The analysis of the particle \textit{yi} is beyond the scope of this study. However, beside sentence (3.84), there are two other sentences with both \textit{liao} and \textit{yi} from \textit{Sanguozhi 三 国志} (Records of Three Kingdoms) that are very interesting and might be worth mentioning here.

我到长安，则自了矣。
\begin{quote}
Wo dao Changan, ze zi \textit{liao} yi
\end{quote}
\begin{quote}
I arrive Changan, then naturally finish/end YI
\end{quote}
\begin{quote}
‘When I arrive in Changan, (it will) end naturally.’
\end{quote}
\begin{quote}
In this sentence, the particle \textit{yi} is used for a future event to indicate that the event will be completed in the future.
\end{quote}

吾常疑汝于文伟优劣未别也，
\begin{quote}
Wu chang yi ru yu Wenwei you lie wei bie ye,
\end{quote}
\begin{quote}
I often suspect you upon Wenwei excellent inferior not distinguish YE,
\end{quote}
\begin{quote}
‘I often doubt (that) you and Wenwei are not superior to each other, but after today, my concern is gone.’
\end{quote}
\begin{quote}
In this sentence, the particle \textit{yi} is used for a present event to denote that the event is finished now.
\end{quote}
In sentence (3.82), liao is an independent verb meaning ‘understand.’ In sentence (3.83), liao is also a lexical verb which follows a time expression sixu ‘in a short time’ and an adverb jiu ‘then’ to mean ‘finish.’ Again, the sense of ‘finish’ is inferred from the probable conditions the character implies, i.e. people immediately know that the life of a new born baby without arms is finished as soon as they see that baby. In sentence (3.84), liao is a particle following a V-O structure – liu wo ‘keep me’ – to indicate that the event/situation described by the V-O structure is decided or unchangeable. Based on our experience, if an event is finished, it is decided and usually unchangeable. When the implicature or inference, i.e. decided and unchangeable events, repeatedly occurs with finished events conveyed by liao, it becomes conventionally associated with liao as a new sense through pragmatic strengthening (Tyler & Evans, 2003). Thus, liao extends from the sense of ‘finish’ to a particle denoting a decided or unchangeable event or situation. Note that yi in sentence (3.84) is another particle following the particle liao, indicating the completion of the action. In sentence (3.84), liao and yi are particles similar or compatible in meaning, and appear in collocation. Often a word takes on meaning from the collocation it occurs in. This collocation reinforces liao’s new sense and function. In a word, all of the three meanings of liao found in the data are closely related to the general meaning ‘know the fate of someone in that particular situation.’ The proto-scene encompasses the notions ‘know,’ ‘finish/complete/put to an end’ as the nature of the child’s life is completed or completely understood from the beginning, and ‘unchangeable’ because of the unchangeable nature of fate and the invited inference from finished events. The systematicity of liao’s semantic extension is illustrated in liaolle’s semantic network 1 (Figure 3.2).
Forty three tokens of *liao* are found in *Baopuzi* (The Master Who Embraces Simplicity) written during the Jin period (265-420 CE) with five distinct meanings: the familiar meanings that we just saw, ‘know/understand’ and ‘finish/complete/put to an end,’ and the new meanings, an adjective ‘clear,’ an adverb ‘completely’ and a noun ‘end.’ (The new senses are also indicated by the shaded cells in Table 3.3.) The senses ‘completely’ and ‘end’ appear closely related to the sense of ‘finish/complete/put to an end.’ The sense of ‘clear’ seems linked with the sense of ‘know.’ The dominant or most frequently used sense of *liao* in the text from the Jin period is the adverb use meaning ‘completely,’ with 31 tokens or 72.1% of the occurrences of *liao* in the text. All the 31 tokens of *liao* in the sense of ‘completely’ are followed by a negative. The second most frequently used sense of *liao* in the text is the sense of ‘clear.’ There are two forms of *liao* conveying the sense of ‘clear’ *liao* and *liaoliao* (Table 3.3).
Table 3.3
Occurrence of liao in Baopuzi 抱朴子 (The Master Embracing Simplicity)

<table>
<thead>
<tr>
<th></th>
<th>‘understand/know’</th>
<th>‘finish/complete/put to an end’</th>
<th>‘clear’</th>
<th>‘completely’ (+not)</th>
<th>n. ‘end’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liao</td>
<td>4 (9.3%)</td>
<td>1 (2.3%)</td>
<td>2 (4.7%)</td>
<td>31 (72.1%)</td>
<td>1 (2.3%)</td>
</tr>
<tr>
<td>Liaoliao</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (9.3%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

In the following paragraphs, I illustrate the five senses with examples following the order listed in Table 3.3, and analyze the three new senses. Since the senses ‘know/understand’ and ‘finish/complete/put to an end’ have been discussed previously, I only provide more examples from Baopuzi 抱朴子 (The Master Embracing Simplicity), namely, examples (3.85) and (3.86) respectively.

(3.85) 天地至大，举目所见，犹不能了，[…]

Sky (and the) earth (are) the biggest, (and we) still cannot understand (what we) see (with our) eyes, […]

In sentence (3.85), liao follows a negative auxiliary verb bu neng ‘cannot’ to mean ‘cannot understand.’

(3.86) 教之亦不得尽言吐实，

Teach him also not get exhausted talk say truth,

‘(When) teaching them, (you) also cannot tell everything (or) tell (the) truth, (and if your) speech cannot be finished, doing it is not beneficial.’

In sentence (3.86), liao is a verb meaning ‘finish’ which goes after a negative adverb bu ‘not.’
They honestly saw it **clearly**, therefore abandoning it as if (it was) forgotten.’

*Liao* in sentence (3.87) has the meaning of ‘clear.’ If we know or understand something, it is **clear** to us, as if we see or hear something more concrete. That is, our thinking or reasoning experience is correlated or linked with our audio-visual experience at the conceptual level, and thus, *liao* in the sense of ‘know/understand’ extends to mean ‘clear’ due to experiential correlation (Tyler & Evans, 2003).

‘He said (that he) already saw Yao Shun Yu Tang, (and) what he said was all very clear.’

The data shows that during the Jin period, *liao* also existed in reduplicated form, *liaoliao*, to denote the sense of ‘clear’ or ‘very/so clear.’ In sentence (3.88), *liaoliao* appears right after the adverb *jie* ‘all’ to mean ‘all very clear.’ In modern Chinese, the reduplication of a disyllabic adjective has a heightening effect and can change the adjective into an adverb or a predicate, e.g., *qingsong* ‘relaxed,’ *qingqingsongsong* ‘easily,’ *qingsongqingsong* ‘to relax’. However, *liao* is monosyllabic, and the four tokens of *liaoliao* found in the text do not sufficiently demonstrate that *liao* as an adjective has evolved into *liaoliao* as an adverb or a verb. Nevertheless, the reduplicated form *liaoliao* shows a heightening effect as it can be understood as ‘very/so clear,’ not just ‘clear.’ Note that reduplication has a heightening effect in many languages.
(3.89) [...], 行 冰 雪 中, 了 不 知 寒。

Liao in sentence (3.89) means ‘completely’ which appears right before a negative predicate, bu zhi han ‘not know cold.’ All the 31 tokens of liao in the sense of ‘completely’ precede negative predicates. This sense of liao including the negative context appears related to what the character of liao suggests, i.e., anyone would express a completely negative comment when seeing a newborn baby without arms as they completely know the fate of the child in the agricultural society of China in ancient times. Again, this sense is made possible due to invited inference (Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher, 2002, 2010). In the text, liao in the sense of ‘completely’ is used before two types of negative predicate, bu (‘not’ + verb) or wu (‘not-have’ + noun). Sentence (3.90) below shows that liao in the sense of ‘completely’ precedes wu (‘not-have’ + noun) predicate.

(3.90) 空 有 疲困 之 劳,

Liao wu zizhu zhi yi ye.

‘There is just fatigue from work, (but) completely no benefit at all.’

The last new sense found in the text from the Jin dynasty (265–420 CE) is a noun meaning ‘end,’ as shown in example (3.91).

(3.91) 若 临 官 受 取, 金 钱 山 积,

Ruo lin guan shou qu, jin qian shan ji,

If face official receive get, gold money mountain accumulate,
‘If (government) officials accept (bribes and) get (property illegally), (and their) gold (and) money accumulate (like a) mountain, (and when it’s) found then they (find a way to) give relief (to) get to the end (of the case), […]’

In sentence (3.91), *liao* after the verb ‘get’ is a noun meaning ‘end.’ Previously, I have argued that *liao* can be used as a verb denoting ‘finish/complete/put to an end.’ Based on Langacker (2002), the noun function and the verb function have the same conceptual content, and the difference is how the situation is accessed or construed. The verb function represents “sequential scanning” of the event state by state. While these states “are profiled only collectively, as facets of the abstract region, […] the overall predication is nominal” (Langacker, 2002, p. 98).

In summary, three new senses of *liao*, ‘clear,’ ‘completely’ and ‘end,’ are identified in the text from the Jin dynasty (265-420 CE). All these three senses are systematically derived from the proto-scene or previously established senses. The extended semantic network of *liao* is diagrammed here (Figure 3.3).

**Figure 3.3 Liao’s semantic network 2**

(*Baopu zi* 抱朴子 [The Master Embracing Simplicity],
Jin dynasty [265-420 CE])

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Before I move on to analyze the data from *Shishuo xinyu* 世说新语 (New Account of the Tales of the World) written during the Liu Song dynasty (420-479 CE), I discuss two new senses of *liao* that I observed in Pei Songzhi’s annotation for *Sanguozhi* 三国志 (Records of Three Kingdoms) – ‘comprehend deeply’ and ‘feel/think,’ which appear related to the earlier established sense ‘know/understand.’ The annotation was written during 372-451 CE.

(3.92) 八岁小儿，能玄了祸福，

Ba sui xiao er, neng xuan liao huo fu,

Eight year little child, can mysterious *comprehend-deeply* misfortune fortune,

聰明特达。

congming te da intelligent special reach.

‘The eight year old child can **deeply comprehend** misfortune and fortune. (He/She) is extremely intelligent.’

In sentence (3.92), *liao* conveys ‘comprehend-deeply.’ As mentioned above, *liao* means ‘know/understand’ here, but the child is further described as extremely intelligent. Thus, the context supports the further semantic extension – ‘comprehend-deeply.’

(3.93) 人当道情，爱我者一何可爱！

‘Ren dang dao qing, ai wo zhe yihe keai!

‘Person should relieve feeling, love me person how lovely!

憎我者一何可憎！’ 顾念孙权，了更侮媚。

Zeng wo zhe yihe kezeng!’ Gunian Sun Quan, liao geng wumei.

Hate me person how hateful!’ Think Sun Quan, **feel/think** more charming.

‘One should relieve (his/her) feelings. How lovely (the) person (who) loves me (is)! How hateful (the) person (who) hates me (is)!’ Thinking of Sun Quan, (you will) **feel/think** (that he is) more charming.’

---

62 Pei Songzhi is a historian in the Liu Song Dynasty.
Sentence (3.93) describes personal feelings. Usually, we feel/think the people who love us are very lovely and we feel/think the people who hate us are quite despicable. Similar to example (3.92), the context supports the semantic extension of liao from ‘know/understand’ to ‘feel/think.’

Twenty two tokens of liao were found in Shishuo xinyu 世说新语 (New Account of the Tales of the World). Eight meanings are identified among the twenty two tokens of liao, including three earlier established senses – ‘know/understand,’ ‘finish/complete/put to an end’ and ‘completely,’ four senses from the Liu Song dynasty (420-479 CE) – ‘comprehend-deeply,’ ‘smart/intelligent’ in the reduplicated form of liao, ‘kill,’ ‘enough,’ and a word component for an ‘extreme or unchangeable situation.’ Liao in the sense of ‘completely’ is still the dominant use with 11 tokens or 50.0% of the occurrences of liao in the text. Still, all the tokens of liao in the sense of ‘completely’ precede negative predicates. The meaning of the reduplicated form liaoliao has changed from ‘clear’ to ‘smart/intelligent.’ A new form liaoyu (literally ‘liao-language’) emerged as a noun for ended or unchangeable events or situations (Table 3.4). In the following paragraphs, I will only discuss the four new senses of liao and the word created with liao observed in Shishuo xinyu 世说新语 (New Account of the Tales of the World). I first present examples to illustrate the new senses and then offer my analysis. The new senses are discussed one by one following the order in Table 3.4.
### Table 3.4
Occurrence of *liao* in *Shishuo xinyu* (New Account of the Tales of the World)

<table>
<thead>
<tr>
<th></th>
<th><em>Liao</em></th>
<th><em>Liaoliao</em></th>
<th><em>Liaoyu</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>‘understand/know’</td>
<td>1 (4.5%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘finish/complete/put to an end’</td>
<td>2 (9.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘completely’</td>
<td>11 (50.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘comprehend-deeply’</td>
<td>2 (9.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘smart/intelligent’</td>
<td>0 (0.0%)</td>
<td>3 (13.6%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘kill’</td>
<td>1 (4.5%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘enough’</td>
<td>1 (4.5%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘ended or unchangeable event or situation’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (4.5%)</td>
</tr>
</tbody>
</table>

(3.94) 入 问 示 其 女, 女 直 直 叫“绝”。
Enter inside show his daughter, daughter straightly call “extinct”.

了 其 意, 出 则 自 裁。
Comprehend-deeply her meaning, exit then self cut.

‘(He) entered (the) inside (room and) showed (the letter to) his daughter, (and his) daughter just said ‘dead.’ (He) comprehended (what) she meant deeply, (and) went out (and) then committed suicide.

Similar to example (3.92), *liao* in sentence (3.94) means ‘know/understand,’ but the context – the father committed suicide right after his daughter uttered only one word – supports the semantic extension of *liao* from ‘know/understand’ to ‘know/understand-clearly/deeply’ or ‘comprehend-deeply.’

(3.95) 韦 曰: “小 时 了了, 大 未必 佳!”
Wei yue: “xiao shi liaoliao, da weibi jia!”
‘Wei said: “(A person who is) smart when (he/she is) little may not (be) excellent (when he/she grows up).”’

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As discussed previously, during the Jin period (265-420 CE), the reduplicated form liaoliao is used to convey the sense of ‘very clear.’ All the tokens of liaoliao found in the text from the Jin period describe what someone saw or said was very clear. However, in sentence (3.95), liaoliao means ‘smart/intelligent,’ and all the three tokens observed in *Shishuo xinyu* (New Account of the Tales of the World) from Liu Song dynasty (420-479 CE) are used to describe someone as ‘smart/intelligent.’ This semantic extension is promoted by experiential correlation between seeing and knowing. Tyler and Evans point out that “when we say *I see what you mean* we are not literally talking and thinking in term of seeing, but rather in terms of the experiential correlate of seeing – knowing and understanding” (Tyler & Evans, 2003, p.34). When a person’s intellectual ability is described in terms of his/her ability in seeing clearly or saying what he/she saw clearly, the form liaoliao extends from ‘very clear’ to ‘smart/intelligent.’

(3.96) 谢 太傅 谓 子敬 曰:  
Xie taifu            wei Zijing yue:  
Xie power-official say Zijing say:  

“可 将 当轴,       了 其 此 处。”  
“ke  jiang dangzhou,   liao    qi ci chu.”  
“can use   powerful-official,  finish/kill  them this place.”

‘Taifu Xie said to Zijing: “(We) can use a powerful official, and finish/kill them in this place.’”

Liao in sentence (3.96) is a verb meaning ‘kill.’ The meaning ‘kill’ emerges when the object of the verb liao ‘finish/complete/to put to an end’ is a person or a life. In other words, if what you are putting to an end is a life, you are killing. This seems like a natural extension that would arise from the appropriate context. This contextual implicature can become conventionally associated with liao as a new sense through continued use of liao in this kind of particular
context. This process of meaning extension is known as pragmatic strengthening (Tyler & Evans, 2003).

(3.97) 群尝书与亲旧：“今年田得七百斛秫米，
Qun chang shu yu qin jiu: “jin nian tian de qi bai hu shumi,
Qun used letter with close old: “this year land get seven hundred 5-pecks sorghum,
不 了 麹糱事。”
bu liao qunie shi.”
not enough wine-making thing.”

‘Qun used to write to (his) relatives and acquaintance: “This year (we) harvested seven hundred ‘hu’ (of) sorghum (from the) land, (but it is) not enough to make wine.”’

In sentence (3.97), liao denotes ‘enough.’ The ‘enough’ sense of liao seems related to the sense of ‘finish,’ for both ‘finish’ and ‘enough’ convey that the needs or expectations for a certain project should be or have been fully met. In other words, if a project is finished, it means what has been done is enough. This meaning extension is made possible through construing the same situation differently.

(3.98) 桓南郡与殷荆州语次，因共作语。
Huan Nanjun yu Yin Jingzhou yuci, yin gong zuo liao-yu.
Huan Nanjun and Yin Jingzhou talk, therefore together do end-language
‘Huan (from) Nanjun and Yin (from) Jingzhou chatted, (and) therefore, made speeches (about) ended or unchangeable (situations).’

In sentence (3.98), liaoyu (literally ‘liao-language’) is one word for an ancient language game in which people describe events or situations that are ended or unchangeable. In Shishuo xinyu 世说新语 (New Account of the Tales of the World), the liaoyu that the two people (i.e., Huan and Yin) in sentence (3.98) made are ‘a fire extinguished after burned a plain,’ ‘a coffin was covered with white cloth and sent to the funeral,’ and ‘throw fish into deep abyss and set a bird free to fly.’ As we can see, the first liaoyu talks about the end of a fire, the second liaoyu signals the end of a person’s life, and the third liaoyu describes an unchangeable situation, i.e., one can never get
the fish or bird back. The new word liaoyu is created based on previously established senses of liao, e.g., ‘finish/complete/put to an end,’ ‘an end’ or ‘ended, unchangeable event.’

To sum up, four new senses of liao and one new word formed with liao’s previously established senses are found in the texts from the Liu Song dynasty (420-479 CE). The four new senses are all systematically extended from the earlier established senses of liao. Specifically, the new sense ‘smart/intelligent’ of liaoliao is derived from the ‘very clear’ sense of liaoliao. The senses ‘know-clearly/comprehend-deeply’ and ‘think/feel’ are extended from the sense of ‘know/understand.’ The last new sense ‘kill’ develops from the sense of ‘finish/complete/put to an end.’ Figure 3.4 illustrates the systematicity of liao’s semantic development by the Liu Song dynasty.

Figure 3.4 Liaolle’s semantic network 3
(Pei Songzhi’s annotation for Sanguozhi 三國志 [Records of Three Kingdoms] and Shishuo Xinyu 世說新語 [New Account of the Tales of the World], Liu Song dynasty [420-479 CE])
Thirty nine tokens of liao are found in *Tongdian* (Comprehensive Institutions) from the Tang dynasty (618-907 CE). (Eight tokens of liao are excluded from the data because liao in these eight sentences were combined with other Chinese characters to say a title, the name of a type of bird, the name of a mountain, or to show that another Chinese character has the same pronunciation as liao.) Besides conveying the previously established senses of ‘know/understand,’ ‘finish/complete/put to an end,’ ‘completely’ and ‘clear,’ liao is also used as a verb to denote ‘resolve’ and attached right after a verb or verb-object structure to indicate ‘completion’ (Table 3.5). (The new senses or functions are indicated by the shaded cells in Table 3.5)

**Table 3.5**

<table>
<thead>
<tr>
<th></th>
<th>‘understand/know’</th>
<th>‘finish/complete/put to an end’</th>
<th>‘completely’</th>
<th>‘clear’</th>
<th>‘completion’ of the first event</th>
<th>‘completion’ of the last event</th>
<th>‘resolve’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liao</strong></td>
<td>8 (25.8%)</td>
<td>9 (29.0%)</td>
<td>7 (22.6%)</td>
<td>3 (9.7%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (3.2%)</td>
</tr>
<tr>
<td><strong>V-liao</strong></td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (3.2%)</td>
<td>1 (3.2%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><strong>V-O liao</strong></td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (3.2%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

I illustrate and discuss the new senses or functions of liao/liao with examples in the following paragraphs. I start with liao as a verb meaning ‘resolve,’ and then analyze the ‘completion’ senses conveyed by liao.

(3.99) Dan shou xing xiong wan, wang yin pin shu wei liao, Dan receive nature fierce naughty, past because grade bureau not resolve,
怨恨亲亲，[…]
complain hate relatives

‘Dan had (a) terrible (and) naughty personality. (In the) past because (his) government official position (was) not resolved, (he) complained (about and) hated (his) relatives, […]’
(From Tongdian 通典)

In sentence (3.99), liao is a verb following a negation adverb wei ‘not.’ Liao seems to have the sense of ‘finish/complete/end.’ This would be the interpretation in a positive context. Here, however, the event is about a person who didn’t get a government position; therefore, liao in this context denotes that the issue was not resolved, not that the issue was not finished. In other words, if the context focuses on the expected settlement or solution, not just the end of the event, then liao extends from ‘finish/complete/end’ to ‘resolve’ due to pragmatic strengthening.

An important development concerning liao’s semantics is the ‘completion’ sense. In the data from the Tang dynasty (618-907 CE), liao can indicate ‘completion’ as a complement, particle or suffix.

(3.100) 四月以后运送，五月三十日内纳了。
Siyue yihou yunsong, wuyue sanshi ri nei na -liao.
April after transport, May thirty day within bring-in -finish.
‘(If) transporting after April, (one should) finish bringing in (grain) before May 30th.’
(From Tongdian 通典)

In sentence (3.100), -liao is attached right after the main verb na ‘bring-in’ to indicate ‘finish bringing-in.’ In this construction, -liao is not an independent verb, but rather a resultative verb complement, i.e., a satellite in Talmy’s (2000) terminology. -Liao expresses the endpoint of the action or event conveyed by the main verb na ‘bring-in.’ As a resultative complement, -liao in sentence (3.100) can be replaced by another resultative complement -wan ‘finish/complete’ which conveys a similar meaning. Here is an example of the resultative complement -liao being
replaced by -wan ‘finish/complete.’ (This example is not from Tongdian 通典 [Comprehensive Institutions]. Instead, I formulated the example.)

(3.101) a. 吃 了 了
    Chi-liao le
    Eat-finish LE
    ‘have finished eating’

b. 吃 完 了
    Chi-wan le
    Eat-finish LE
    ‘have finished eating’

In (3.101a), -liao is a resultative verb complement indicating ‘finish verb-ing’, whereas le is a sentence particle denoting ‘now.’ Sentence (3.101b) shows that -liao can be replaced by -wan while preserving the same meaning.

(3.102) 教 战 了， 欲 散 还 营，
    Jiao zhan liao, yu san huan ying,
    Teach war finish, want disperse return base,

    看 大 总管 处 两 旗 卧， 即 分散
    kan da zongguan chu liang qi wo, ji fensan
    look big manager place two flag lie, then disperse

    “After teaching (how to do) battle, (the soldiers) want (to) disperse (and) return (the) base, (when they) see (the) general manager (with) two flags down, then (they) disperse.”
    (From Tongdian 通典)

Liao in sentence (3.102) is not an independent verb. It is attached after a verb-object construction jiao zhan, ‘teach (how to do) battle,’ to mark the completion of the event expressed by the V-O construction. Since the event marked by liao is followed by another event, liao may also function to sequence the two events in series, i.e., after the first event, the second event takes place. In other words, liao in this context has the sense of ‘after’ (Chao, 1968). Moreover, appearing after
a V-O construction, this *liao* is syntactically positioned as a particle, not a verb complement or suffix.

(3.103) 令持戈枪刀棒并弓弩等，
Order hold spear gun knife stick and bow crossbow etc.,

张施待贼。张施了，即抽前队。
stretch carry-out wait enemy. Stretch carry-out -finish, then draw out front team

“Order (the soldiers to) hold spears, guns, knives, sticks, bows, crossbows, etc., spread out, get ready (and) wait (for the) enemy. After spreading out, then draw out (the) front team.
(From Tongdian 通典)

In sentence (3.103), *liao* is attached after the main verb *zhang-shi* ‘spread-out’ in the first event of a series of events. If we only look at the event marked by the *liao* alone, *liao* is a resultative verb complement meaning ‘finish verb-ing.’ However, since the event marked by *liao* is followed by another event, *liao* not only indicates the completion of the first event, but also functions to sequence the two events in a series, i.e., ‘after’ the first event, the second event takes place. Different from the *liao* in (3.102) which is placed after a V-O construction, the *liao* in (3.103) is attached immediately to the verb; therefore, the *liao* in (3.103) might be a verb suffix meaning ‘after,’ or a verb complement indicating ‘finish verb-ing.’

To sum up, the data from the Tang dynasty (618-907 CE) material shows that *liao* has begun to grammaticalize from an independent verb to a verb complement, a verb suffix and a particle during the Tang dynasty. *Liao* in sentence (3.100) is a resultative verb complement meaning ‘finish verb-ing’. *Liao* in sentence (3.102) is similar to a particle syntactically as it was used after a V-O construction. *Liao* in sentence (3.103) is attached right after a verb; therefore, it could be a verb complement meaning ‘finish verb-ing’. However, since *liao* in sentence (3.103)
appears in a series of events marking the completion of the first event, *liao* may also take on the role of sequencing events, i.e., the second event in a series takes place ‘after’ the first event, or ‘when’ the first event is completed. In other words, *liao* in sentence (3.103) may also function as a verb suffix with a more general sense of ‘sequencing event,’ i.e., ‘after’ or ‘when.’ This analysis offers an explanation as to why the verb suffix *liao* (pronounced *le* in modern Chinese) is often translated into English as ‘when’ or ‘after’ in this context. Note that 了 is pronounced *liao* during the Tang dynasty because it is noted in *Tongdian* 通典 that 蓼 and 了 are pronounced the same. The pronunciation of 蓼 is *liao*. Figure 3.5 illustrates *liao*’s semantic development by the Tang dynasty.

Figure 3.5 *Liaolle*’s semantic network 4
(*Tongdian* 通典 [Comprehensive Institutions], Tang dynasty [618-907 CE])
**Sishu zhangju jizhu 四书章句集注 (A Collection of Comments on the Four Books)**

Twelve tokens of *liao* are found in *Sishu zhangju jizhu 四书章句集注 (A Collection of Comments on the Four Books)* from the Song dynasty (960-1279 CE), but five out of the twelve tokens are excluded because these tokens are either used to talk about *liao*’s pronunciation, another Chinese character’s pronunciation, or used in a person’s name. 了 is still pronounced *liao* during the Song period because it is written in the book that 绉 and 了 are pronounced the same. The pronunciation of 绉 is *liao*. Among the seven valid tokens of *liao*, one token is a verb meaning ‘know/understand’, another token is an adjective meaning ‘bright,’ and the other five tokens are used as a verb suffix or a verb complement (Table 3.6).

**Table 3.6**

<table>
<thead>
<tr>
<th></th>
<th>‘understand/know’</th>
<th>‘bright’</th>
<th>‘completion’ of the first event</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Liao</em></td>
<td>1 (14.3%)</td>
<td>1 (14.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td><em>V-liao</em></td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>5 (71.4%)</td>
</tr>
</tbody>
</table>

In the following, I first present the new sense ‘bright,’ and then further discuss the familiar verb suffix and complement functions associated with *liao* with more examples as it has become the dominant function in this particular data set.

(3.104) 胸 中 正， 则 眸子 了 焉
Xiong zhong zheng, ze mouzi *liao* yan
Chest middle righteous, then eye bright YAN
‘If within the chest all is righteous, the eyes are bright’
(From *Sishu zhangju jizhu 四书章句集注*)

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In sentence (3.104), *liao* is an adjectival predicate describing someone’s eyes as ‘bright.’ The particle *yan* after the adjectival predicate is an interjection in classical Chinese. The sense of ‘bright’ of *liao* seems to have derived from the sense of ‘clear.’ The appearance of clear eyes may give rise to the impression of bright eyes. The context, ‘eyes,’ supports the meaning extension from ‘clear’ to ‘bright.’

Sentences (3.105) and (3.106) illustrate the verbal complement and suffix use of *liao*.

(3.105) 程子曰：“读论语：有读了全然无事者；
Cheng Zi yue: “du Lunyu: you du -liao quanran wu shi zhe;
有读了后其中得一两句喜者；
you du -liao hou qi zhong de yi liang ju xi zhe;
有读了后知好之者；
you du -liao hou zhi hao zhi zhe;
有读了后直有不知手之舞之足之蹈之者。”
you du -liao hou zhi you bu zhi shou zhi wu zhi zu zhi dao zhi zhe
‘Cheng Zi said: “Reading (the) Analects: there are people (who look like) nothing (has happened) after reading; there are people (who) get one or two favorite sentences after reading; there are people (who) know (that they) like it after reading; there are people (who) just don’t know (that their) hands and feet are dancing (for) it after reading.”’

(From *Sishu zhangju jizhu* 四书章句集注)

(3.106) 程子曰：“今人不会读书。
如读论语，未读时是此等人，
Ru du Lunyu, wei du shi shi ci deng ren,
Like read Analects, not read time is this rank person,
“Cheng Zi said (that): “today people (do) not know how to read books. Such as reading (the) Analects, when (they have) not read (it), (they) are this kind (of) people, (but) after (they have) read (it), (they) are still this kind (of) people, then (it) is (like they have) never read (it).””

(From Sishu zhangju jizhu 四书章句集注)

All the tokens of liao in sentences (3.105) and (3.106) are verbal complements or suffixes, not independent verbs, for they are attached to the main verbs of the clauses. The first liao in (3.105) is attached right after the verb ‘read’ to mark the end of the reading event. What follows is the second event ‘as if nothing has happened.’ This liao combines the function of a resultative verb complement with a lexical meaning ‘finish’ and the function of a verbal suffix to sequence the events. Therefore, all of the three translations are acceptable – “there are people who finished reading it but look as if nothing has happened,” “there are people who look as if nothing has happened after reading it” and “there are people who look as if nothing has happened after finishing reading it.”

Different from the first liao in sentence (3.105), the other four tokens of liao in (3.105) and (3.106) are all immediately followed by an adverb hou ‘after.’ In this context, liao can still be interpreted as having two functions resultative verb complement and verb suffix. As a verb suffix, liao plays the role of sequencing the events, which is compatible with the adverb hou ‘after,’ and thus, they tend to occur together. (Note that guo can also sequence events with the sense of ‘after.’ Guo has developed this function earlier, in the Jin dynasty (265-420 CE). At the early stage of this function, guo is a verb taking a temporal LM. When the guo clause is followed by another event, the guo clause functions to provide temporal information for the second or main clause. Therefore, the guo clause is backgrounded and evolved to be an adverbial
expression ‘after + (time).’ This shows that although *guo* and *liaolle* both have the sense of ‘after,’ they have certain differences in the context and syntactic location in which they occur.

Since this chapter focuses on *le*, the inter-lexical polysemy of *guo* and *le* will be addressed in the next chapter.) As a resultative verb complement, *liao* retains the lexical meaning ‘finish,’ and the adverb *hou* ‘after’ is used to sequence the events in a series.

To sum up, this particular data set suggests that *liao* likely has begun to grammaticalize from a lexical verb meaning ‘finish/complete/end’ to a resultative verb complement, a verbal suffix, and a particle during the Tang dynasty (618-906 CE), and this grammaticalizacion process has continued in the Song dynasty (960-1279). *Liao* as a verb complement or suffix has become dominant, i.e., the most frequently used function among all other functions of *liao*, in this particular data set during the Song dynasty (960-1279). *Liaole’s* semantic network 5 (Figure 3.6) has the new sense ‘bright.’

**Figure 3.6 Liaolle’s semantic network 5**

(*Sishu zhangju jizhu 四书章句集注 [A Collection of Comments on the Four Books], Song dynasty [CE 960-1279]*)
Sanguo yanyi 三国演义 (Romance of the Three Kingdoms)

The use of liao/le expanded substantially in the data examined for the Yuan (1271-1368) and Ming (1368-1644) dynasties. There are more than one thousand tokens of liao/le in Sanguo yanyi 三国演义 (Romance of the Three Kingdoms). For this study, I examine the first 300 tokens in the text. Table 3.7 shows that the dominant use of liao/le is the suffix use with 213 tokens or 71.0% of the total tokens examined. The particle use also occupies a big portion of the use of liao/le with 74 tokens or 24.7% of the total tokens examined. There are 3 tokens in which liao/le can be interpreted as a suffix or particle depending on the reading whether liao/le marks the verb or the event as a whole. The data shows that liao/le is also used in fixed expressions, including ba-liao/ba-le 罷了 ‘that’s it,’ bian-liao 便了 ‘that’s it’ and liao-dang 了当 ‘finish-verb-ing’. The lexical use of liao fell sharply in the texts from the Yuan (1271-1368) and Ming (1368-1644) dynasties with only 1 token or 0.3% of the total tokens examined. This reveals that by the time of the Yuan (1271-1368) and Ming (1368-1644) dynasties, the use of liao had highly grammaticalized since the Tang dynasty (618-906 CE) when liao began to grammaticalize from a lexical verb meaning ‘finish’ to a verb complement, a verb suffix and a particle. I hypothesize that the pronunciation of the character 了 has begun to reduce from liao to le for certain grammaticalized uses (e.g., verb suffix and particle) during the Yuan (1271-1368) and Ming (1368-1644) dynasties. I put the phonologically reduced form le next to liao for the highly grammaticalized uses, verb suffix and particle, in this section, and analyze the phonological reduction of liao later in this section.
Table 3.7
Frequency measures for LIAO/LE in Sanguo yanyi 三国演义 (Romance of the Three Kingdoms)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical liao</td>
<td>1</td>
<td>0.3%</td>
</tr>
<tr>
<td>Suffix -liao/-le</td>
<td>213</td>
<td>71.0%</td>
</tr>
<tr>
<td>Particle liao/le</td>
<td>74</td>
<td>24.7%</td>
</tr>
<tr>
<td>Suffix/Particle</td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td>In fixed expressions</td>
<td>9</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

The semantics of the suffix -liaol-le varies depending on its syntactic location. The same applies to the particle liaolle. As Tai (1983) points out, due to the fact that Chinese is a non-inflectional language, word order plays an important role in the Chinese grammatical system and “carries more semantic functions in this language than in an inflectional language” (Tai, 1983, p. 49). The data (Table 3.8) below shows that the suffix -liaol-le is primarily used in the first event of a series of events with 106 tokens or 35.3% of the total tokens examined to denote temporal information (or sequence, e.g. ‘when’ or ‘after’), cause, condition or manner of the following event in the series. The suffix -liaol-le is also often used in the middle of a series of events with 49 tokens or 16.3% of the total tokens examined to indicate the pivot event of the series. The pivot event usually is the resulting event of the preceding event and the causal or conditional event for the following event in the series. Comparatively speaking, the suffix -liaol-le appearing in the last event of a series of events is less frequent with 30 tokens or 10.0% of the total tokens examined. The suffix -liaol-le in the last event of a series of events signals the completion of the last event in the series. In contrast, the particle liaolle is primarily used with the last event of a series of events with 65 tokens or 25.7% of the total tokens examined to convey the
closure/completion of the series. No particle *liaolle* is observed in the first event of a series of events, and only one token of the particle *liaolle* is found in the middle of a series of events. In addition, the particle *liaolle* is used to mark a change of state with 9 tokens or 3.0% of the total tokens examined; this seems like a natural extension as ending a series of events is closely related to the end of a particular state (i.e. the idea of a change of state), and the suffix *-liaol-le* is used to indicate a past event with 26 tokens or 8.7% of the total tokens examined. The suffix *-liaol-le* is also observed to convey ‘emphasis/warning’ with 2 tokens or 0.7% of the total tokens examined.

**Table 3.8**

<table>
<thead>
<tr>
<th>Senses of LIAO/LE in Sanguo yanyi 三国演义 (Romance of the Three Kingdoms)</th>
<th>‘finish/complete/end’</th>
<th>‘first event’</th>
<th>‘pivot’</th>
<th>‘last event’</th>
<th>‘past’</th>
<th>‘contrastive state change’</th>
<th>‘emphasis/warning’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexical liao</strong></td>
<td>1 (0.3%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td><strong>Suffix -liaol-le</strong></td>
<td>0 (0.0%)</td>
<td>106 (35.3%)</td>
<td>49 (16.3%)</td>
<td>30 (10.0%)</td>
<td>26 (8.7%)</td>
<td>0 (0.0%)</td>
<td>2 (0.7%)</td>
</tr>
<tr>
<td><strong>Particle liao/le</strong></td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (0.3%)</td>
<td>65 (21.7%)</td>
<td>0 (0.0%)</td>
<td>8 (2.7%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

Before I analyze the different functions/senses of *liaolle* and the relationship among the functions/senses with examples from the corpus data, it is necessary to discuss the pronunciation of the character 了. As discussed above, 了 right after a verb can be a resultative complement with a more specific meaning of ‘finish,’ a suffix with a more general meaning of marking completion or sequencing, or a dual role of a resultative complement and a suffix. In modern Chinese, we can tell whether 了 is a resultative complement or a suffix based on its pronunciation. 了 is pronounced *liao* if it’s a resultative complement as shown in sentence (3.107), and *le* if it’s a suffix as shown in sentence (3.108).
Unfortunately, I cannot use pronunciation to analyze the data from the Ming dynasty because the data that I analyzed did not have any discussions on the pronunciation of 了, and obviously, no audio recordings have been preserved from the Ming dynasty. Since 了 had been highly grammaticalized by the Ming dynasty, it is plausible that 了 also underwent a phonological reduction from liao to le during the Ming dynasty or earlier. Bybee et al. (1991, 1994) demonstrate that phonological reduction, particularly in the length of the element in question, is a concomitant process of grammaticalization. Liao /ljao/ reduced from having two approximants, two unrounded back vowels and a third tone to le /lx/ with one approximant, one unrounded back vowel and no tone (or neutral tone). As the meaning of 了 generalized, its sound became shorter and less stressed, as illustrated by Figure 3.7.
Following Bybee (2003), the increased frequency of the grammaticalized use of 了 plays an important role in the process of phonological reduction. Since the grammaticalized use of 了 has become the most dominant use during the Yuan (1271-1368) and Ming (1368-1644) dynasties, I use the reduced pronunciation, le, if it is a verb suffix or sentence particle from now on. If there is no clear clue that a 了 is a verb complement with the pronunciation liao (e.g., DE in sentence [3.107] above), I will consider it a verb suffix with the pronunciation le. Following Chao (1968), I use -le for verb suffix and le for particle. In addition, if 了 appears after a verb-complement structure, it must be a suffix, not a complement. For instance,

(3.109) 喂 饱 了 马，曹操先睡。
Wei -bao-le ma, Cao Cao xian shui.
Feed-full-LE horse, Cao Cao first sleep.
‘After (they) fed (the) horses, Cao Cao slept first.’
(From Sanguo yanyi 三国演义)

In sentence (3.109), -le is used after the resultative complement bao ‘full,’ therefore, -le cannot be a complement as Chinese does not allow two resultative complements in a row. In this context, -le is a suffix attached right after the verb-complement and before the object.

Having differentiated the two pronunciations of 了, I analyze the functions/senses of 了 shown in Table 3.8 with examples in the following paragraphs. I start with the dominant (i.e., the most frequently used) function found in the data.

(3.110) 三 人 救 了 董 卓 回 寨。
San ren jiu -le Dong Zhuo hui zhai.
Three person save -LE Dong Zhuo return fortress
‘(The) three people saved Dong Zhuo (and) returned (to the) fortress.’ [sequencing]
(From Sanguo yanyi 三国演义)

In sentence (3.110), two events, jiu Dong Zhuo ‘save Dong Zhuo’ and hui zhai ‘return (to the) fortress,’ form a series. -Le is a suffix attached right after the verb and before the object in the
first event to suggest the completion of the first event or the sequence of the events in the series, i.e., what follows a completed event is the next event in the series. *-Le* in this context can also be translated as ‘after.’

Like many languages of the world, Chinese arranges events chronologically. When the suffix 

- *le* is used to mark the completion of one event in a series, it also functions to set up the temporal sequence of the events, i.e., the next event follows the completion of a previous event. The temporal sequence signaled by the suffix 

- le is the foundation for its semantic extension to causality, condition or the manner of the following event. Chao (1968) observes the analogy between time and condition, i.e. the earlier event may be the condition for the following event. Zacks and Tversky point out that ‘perception of temporal sequence is elementary to perception of causality’ (Zacks & Tversky, 2001, p. 3). Zacks and Tversky (2001) also reiterate Moens and Steedman’s (1988) finding that ‘many cases that on the surface appear to be temporal references actually refer to contingency relations between antecedents and goals’ (Zacks & Tversky, 2001, p. 11). Their example is a manner event as the antecedent suggesting how the goal event is realized. The antecedents marked by the suffix 

- le can be an earlier event, the cause, condition, or manner of the following event (or the goal event), as illustrated by the examples below.

(3.111) 若擒了吕布，董卓易诛耳。

Ruo qin le Lu Bu, Dong Zhuo yi zhu er.
If capture -LE Lu Bu, Dong Zhuo easy kill ER
‘If (we) capture Lu Bu, Dong Zhuo (will be) easy (to) kill.’
(From *Sanguo yanyi* 三国演义)

There are two events in sentence (3.111) *qin Lu Bu* ‘capture Lu Bu’ and *Dong Zhuo yi zhu* ‘Dong Zhuo (will be) easy (to) kill.’ On the surface, the suffix 

- le marks the completion of the first

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63 *Er* 耳 is a clause-final particle in classical Chinese indicating ‘that’s it.’
event, *qin Lu Bu* ‘capture Lu Bu,’ so as to sequence the two events. However, the use of the suffix *-le* actually denotes the condition of the second event (or the goal event), *Dong Zhuo yi zhu* ‘Dong Zhuo (will be) easy (to) kill.’ This is also evidenced by the use of the conjunction word *ruo* ‘if.’ Of course, the conjunction word *ruo* ‘if’ also conveys the sense of condition, but it can be omitted without affecting the meaning. Again, we see a collocation of words with similar meanings. This appears to be an important contextualizing phenomenon that helps entrench new meanings associated with a particular lexical item. In short, sentence (3.111) is actually saying that the condition of easily killing Dong Zhuo is via capturing Lu Bu, though temporal sequence is inevitably involved in the series of events.

(3.112) 玄德曰: “杀 了 曹操 心腹 之人, 如何肯 休?”
Xuan De yue: “sha -le Cao Cao xinfu zhi ren, ruhe ken xiu?”
Xuan De say: “(You) killed Cao Cao’s favorite person, (so Cao Cao) won’t let the matter rest!”
(From *Sanguo yanyi* 三国演义)

The quoted expression in sentence (3.112) is a series of two events, *sha Cao Cao xinfu zhi ren* ‘kill Cao Cao’s favorite person’ and *ruhe ken xiu* ‘won’t let the matter rest.’ Based on the information from the larger context, the first event has taken place. The suffix *-le* used in the first event marks the cause of the second event. In other words, the reason why ‘Cao Cao won’t let the matter rest’ is because ‘(you) killed Cao Cao’s favorite person.’ Note that without the information from the larger context, *-le* in this sentence has a conditional reading, i.e., ‘if you kill Cao Cao’s favorite person, Cao Cao won’t let the matter rest.’

(3.113) 操 教 取 刀 来, 就 阶 下 截 去 其 九 指,
Cao jiao qu dao lai, jiu jie xia jie qu qi jiu zhi,
Cao ask get knife come, just step down cut go his nine finger
曰：‘一发截了，教你为誓！’
yue: “yifa jie-le, jiao ni wei shi!”
say: “together cut -LE, teach you do vow!”

‘Cao asked (a soldier to) bring (a) knife, (and) cut off his nine fingers just (at the) bottom (of the) steps, (and) said: “(I) cut off (your fingers) together, (and this) teaches you (how to) make (a) vow!”’

(From Sanguo yanyi 三国演义)

The quoted expression in sentence (3.113) contains two events in sequence, jie ‘cut’ and jiao ni wei shi ‘teach you how to make a vow.’ The suffix -le is used in the first event to mark the manner or way in which the second event takes place. In other words, the manner or way in which Cao taught the other person how to make a vow was cutting off all his fingers.

Sentences (3.110)-(3.113) illustrate when the suffix -le is used in the first event of a series of events, it may signal when, why, how or under what condition the following event takes place. The deletion of the suffix -le in these sentences would either change the meaning or result in ungrammatical expressions. Nevertheless, it has to be noted that the suffix -le denoting temporal sequence can be used for more than one event in a series of events depending on the logical structure of the events. For instance,

(3.114) 慈于军中讨了一匹马, 取了枪, 上马复来。
Ci yu jun zhong tao -le yi -pi ma, qu -le qiang, shang ma fu lai.
Ci in military middle ask-for one-CL horse, get one-CL spear, on horse again come again.’

(From Sanguo yanyi 三国演义)

There are four events in example (3.114), ‘asked for a horse,’ ‘got a spear,’ ‘got on the horse’ and ‘came again.’ One possible logical structure of the events can be that ‘asked for a horse’ and ‘got a spear’ are the antecedents of the goal ‘came again by horse.’ Therefore, the suffix -le is used to mark the two antecedents. To push the analysis further, as antecedents, ‘asked for a
horse’ and ‘got a spear’ enjoy the same status in the series of events, and thus, can switch positions to ‘got a spear’ and ‘ask for a horse’ if the temporal sequence between the two events is not crucial information to the goal event. Figure 3.8 depicts the ‘temporal sequence’ sense and its extended senses of the suffix -le.

**Figure 3.8 ‘Temporal sequence’ sense and ‘cause/prerequisite/manner’ sense of -le**

In Figure 3.8, the trajector (TR) is represented by the heavy-lined black circle. The landmark (LM) is represented by the heavy-lined square. Each pair of TR and LM confined by a rectangle depicts an event. The larger rectangle, encapsulating three events, represents a series of events. There may be greater or lesser number of events in an actual series. Time (T) is represented by a time line with an arrow on the right. The time when the series of events takes place is profiled by the heavy-lined span on the time line. The first event marked by the suffix -le is profiled by the heavy-lined rectangle. When/after the first event is completed, the second and third events take place in temporal/logical order. The suffix -le marking the completion/closure of the antecedent event functions to sequence the events, or denote the cause, condition or manner of the following event. Liao/le’s semantic extension revolving the sense of ‘completion of the first event’ is illustrated in Figure 3.9.
The second most frequently used function of the suffix 
-<le> was to indicate the pivot of a series of events. For example,

(3.115) 我 等 亲 赴 血 战, 救 了 这 厮, 他 却 如此 无 礼
Wo deng qin fu xue zhan, jiu -le zhe si, ta que ruci wu li
I etc. personally go blood fight, save -LE this fellow, he however so no politeness
‘We went (to a) bloody fight, (and) saved this menial, however he (was) so rude”
(From Sanguo yanyi 三国演义 [Romance of the Three Kingdoms],
Yuan [1271-1368] and Ming [1368-1644] dynasties)

There are three events in a series in example (3.115). The verb suffix -le is used in the second
event, not the first event. This goes against Li and Thompson’s (1981) proposal of “first event in
a sequence.” According to Li and Thompson, an event is bounded by being the first event in a

Figure 3.9 Liaolle’s semantic network 6
(Sanguo yanyi 三国演义 [Romance of the Three Kingdoms],
Yuan [1271-1368] and Ming [1368-1644] dynasties)
sequence, and thus, the perfective suffix -le is used (1981, p.198). It seems that the human brain does not simply function like a calculator. In example (3.115), the adverb que ‘however’ separates the sequence of events into two sub-sequences – one before que ‘however’ and the other is the que ‘however’ clause. The suffix -le appears in the second event, jiu-le zhe si ‘saved this menial,’ for it is the resulting event of the first event and the prerequisite which sets the stage for the que ‘however’ clause. That is, the suffix -le is used to mark the pivot of the series of events. Moreover, if the suffix -le is used in the first event, it may change the meaning of the sentence to ‘we went to a bloody fight to/in order to save this menial, however he was so rude.’ In this case, it is unclear whether the menial was saved or not. In other words, the suffix -le that marks the pivot indicates that it is the result (not purpose) of the preceding event and the situation which acts as the foundation for the following final event. The dual role of the pivot event marked by the suffix -le comes from its intermediate location in the series of events and the meaning of ‘completion’ conveyed by the suffix -le. Figure 3.10 below represents the pivot sense indicated by the suffix -le.

![Figure 3.10 ‘Pivot’ sense of -le](image)

Figure 3.10 ‘Pivot’ sense of -le
In Figure 3.10, the middle event in the series of events is profiled by the heavy-lined rectangle to represent the pivot event marked by the suffix -le. The completion/closure of the pivot event is also alluded to by the use of -le. The pivot event usually is the resulting event of the preceding event and the prerequisite event for the following event in the series. The dotted line right after the pivot event indicates that the events before it belong to the first sub-sequence or the background events in the series. Background events provide information on when, where, why, or how the following event takes place.

I have shown that the suffix -le does not have to appear in the first event, but can be used in the middle of a series of events. When the verb suffix -le is used in the middle of a series of events, it usually highlights the pivot event in the series. A pivot event is the result of the preceding event and the prerequisite which sets the stage for the following event. If one series of events could be divided into two sub-sequences, the pivot event is the end of the first sub-sequence and the prerequisite for the next sub-sequence. Here are more examples of the suffix -le used to highlight the pivot event.

(3.116) Zhang Hu jian Chen Sheng zhui di, chi-le yi jing, cuo -shou-bu-ji
Zhang Hu see Chen Sheng fall ground, eat-LE one surprise, arrange-hand-no-reach

Panic seized upon Zhang Hu at (the) fall (of) Chen Sheng, (and) he could no longer defend himself. (Then) Han Dang (with) a (slash of his) sword clove (Zhang Hui’s) skull in twain.’
(This English translation is modified from ctext.org website.)
(From Sanguo yanyi 三国演义)

In sentence (3.116), ‘Zhang Hu was shocked/startled’ is the pivot event marked by -le. It is the result of the preceding event ‘Zhang Hu saw that Chen Sheng fell to the ground’ and the cause of
the following events ‘Zhang Hu couldn’t defend himself and was killed by Han Dang.’ The verb
suffix -le marks the end of the first sub-sequence, and the rest of the clauses belong to the second
sub-sequence.

(3.117) 曹操见两路军到，亦分了军势，
Cao Cao see two-CL military arrive, also divide-LE military power,
不 敢 向 前 攻 城。
not dare toward front attack city.

‘Cao Cao saw two troops arrived, (so he) also divided (his) army (into parts to meet them), (and)
dare not (move) forward (to) attack (the) city.’
(From Sanguo yanyi 三国演义)

In sentence (3.117), ‘Cao Cao divided his army’ is the pivot event highlighted by -le. It is the
result of the preceding event ‘Cao Cao saw two troops arrived’ and the reason/cause of the
following event ‘Cao Cao dare not move forward to attack the city.’ The suffix -le indicates the
end of the first sub-sequence on what Cao Cao had done. The third clause belongs to the second
sub-sequence on what Cao Cao would do next.

(3.118) 随后一贼跃马挺枪直取周泰，
Suìhòu yī zei yue ma tíng qiāng zhí qu Zhou Tai,
被泰扯住枪，拖下马来，夺了枪马。
BEI Tai pull hold spear, drag down horse come, snatch-LE spear horse,
杀条血路，救出孙权。
kill CL blood road, save out Sun Quan.

‘Later (a) robber leaped (on a) horse (and) held (his) spear aloft (to) get Zhou Tai, (but) Tai laid
hold (of the robber’s) spear, pulled (the robber) off (the) horse, snatched (the robber’s) spear
(and) mounted (the robber’s) horse, fought (his) way (out), (and) saved Sun Quan.’
(From Sanguo yanyi 三国演义)
In example (3.118), ‘Zhou Tai snatched (the robber’s) spear (and) mounted (the robber’s) horse’ is the pivot event indicated by the verb suffix -le. It is the result/end of Zhou Tai’s fight with the robber and the cause or prerequisite for the following events ‘Zhou Tai fought his way out and saved Sun Quan.’ In other words, because Sun Tai won the fight with a robber, he got a spear and a horse. Because he had a spear and a horse, he was able to fight his way out and save Sun Quan.

The verb suffix -le can also mark a pivot event that has not happened yet, as shown by example (3.119).

(3.119) 如今 曹 嵩 辜 重 车辆 无数，你们欲得富贵不难，
Rujin Cao Song zi zhong cheliang wu shu, ni-men yu de fugui bu nan,
Now Cao Song supply heavy vehicle no number, you-pl want get rich not difficult
只就今夜三更，大家砍将入去，
zhi jiu jin ye san geng, dajia kan jiang ru qu,
only then today night three watch, everyone chop use enter go,
把曹嵩一家杀了，取了财物，
ba Cao Song yi jia sha-le, qu-le cai wu,
BA Cao Song one family kill-LE, get-LE property thing,
同往山中落草。
tong wang shan zhong luo-cao.
together toward mountain middle become-outlaw.

“Now Cao Song has no end (of) gear, (and it’s) not hard (for) you guys to become rich. Just tonight (at the) third watch, we (will) enter (his house) with knife, kill Cao Song’s family, grab (Cao Song’s) treasure, (and get away) to (the) mountains (to) become outlaws together.”
(From Sanguo yanyi 三国演义)

Sentence (3.119) describes a series of events that will take place in the future. Still, the verb suffix -le is used to indicate the result or end of a sudden slaughter of Cao Song’s family, i.e., ‘kill Cao Song’s family and get their treasure,’ which is also the culminating situation if their
plan works and the reason why they need to run into mountains to be outlaws. The suffix -le is used twice because the pivot contains two events.

In the data, most of the pivot events are marked by the suffix -le. There is only one case in which the particle is analyzed as marking a pivot event indicating completion, as shown in example (3.120).

(3.120) 及至吕布来时，却又擂鼓收军去了，
Jizhi Lu Bu lai shi, que you lei gu shou jun qu le,
Until Lu Bu come time, however again beat drum withdraw army go LE,
激得吕布怒气填胸。
ji de Lu Bu nuqi tian xiong.
stimulate DE Lu Bu anger fill chest

‘When Lu Bu came, however (he) beat (a) drum and withdrew (the) army, (and) made Lu Bu very angry.’
(From Sanguo yanyi 三国演义)

In sentence (3.120), the pivot event marked by le is ‘withdrew the army,’ which is the result of the first event ‘Lu Bu came’ and the cause of the last event ‘Lu Bu was angry.’ However, the le is not used after the verb shou ‘withdraw;’ instead, it appears at the end of the clause after the deictic marker qu (‘go; away from the speaker or deictic center’). That is, the le in sentence (3.120) might be a particle indicating the closure of a series of events, not a suffix.

The data from the Yuan (1271-1368) and Ming (1368-1644) dynasties shows that the suffix -le is also used to mark the ending or completion of the last event in a series of events (but this use occurred not as frequently as marking the first event or the pivot event). For instance,

(3.121) 操乘马正行，忽田中惊起一鸠，
Cao cheng ma zheng xing, hu tian zhong jing qi yi jiu,
Cao ride horse ZHENG move, suddenly farm-field middle surprise up one dove,
那马眼生，窜入麦中，践坏了一大块麦田。

‘(While) Cao was riding (a) horse, a dove suddenly got up (from the) farm field (by) surprise, startling the horse (so that it) swerved into (the standing) grain, (and) stomped down a large patch (of) grain.’

(From Sanguo yanyi 三国演义)

There are five events in a series in example (3.121). There is only one suffix -le used for the last event in the series. By marking the completion/closure of the last event, the suffix -le not only highlights the result of the preceding events, but also effectively alludes to the completion/closure of the preceding events. The last event marked by the suffix -le is usually the resulting event, for Chinese word order follows the logical order of condition/cause→result.

Marking the completion/closure of the last event also denotes the completion/closure of preceding events, as Chinese arranges events chronologically. That is, if the latest event (i.e., the last event) is completed or ended, the earlier events (i.e., the preceding events) in the series should also be completed or ended. Here is another example.

卓将赵岑，见卓已弃洛阳而去，

卓将 Zhao Cen, see Zhuo already give-up Luoyang and go,

便献了汜水关。

then give-LE Sishui Pass.

‘Zhuo’s general, Zhao Cen, saw Zhuo already gave up Luoyang and left, then (he) gave Sishui Pass (to the enemy).’

(From Sanguo yanyi 三国演义)

In sentence (3.122), there are two events in a series. The suffix -le marks the last event ‘gave Sishui Pass (to the enemy),’ which is the latest event in the series and the result of the preceding event ‘saw Zhuo already gave up Luoyang and left.’
Note that it is easy to interpret le in sentences (3.121) and (3.122) as the suffix -le since it appears right after the verb and before the object. However, for sentences without objects, it is not unambiguous if the le in the last event is the suffix -le or the particle le due to the similarity in their surface syntactic structures, i.e. being the last element in a clause. For instance,

(3.123) a. 俞 涉 与 华 雄 战 不 三 合，被 华 雄 斩 le。  
Yu She yu  Hua Xiong zhan bu san he,  bei Hua Xiong zhan-le.  
Yu She and Hua Xiong fight no three round, BEI Hua Xiong kill -LE.  
‘Yu She fought less than three rounds with Hua Xioang, (and) was killed by Hua Xiong.’  
(From Sanguo yanyi 三国演义)

From the surface syntactic structure, le in the last event of sentence (3.123a) can be the suffix -le as it goes right after the verb zhan ‘kill’ or the particle le for it is the last element in the sentence. However, the le in (3.123a) is indeed a suffix. There is no object after -le because it is in the passive voice and both the patient and the doer of the action are placed before the verb in the Chinese passive voice construction. Sentence (3.123a) can be changed into the active voice, as shown by sentence (3.123b).

(3.123) b. 华 雄 与 俞 涉 战 不 三 合，便 斩 le 俞 涉。  
Hua Xiong yu  Yu She zhan bu san he,  then kill -le  Yu She.  
Hua Xiong with Yu She fight no three round, then kill -LE Yu She.  
‘Hua Xiong fought less than three rounds with Yu She, (and) then killed Yu She.’

The active counter expression of (3.123a) suggests that the le in the last event is a suffix to the verb zhan ‘kill,’ not a sentence particle.

In the material from the Yuan (1271-1368) and Ming (1368-1644) dynasties, all the tokens of the suffix -le marking the completion/closure of the last event in a series of events appear in events prior to the speech time, i.e., past events. Despite the fact that the last event in a series is usually the resulting event in Chinese, marking the last event as ‘past’ probably is the
most efficient way to indicate a series of events being ‘past’ or completed, especially considering that Chinese is a tenseless language. That is, if the last event in a series was finished prior to the speech time, the implication is that all preceding events were also finished prior to the speech time. So we see that the function of marking the completion of an event in a series also takes on a tense coloring. Moreover, the suffix -le can be used in a single event, not a series of events, to indicate its completion/closure prior to the speech time. For example,

(3.124) 前面 哨马 探知，报与玄德 云：
Front scout ascertain, report with Xuande say:

“今番 又 是 红 面 长 鬍 的 斩 了 文丑。”
“jinfan you shi hong mian chang ran de zhan-le Wenchou.”
“Today again is red face long beard one kill -LE Wenchou.”

‘(The) scout (in the) front ascertained, reported to Xuande (and) said: “Today again (it) is (the) one (with) red face (and) long beard (that) killed Wenchou.”
(From Sanguo yanyi 三国演义)

In sentence (3.124) the event in quotation marks is one single event. The suffix -le is used after the verb and before the object to denote that the event took place before the speech time. Here is another example.

(3.125) 陈 登 献 了 徐 州。
Chen Deng xian-le Xu Zhou.
Chen Deng give-LE Xu State.
‘Chen Deng gave Xu Zhou Region (to the enemy).’
(From Sanguo yanyi 三国演义)

Sometimes, the suffix -le marking the completion/closure of a single event prior to the speech time or the reference point can be confused with the suffix -le marking the first event in a sequence, as shown by sentence (3.126).
Next day, Guo Si knew that Li Jue kidnapped the Emperor, therefore led the army to the front of Li Jue’s camp to fight.

(From *Sanguo yanyi* 三国演义)

In sentence (3.126), the event marked by the suffix -le, ‘Li Jue kidnapped the Emperor,’ is an event that happened prior to ‘the next day,’ not an event in a series from ‘the next day.’ In other words, the event ‘Li Jue kidnapped the Emperor’ is a single event before the reference point ‘the next day,’ which is the event that Guo Si heard of.

To sum up, the suffix -le can be used to indicate the completion/closure of a single event or the last event (i.e., the resulting event) in a series of events prior to the reference point. In the data, all these events are past events. Thus we see multiple, related interpretations emerging – marking completion of a particular event, result, and the temporal notion of ‘past.’ Figure 3.11 depicts this use of the suffix -le.

![Figure 3.11 ‘Past’ sense of -le](image)

In Figure 3.11, the completion/closure of the last or resulting event in a series of events is profiled by the suffix -le, and is represented by the heavy-lined box. Time (T) is represented by a time line with an arrow on the right. The time when the series of events takes place is profiled by
the heavy-lined span on the timeline. The completion/closure of the last event is prior to the reference point (RP). The RP usually is the speech time or the present ‘now’ unless otherwise specified in the expression. The completion/closure of the last event in a series prior to the speech time or the present time alludes to the fact that the event and all preceding events in the series are past events. It is possible that there is only one single event, not a series of events, prior to the RP.

Past events are unchangeable and may be associated with certain legacy, fate or aftermath. We can describe an event that has not happened yet as unchangeable and probably associated with a certain aftermath/fate to add emphasis or warning on the actualization of such event. The suffix -le has extended from describing unchangeable past events to expressing warning (Li and Thompson, 1981) or adding emphasis, as shown by the examples below.

(3.127) 众军皆大叫曰：‘不要走LE吕布!’
Zhong jun jie da jiao yue: ‘bu yao zou LE Lu Bu!’
 Many soliders all big call say: “not must go -LE Lu Bu!”
‘Many soliders all shouted (and) said: “don’t let Lu Bu go!”’
(From Sanguo yanyi 三国演义)

In sentence (3.127), the event ‘let Lu Bu go’ has not happened yet. With the suffix -le attached right after the verb zou ‘go,’ the imperative sentence gives a warning on the actualization of the event ‘let Lu Bu go.’ Here is another example.

(3.128) 遂 分付从人看好LE马，喝散庄客，
Sui fenfu congren kan hao LE ma, he san zhuang ke,
Then tell squire watch-well-LE horse, call dismiss village guest,
与孙乾回草堂歇息。
yu Sun Qian hui cao tang xiexi.
with Sun Qian return thatched cottage have-a-rest

‘Then (he) told (his) squire (to) watch (over the) horses well, dismissed (the) guests, (and) went back to (the) thatched cottage to have a rest with Sun Qian.’ (From Sanguo yanyi 三国演义)
Sentence (3.128) is not an imperative expression. The suffix -le is used after the verb-complement *kan-hao* ‘watch (over) well’ and before the object *ma* ‘horse’ to add emphasis on the action of ‘watch (over) well.’ In other words, ‘watch (over the) horses well’ is an important, unchangeable action to undertake and must be actualized. Figure 3.12 below depicts the warning/emphasis sense of the suffix -le.

![Figure 3.12 ‘Warning/emphasis’ sense of -le](image)

In Figure 3.12, the reference point (RP) is usually the speech time or the present ‘now’ unless otherwise specified in the expression. The event appears after the RP on the time line (T) showing that it has not happened yet at the RP. The yet-to-happen event is emphasized by heavy lines as it is marked by the suffix -le to emphasize its actualization.

In summary, I have analyzed two important functions of the suffix -le – marking the pivot event and indicating the completion of the last event. I have also discussed how the sense of ‘completion of the last event’ conveyed by the suffix -le has extended to indicate ‘past event,’ ‘resulting event’ and ‘warning/emphasizing.’ The systematicity of the semantic extension related to these senses or functions is diagrammed in Figure 3.13.
Having analyzed the senses of the suffix -le, let’s turn to the particle le. As shown in Table 3.8 above, although the suffix -le can be used for the last event in a series of events, it is mainly used to mark the first event or the pivot event. In contrast, the particle le is primarily used with the last event in a series, or more precisely for the end of the entire series of events. There
are several differences between the suffix -le marking the last event in a series and the particle le appearing at the end of a series of events. First, on the surface syntactic structure, the suffix -le may be followed by a definite or specific object or quantification element, whereas the particle le is usually the last element. Second, the suffix -le denotes the completion/closure of the last event in a series of events, whereas the particle le indicates the completion/closure of the entire series of events. Third, the suffix -le denotes the sense of ‘past’ (except for the ‘warning/emphasizing’ sense), whereas the particle le can be used in past, present, future or subjunctive events/situations. Finally, the particle le can denote the change of state/situation, whereas the suffix -le can not. I analyze the functions of the particle le with examples and figures in the following paragraphs.

(3.129) 且说董卓欲杀袁绍，李儒止之曰：“事未可定，不可妄杀。”袁绍手提宝剑，辞别百官而出，悬节东门，奔翼州去了。
‘Dong Zhuo was on the point of slaying Yuan Shao, but Li Ru checked him, saying, “You must not kill rashly while the business hangs in the balance.” Yuan Shao, his sword still unsheathed, left the assembly. He hung up the seals of his office at the east gate and went to Jizhou Region.’
(From Sanguo yanyi 三国演义. The English translation is from ctext.org.)

奔翼州去了。
Ben Ji Zhou qu le.
Run Ji State go LE.
‘went to Jizhou Region.’

In the story described in (3.129), only the ending event is marked by le. The last clause, which contains le, is underlined and glossed separately. In the last clause, the main verb is ben ‘run,’ the object is Jizhou ‘Ji region,’ and the word qu ‘go’ is a deictic marker indicating the action is moving away from the speaker or deictic center. Different from the suffix -le, which marks the verb and appears right after the verb, the le in (3.129) is used after the verb-object-deictic construction. Thus, the le in (3.129) is not a suffix marking the event/verb, but a particle used
after the last event in the series to mark the closure of the whole event complex. This also explains why the verb suffix *-le* usually co-occurs with definite objects or quantified elements. If the focus is on a single event or a particular constituent event, certain details, such as specific information about the object or quantification, are relevant or necessary in order to actualize the focus. This is similar to the fact that when we zoom in on a particular single event, we inevitably see certain, prominent details. In contrast, the particle *le* marks the completion/closure of the entire series of events, and therefore, further detailed information such as the definite object or quantification is not necessary or required. Figure 3.14 represents the sense of the completion/closure of the whole event complex indicated by the particle *le*.

![Figure 3.14](image)

**Figure 3.14 ‘Completion/closure of event complex’ sense of the particle *le***

In Figure 3.14, no single event is emphasized because the particle *le* used at the very end of a series of events marks the completion/closure of the whole event complex as shown by the bigger heavy-lined rectangle. Time (T) is represented by a time line with an arrow on the right. The time when the series of events takes place is profiled by the heavy-lined span on the time line. (Note that it is possible that there is only one event, not a series of events for the use of the particle *le*. )
Here is another example of the particle *le* marking the completion/closure of a series of events.

(3.130) 见一大汉, 推著一辆车子, 到店门首歇了; […]
See one big man, push-ZHE one-CL cart, arrive store doorway rest LE
‘(They) saw a tall fellow, pushing a hand-cart (along the road), arrived (at the) doorway (of the) store (and) halted; […]’
(From *Sanguo yanyi* 三国演义)

In sentence (3.130) the particle *le* at the end of the sentence indicates the completion/closure of the whole event complex regarding the process of a tall fellow pushing a hand-cart.

In terms of our lived, embodied experience, the completion/closure of a whole event complex is naturally accompanied with a change of state from ‘doing it’ to ‘not doing it.’ For example, in addition to marking the completion/closure of the series of events, the particle *le* in (3.129) also denotes that ‘Yuan Shao was here before but he is away from this place now,’ and the particle *le* in (3.130) also indicates that ‘the tall man was pushing a hand-cart before but he is resting now.’ In other words, when a series of events is ended, it is not followed by nothing, but a new state as implicated by the expression or another event beyond what has been expressed.

This is a ubiquitous way in which we experience the world. Drawing on this daily experience, the particle *le* extended from indicating the completion/closure of a series of events to expressing a change of state. Moreover, the cognitive linguistics tenet of profiling and highlighting reveals that in any scene, it is possible to shift attention. So, it is not surprising that in certain contexts, the particle *le* can be interpreted as indicating the completion/closure of a series of events or denoting situation/state change (Chao, 1968). For instance,
建宁二年四月望日，帝御温德殿。方升座，殿角狂风骤起，只见一条大青蛇，从梁上飞将下来，蟠于椅上。帝惊倒，左右急救入宫，百官俱奔避。须臾，蛇不见了。

It fell upon the day of full moon of the fourth month, the second year, in the era of Established Calm (AD 168), that Emperor Ling went in state to the Hall of Virtue. As he drew near the throne, a rushing whirlwind arose in the corner of the hall and, lo! from the roof beams floated down a monstrous black serpent that coiled itself up on the very seat of majesty. The Emperor fell in a swoon. Those nearest him hastily raised and bore him to his palace, while the courtiers scattered and fled. The serpent disappeared.

(From Sanguo yanyi 三国演义. The English translation is from ctext.org.)

With the whole story presented, I gloss and analyze the last sentence, which contains le.

须臾，蛇不见 了。
Xuyu, she bu jian le.
Instant, snake not see LE.
“In an instant, the serpent disappeared/couldn’t be seen anymore/was gone.”

Example (3.131) is a paragraph describing a story about a serpent which happened before the speech time or ‘now’ as indicated by the time word ‘in the era of Established Calm (AD 168).’

There is only one le, which is used at the end of the story, marking the end of the entire story about the serpent, i.e., ‘the serpent disappeared.’ (Note that the event described after this paragraph has nothing to do with the serpent.) However, in (3.131), the sentence which contains le has two other possible readings – ‘the serpent couldn’t be seen anymore’ and ‘the serpent was gone.’ These two readings allude to a change of situation or state. In fact, the verb bu-jian ‘not-see, disappear’ implies an instantaneous switch between two states or situations – ‘presence’ and ‘absence.’ This context highlights the ‘change of state/situation’ sense of the particle le derived from le’s function of marking the closure of a series of events. In other words, when a series of events ends, it is usually accompanied with a change of state. Figure 3.15 illustrates the ‘change of state’ sense conveyed by the particle le.

64 Le, in this text, is in the process of grammaticalization. Without overt cues (e.g. an object), different interpretations may be associated with the le in (3.131), i.e. a suffix or particle.
In Figure 3.15, the white beam represents the previous state/situation, and the black beam is the changed state/situation marked by the particle *le*. The white and black states/situations depict that they are contrastive states/situations. The arrow indicates the change from the previous state to the new contrastive state. The state change is situated in a time line (T) and takes place at the reference point (RP). Depending on the RP, the state/situation change can be a past, present or future event.

Here is an example in which the particle *le* is used in a present expression.

(3.132) 登曰: “兒亦有計le了。”
Deng yue: “er yi you ji le.”
Deng say: “son also have plan LE.”
‘Deng said: “I also have a plan (now).”’
(From *Sanguo yanyi* 三国演义)

In sentence (3.132), *le* is a particle, not a suffix, as it goes after the verb-object construction to treat the event as a whole. The particle *le* is used to indicate a new state/situation ‘have a plan,’ or a change of state/situation from ‘not have a plan’ to ‘have a plan.’ Linguists (e.g., Chao, 1968; Li & Thompson, 1981) have pointed out that the particle *le* conveys the sense of ‘now’ in this context, however none of them have analyzed where the sense of ‘now’
originated from. As illustrated in Figure 3.15, the change of state takes place with respect to a RP. The RP is usually the speech time or the present ‘now’ unless otherwise specified in the expression. In sentence (3.13), the particle le appears in a quoted speech bringing up a live conversation for which the speech time coincides with the present ‘now.’ That is, the RP is the speech time or ‘now.’ Therefore, in this context, the particle le has the sense of ‘now.’ When the change of state denoted by the particle le repeatedly co-occurs with the speech time, which is interpreted as the present ‘now,’ the sense of ‘now’ becomes entrenched in the semantics of le denoting state/situation change through pragmatic strengthening (Tyler & Evans, 2003).

As mentioned above, depending on the RP, the state/situation change can be a past, present or future event. Examples (3.131) and (3.132) represent the past and present events respectively. Sentence (3.133) is an example in which the particle le is used in a future or subjunctive event.

(3.133) 便 丞相 诛 我 三 族， 也不 来 了。
Bian Chengxiang zhu wo san zu, ye bu lai le.
Even-if Prime-Minister kill I three relative, also not come LE.
‘Even if the Prime Minister will kill my father, mother and wife, I won’t come (any more).’
‘Even if the Prime Minister would kill my father, mother and wife, I wouldn’t come (any more).’
(From Sanguo yanyi 三国演义)

The particle le in sentence (3.133) is not necessary grammatically and can be omitted. However, without the particle le, the interpretation changes. Absent le, it simply states that the event, ‘come,’ will/would not happen, and it is unclear whether the subject did or did not used to come. In contrast, with the particle le, it is clear that the subject used to come, but will/would not come any more. Therefore, the particle le indicates a change between ‘come’ and ‘not come.’
I have analyzed le’s function of marking the closure of a series of events, which further extends to denote a change of state or situation. The systematic development of these two new senses is illustrated in liaole’s semantic network 8 (Figure 3.16).

Figure 3.16 Liaole’s semantic network 8
(Sanguo yanyi 三国演义 [Romance of the Three Kingdoms], Yuan [1271-1368] and Ming [1368-1644] dynasties)
In the text from the Yuan (1271-1368) and Ming (1368-1644) dynasties, le also appears in fixed expressions, such as ba-liao/le 罢了, bian-liao 便了 and liao-dang 了当. The first two fixed expressions ba-liao/le 罢了 and bian-liao 便了 are modal expressions used at the end of an utterance indicating resoluteness, similar to English ‘that’s it,’ ‘that’s all’ or ‘nothing much.’ Ba 罢 is a verb meaning ‘to stop.’ Bian 便 is an adverb meaning ‘then.’ It is not surprising that liao/le is fused with these two Chinese characters/words to form the fixed expressions ba-liao/le and bian-liao. Following Bybee’s (2003) mechanisms of change in grammaticalization, this formation of fixed expressions is based on semantic similarity (e.g., ba-liao ‘stop-end’) and syntactic possibility (e.g., bian-liao ‘then-end’), but its result is a generalization or bleaching of the meaning of liao/le and even the meaning of all components in the fixed expressions, i.e., ‘that’s it.’ Moreover, the fixed expression ba-liao/le (literally ‘stop-finish/end’), formed with collocating Chinese characters with similar meanings, reinforces the sense that is central to both of the two characters – marking the endpoint for a certain event with force or resolution. One token of ba-liao/le and six tokens of bian-liao are found in the text. All the seven tokens of ba-liao/le and bian-liao are used in future events to convey certain kind of resoluteness on a newly made decision, as illustrated by examples (3.134)-(3.136).

(3.134) 不须多言! 我两个各自不许用军士，
Bu xu duo yan! Wo liang ge ge bu xu yong jun shi,
Not need many word! We two individual each not allow use military solider,

只自并输赢。赢的便把皇帝取去罢了。
zhi zi bing shu ying. Ying de bian ba huangdi qu qu ba-liao/le.
only self juxtapose lose win. Win one then BA emperor take go stop-end.

‘Why so many words? Let us forgo a battle and settle the matter in single combat, the winner to take the Emperor and go.’
(From Sanguo yanyi 三国演义)
弟自今以后，不饮酒，不打军士，

Younger-brother since today after, not drink wine, not beat military soldier,

诸般听人劝谏便了。

various listen person exhortation then-end.

‘Henceforth I will drink no more wine, I will not beat the soldiers, and I will always listen to advice.’

(From Sanguo yanyi 三国演义)

吾自作书覆之便了。

I self make letter cover it then-end.

‘I will write a letter to reply.’

(From Sanguo yanyi 三国演义)

The third fixed expression liao-dang了当, literally ‘finish-proper,’ functions similarly to a resultative complement attached right after a verb to indicate the proper completion of the action/verb. Dang当 is an adjective meaning ‘proper,’ which is similar to a commonly used resultative complement hao‘good, well.’ Here are the examples.

玄德吩咐了当，乃统马步军三万，

Zuande command finish-proper, then command horse walk army three ten-thousand,

离徐州望南阳进发。

leave Xu Region toward Nanyang set-out.

‘Xuande gave the final orders, then led the army of thiry thousand, horse and foot, left Xuzhou Region (and) marched toward Nanyang.’

(From Sanguo yanyi 三国演义)

关公见王植意甚殷勤，

Guan Gong see Wang Zhi meaning very hospitable,
遂请二嫂入城。
sui qing er sao ru cheng.
then invite two sister-in-law enter city.

馆驿中皆铺陈了当。 王植请公赴宴， [...] Guanyi zhong jie puchen liao-dang. Wang Zhi qing Gong fu yan
Hotel in all arrange finish-proper. Wang Zhi invite Gong go feast

‘Guan Gong saw (that) Wang Zhi (was) very earnest, then invited (the) two sisters-in-law (to) go into (the) city. Everything in (the) guest house (was) comfortably prepared (for them). Wang Zhi invited Gong (to) go (to a) feast, [...]’
(From Sanguo yanyi 三国演义)

In examples (3.137) and (3.138), the fixed expression liao-dang 了当 ‘finish-proper(ly)’ is
attached right after the verb ‘command’ and the verb ‘arrange’ to convey the proper completion
of ‘commanding’ and ‘arranging.’

I have discussed the semantics of liaolle as a suffix, a particle and in fixed expressions.

However, the distinction between suffix -le and particle le is not always clear cut. There are
situations in which le can be interpreted as a suffix or a particle. For instance,

(3.139) 策曰：“吾今准备了，取城只在今夜。”
Ce yue: “Wu jin zhunbei le, qu cheng zhi zai jin ye.”
Ce say: “I today prepare LE, get city only at today night.”
‘Ce said: “I prepared today, (so we can) get (the) city tonight.”’
‘Ce said: “I am prepared/ready today, (so we can) get (the) city tonight.”’
(From Sanguo yanyi 三国演义)

There are two readings for sentence (3.139). The first reading is ‘I did the preparation today, so
we can get the city tonight.’ In this reading, le is a suffix -le denoting the completion of the first
event prior to the speech time (i.e. a past event), which functions as the condition of the
following event. The second reading is ‘I am prepared/ready today (which is a new situation as I
didn’t prepare before), so we can get the city tonight.’ In the second reading, le is a particle le
indicating a change of state/situation. Without any further contextual information, (3.139) is
ambiguous at the sentence level. However, if we know the larger context, i.e., what happened previously, le in (3.139) should have a clear interpretation. If the context supports the idea that the subject didn’t prepare last time, then le in (3.139) indicates a ‘situation/state change.’ Conversely, if the context does not suggest a prior, unprepared attack of the city, le denotes a completed event (prior to the speech time), which functions as the condition of the following event. In other words, to the speaker ‘Ce’ and the listener in the novel, le in this expression should have a clear interpretation based on their background knowledge about the situation of getting the city. However, to readers who didn’t read the whole story, le appears ambiguous and may lead to follow up clarification questions, such as “did the guy fail to get the city before?”

Evans addresses this type of polysemy as conceptual polysemy (Evans, 2015, p. 101). ‘Completed event’ and ‘situation/state change’ both are part of le’s semantics. (The terms, suffix and particle, are labels to categorize part of the senses associated with the form le, for the sake of analysis and teaching.) “Linguistic context can serve to differentially highlight different aspects of the non-linguistic or encyclopaedic knowledge to which a word form facilitates access” (Evans, 2015), i.e., ‘completed event’ versus ‘situation/state change’ in this case. Here is another example in which le has two interpretations.

(3.140) 且 曰: “今 之 谋 望 不 成 者, 乃 刘 玄德、 马 腾
Qie yue: “jin zhi mou wang bu cheng zhe, nai Liu Xuande, Ma Teng
Qie say: “today of seek hope not succeed person, be Liu Xuande, Ma Teng
gezi qu le, wu ji ke shi, yin ci gan er cheng ji.”
separately go LE, no plan can apply, because this feel so become illness.”

‘Qie said: “Today (our) schemes won’t succeed, as Liu Xuande and Ma Teng left/are gone sepererately, (so) there is nothing (we) can do, (and) because (of) this (I) fell ill.”’
(From Sanguo yanyi 三国演义)
In (3.140), *le* can be a suffix indicating a past event ‘left’ or a particle denoting a change of state/situation, i.e., ‘are gone (now).’ The verb ‘leave’ alludes to a change between ‘Liu Xuande and Ma Teng’s presence’ and ‘Liu Xuande and Ma Teng’s absence.’ In this context, ‘left’ and ‘are gone’ are two different construals of the same event. The suffix use (i.e. the ‘past event’ interpretation in this case) profiles the sense of completion prior to the reference point, whereas the particle use highlights the situation/state change in relation to the reference point. The two different interpretations demonstrate that people have the cognitive abilities to access the same event from different perspectives.

To summarize, by the Yuan (1271-1368) and Ming (1368-1644) dynasties, *liaol*/*le* had highly grammaticalized with 99% of its usage found in the data being a suffix, particle or in fixed expressions. Consequently, it would not be surprising if *liao* experienced phonological reduction to *le* during this period. As a suffix, *-le* is primarily used in the first event of a series of events, to sequence the events or indicate the time, cause, prerequisite or manner of the following event, though it is also used to mark the pivot event or the last event in a series of events. The pivot event marked by the suffix *-le* is usually the result of the preceding event and the cause or prerequisite of the following event. The suffix *-le* used in the last event signals that the last event and all its preceding events in the series ended before the reference point (e.g. speech time or ‘now’), and thus, are past events. As we can see, the sentential location of the suffix *-le* and its semantics are logically linked together, genuinely reflecting conceptual principles temporal sequence, condition-action, and cause-effect. This principle also applies to the particle *le*. In the text from the Yuan (1271-1368) and Ming (1368-1644) dynasties, the particle *le* is mainly used at the end of an event complex to indicate the completion/closure of the whole series of events,
though it also denotes a change of state/situation in certain contexts. Logically, what follows the completion/closure of an event complex is another situation or state. As Tai (1983) points out, a hypothesis often put forward by Chinese philosophers is that “Chinese thought tends to emphasize the perception of the concrete” (Tai, 1983, p. 65). The sentential locations of *le* and its corresponding senses reflect a form of sequential iconicity (Taylor, 2002) – the first mentioned is the first to occur, the event appearing in the middle of a series of events represents the pivot, and the last element marks the closure.

*Rulin waishi* 儒林外史 (The Scholars)

I examined the first 300 tokens of *LIAO/LE* in *Rulin waishi* 儒林外史 (The Scholars) written in the Qing dynasty (1644-1912). (Note that, according to Peyraube [2016], the period for modern Chinese is from the middle of the thirteenth century to the middle of the nineteenth century. After that is the period for contemporary Chinese [Peyraube, 2016, p. 1]. Thus, the data from *Rulin waishi* 儒林外史 [The Scholars] primarily reflects the features of modern Chinese.)

99% of the tokens examined are in grammaticalized forms. Only 1% of the tokens are in lexical form (Table 3.9). Among the grammaticalized forms, the dominant use of *le* is as a suffix, representing 69.7% of the tokens examined. The second most frequently used form of *le* is a particle, representing 27.3% of the tokens examined. *Liao(le)* also appears in fixed expressions, including the familiar *ba-liao(le)* 罢了 ‘that’s it,’ *bian-liao* 便了 ‘that’s it,’ and a new form *bu-liao* 不了 (a verb complement denoting ‘cannot.’)
Table 3.9
Frequency measures for LIAO/LE Rulin waishi 儒林外史 (The Scholars)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexical liao</strong></td>
<td>3</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Suffix -le</strong></td>
<td>209</td>
<td>69.7%</td>
</tr>
<tr>
<td><strong>Particle le</strong></td>
<td>82</td>
<td>27.3%</td>
</tr>
<tr>
<td><strong>Suffix/Particle</strong></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>In fixed expressions</strong></td>
<td>4</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

The distribution of the functions of liaol/le in the data from the Qing dynasty (1644-1912) is similar to that of the Yuan (1271-1368) and Ming (1368-1644) dynasties. However, a new trend shown in the data is that liaol/le is used more frequently in the Qing dynasty. There are sentences in which every clause has one or more liaol/le. This suggests the entrenchment of the previously established senses or functions of liaol/le. For instance,

(3.141) 到 了 早 饭 时 候， 为 头 的 申 祥 甫 带 了 七 八 个 人
Dao-Le zaofan shihou, wei tou de Shen Xiangfu dai-le qi ba -ge ren
Arrive-LE breakfast time, as head DE Shen Xiangfu bring-LE seven eight-CL person

走 了 进 来， 在 殿 上 拜 了 佛。
Zou-Le jin lai, zai dian shang bai Le fo.
walk-LE enter come, in main-hall on worship-LE Buddha.

‘When (it) was (the) breakfast time, Shen Xiangfu as (the) lead, with seven (or) eight others, walked in, (and) in (the) main hall (they) bowed (to) Buddha.’
(From Rulin waishi 儒林外史)

In example (3.141), there are four events/verbs in three clauses. Each event/verb is marked by a suffix le, and each of the uses of le is somewhat different. The first -le is used in the first clause (‘arrive-LE breakfast time’) to indicate the temporal information of the following event. The second -le marks an event that suggests the manner of the next event, i.e., ‘bring-LE/with seven
or eight people.’ The third -le, on one hand, marks the manner of the entering event, i.e. ‘walking,’ on the other hand, sequences the last two events, i.e. ‘after they walked in, they bowed to Buddha.’ The fourth -le is used in the last event of the series of events to indicate the last event took place before the reference time (i.e., the speech time or ‘now’).

During the Qing dynasty (1644-1912), liaolle is not only used more frequently, but also more flexibly in terms of its sentential location. For example, in (3.141), the use of the suffix -le to sequence events or indicate the manner of the next event is not limited to the first event, but can appear in any suitable event in a series. This represents an important shift or expansion in the function of liaolle. Moreover, the data from the Qing dynasty also reveals more meanings/functions of liaolle, such as indicating ‘a change soon to happen,’ ‘a state/situation change along a continuum,’ ‘a conviction,’ and ‘a change into an extreme degree.’

As shown in Table 3.10 below, the lexical liao is a verb meaning ‘to finish/complete/end.’ The top three most frequently used functions of the suffix -le are to sequence events, with 67 tokens or 22.3% of the total tokens examined; to mark the pivot event with 45 tokens or 15% of the total tokens examined; and to indicate the last/resulting event with 32 tokens or 10.7% of the total tokens examined. This is similar to the use of the suffix -le in the Yuan and Ming dynasties. However, different from the Yuan and Ming dynasties, when the suffix -le was used to signal temporal information, prerequisite, cause, or manner of the following event in the text from the Qing dynasty, it no longer had to be in the first event, but can be in any event except for the last event. The top three dominant functions of the particle le are to denote contrastive change of state/situation with 40 tokens or 13.3% of the total tokens examined, to express conviction with 16 tokens or 5.3% of the total tokens examined, and to
indicate closure of an event or a series of events with 16 tokens or 5.3% of the total tokens examined.

Table 3.10
Senses of LIAO/LE in Rulin waishi 儒林外史 (The Scholars)

<table>
<thead>
<tr>
<th>Sense</th>
<th>Lexical liao</th>
<th>Suffix -le</th>
<th>Particle le</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘to finish/complete/end’</td>
<td>3 (1.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘sequencing events’</td>
<td>0 (0.0%)</td>
<td>67 (22.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘temporal information’</td>
<td>0 (0.0%)</td>
<td>10 (3.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘condition’</td>
<td>0 (0.0%)</td>
<td>8 (2.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘cause’</td>
<td>0 (0.0%)</td>
<td>6 (2.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘manner’</td>
<td>0 (0.0%)</td>
<td>11 (3.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘pivot’</td>
<td>0 (0.0%)</td>
<td>45 (15.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘last/resulting event’</td>
<td>0 (0.0%)</td>
<td>32 (10.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘closure (of a series)’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>16 (5.3%)</td>
</tr>
<tr>
<td>‘past event’</td>
<td>0 (0.0%)</td>
<td>29 (9.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘contrastive change of state/situation’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>40 (13.3%)</td>
</tr>
<tr>
<td>‘a state/situation change along a continuum’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (1.3%)</td>
</tr>
<tr>
<td>‘a change soon to happen’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2 (0.7%)</td>
</tr>
<tr>
<td>‘a change into an extreme degree’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (1.3%)</td>
</tr>
<tr>
<td>‘conviction’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>16 (5.3%)</td>
</tr>
<tr>
<td>‘emphasizing result’</td>
<td>0 (0.0%)</td>
<td>1 (0.3%)</td>
<td>0 (0.0%)</td>
</tr>
</tbody>
</table>

In the following paragraphs, I first analyze the new senses or functions of le – ‘a state/situation change along a continuum,’ ‘a change soon to happen,’ ‘a change into an extreme degree,’ and ‘conviction.’
degree’ and ‘a conviction’ – one by one, and then discuss the newly identified negative form bu-liao 不了 (literally ‘not-end’) as a verb complement.

I have discussed the contrastive change of state/situation conveyed by the particle le in the previous section/period. Some state/situation changes involve only two states or situations, e.g. ‘having it’ and ‘not having it;’ whereas other state/situation changes take place stage by stage along a certain continuum. The particle le, which has been used to indicate contrastive state/situation change, expands to cover state/situation changes along a continuum. This meaning extension is made possible due to pragmatic strengthening (Tyler & Evans, 2003). That is, since ‘state/situation change’ is already established in the semantics of the particle le, the contextual implicature – ‘the change takes place stage by stage along a continuum’ – can become conventionally associated with the particle le through repeated use of the particle le in this type of contexts. When the particle le is used for a change of state/situation along a continuum, it projects a scale of progression from the lowest degree to the highest degree, and even to the extreme degree, which is the endpoint of the progression scale. For example,

(3.142) 看看三个年头，王冕已是十岁了。  
Kan kan san-ge nian-tou, Wang Mian yi shi shi sui le.  
Watch watch three-CL year-head, Wang Mian already is ten year-old LE.  
‘Soon three years (had passed), (and) Wang Mian was already ten years old.’  
(From Rulin waishi 儒林外史)

In sentence (3.142), the particle le following the verb-object construction shi shi sui ‘is/was ten years old’ indicates that ‘being ten years old’ is a newly acquired stage in Wang Mian’s growth. The temporal expression in the first clause and the adverb yi ‘already’ both create a suitable environment for a ‘change of state along a continuum’ reading of Wang Mian’s being ten years old. In this context, the particle le is necessary. Without the particle le to convey the sense of a
change of state/situation along a continuum, sentence (3.142) is odd. A similar expression
without the context and the particle le,

王冕是十岁
Wang Mian shi shi sui
Wang Mian is ten years-old
‘Wang Mian is ten years old’

does not have a ‘change along a continuum’ reading, but a stative reading. Below is another
example to show that without the context, the particle le alone can denote a change of
state/situation along a continuum.

(3.143) a. 他 就 问 道： “方才 这 小学生 几 岁 了?”
Ta jiu wen dao: “fangcai zhei xiaoxuesheng ji sui le?”
He then ask say: “just-now this primary-school-student how old LE?”
‘He then asked (and) said: “How old is the primary school student (who was here) just
now by now/this year?”’
(From Rulin waishi 儒林外史)

In sentence (3.143a), there is no context that promotes the reading of change along a continuum.

Only with the particle le, sentence (3.143a) still conveys a change of state/situation with respect
to a scale of progression, i.e., the increase of age as measured by year. In contrast, sentence
(3.143b) without the particle le simply describes a stative situation of ‘being ten years old.’

(3.143) b. 他 就 问 道： “方才 这 小学生 几 岁?”
Ta jiu wen dao: “fangcai zhei xiaoxuesheng ji sui?”
He then ask say: “just-now this primary-school-student how old?”
‘He then asked (and) said: “How old is the primary school student (who was here) just
now?”’

Here is another example of the particle le denoting a change along a continuum.

(3.144) 王 举人 道： “这 话 更 不 作 得 准 了。[...]”
Wang Juren dao: “zhei hua geng bu zuo de zhun le. […]”
Wang Juren say: “this word even-more not as DE accurate LE. [...]”
‘Junren Wang said: “This saying is even more inaccurate. [...]”
(From Rulin waishi 儒林外史)
In sentence (3.144), the adverb *geng* ‘even-more' suggests an increase of degree. The particle *le* denotes a change along with a scale that is, the increase of degree of inaccuracy suggested by the predicate.

The sense of a state/situation change along a continuum of the particle *le* appears extended from the contrastive state/situation change of the particle *le*. While the contrastive change only involves two opposite stages, the change along a continuum projects a scale of progression with several stages from the lowest to the highest degree. Figure 3.17 depicts the sense of a state/situation change along a continuum signaled by the particle *le*.

![Figure 3.17 ‘State/situation change along a continuum’ sense of the particle *le*](image)

In Figure 3.17, S represents the scale of the progression of an event. The scale is composed of a series/sequence of stages toward an extreme degree (ED). The heavy-lined marked stage represents the newly acquired stage signaled by the particle *le*. The arrow with a curvy dotted line indicates the change takes place step by step following the stages on the scale. The scale or progression is situated in a time line, and the change takes place at the reference point (RP). Depending on the RP, the state/situation change along a continuum can be a past, present or future event.
I have shown that the particle *le* can be used to indicate contrastive state/situation changes and state/situation changes along a continuum, or new situations (Chao, 1968) in general. This use of the particle *le* is the dominant or most frequently used function of the particle *le* in the text from the Ming dynasty (1644-1912). Consequently, the sense of a state/situation change became so entrenched in the particle *le* that the particle *le* extended to express a change or new situation that has not happened yet but will happen soon. For example,

(3.145) 如今 没 奈何，把 你 雇 在 间壁 人 家 放 牛，
Rujin mei naihe, ba ni gu zai jianbi ren jia fang niu,
Now no how, BA you hire at next-door person family release cow,

每 月 可 以 得 他 几 钱 银子，
mei yue keyi de ta ji qian yinzi,
evry month can get he several money silver,

你 又 有 现成 饭 吃，只 在 明日 就 要 去 了。  
ni you you xiancheng fan chi, zhi zai mingri jiu yao qu LE.  
you again have ready-made food eat, only in/at/on tomorrow right-away will go LE.

“Now there is nothing (but to) set you to work looking after (our) neighbour’s buffalo. Every month (you) can get some money (from) him, (and) you (will) also have ready-made meals (to) eat. (You will) go (there) tomorrow.”
(From Rulin waishi 儒林外史)

In the last clause of example (3.145), the time word *mingri* ‘tomorrow’ and the adverb *jiu* ‘right-away’ suggest that a new event/situation will take place soon. In this context, it is odd or ungrammatical to omit the particle *le*. In fact, *jiu*-predicate-*le* has become a fixed construction in modern Chinese for describing events/changes soon to happen. Here is another example.

(3.146) 一 日，母亲 吩咐 王 晁 道：‘我 眼见得 不济事 了。[...]’
Yi ri, muqin fenfu Wang Mian dao: ‘wo jian-jian-de bu-jishi LE. [...]’
One day, mother tell Wang Mian say: “I soon no-use LE. [...]”
‘One day, (his) mother told Wang Mian: “I will be useless (or die) soon. [...]”’
(From Rulin waishi 儒林外史)
In sentence (3.146), the expression *yan-jian-de* (literally ‘eye can see’=‘soon’) is an equivalent of the adverb *jiu* ‘soon,’ and the particle *le* indicates the new state/situation ‘being useless/dead’ soon to happen in modern Chinese.

As mentioned previously, when the particle *le* is used for a change of state/situation along a continuum, it projects a scale from the lowest degree to the highest degree, and even to the extreme degree, which is the endpoint of the progression scale. As an event progresses along with the scale, the last step of change is to reach the endpoint, i.e. the extreme degree. Therefore, the particle *le* can be used to denote a change into the extreme degree, as depicted by Figure 3.18.

![Figure 3.18 'Change into extreme degree' sense of the particle *le*](image)

**Figure 3.18 ‘Change into extreme degree’ sense of the particle *le***

Figure 3.18 profiles a change into the extreme degree indicated by the particle *le*. The scale (S) represents the progression of an event. The progress of an event ends at the extreme degree (ED). The particle *le* denotes that the event changes into the extreme degree at the reference point (RP) situated in time (T).

Here are examples demonstrating the change into the extreme degree sense denoted by the particle *le*.
(3.147) a. 你方才也太执意了。
    Ni fangcai ye tai zhiyi le.
    ‘You just-now also too obstinate LE.
    ‘You were too obstinate just now.’
    (From Rulin waishi 儒林外史)

In sentence (3.147a), the situation described by the predicate tai zhiyi ‘too obstinate’ is an extreme degree. The particle le indicates a change to this extreme degree in modern Chinese. Note that, without the le, a similar expression (3.147b) is stative, and no sense of change is expressed.

(3.147) b. 你太执意。
    Ni tai zhiyi.
    ‘You are too obstinate.’

(3.148) 时知县道：‘[…] 他听见老师相爱，自然喜出望外了。’
    Shi Zhixian dao: “ta tingjian laoshi xiangai, ziran xi-chu-wang-wai le.”
    Shi Zhixian say: “he hear teacher love, naturally overjoyed LE.”
    Shi Zhixian said: “[…] (if) he hears (that the) teacher likes (him), (he will) of course (be) overjoyed.”
    (From Rulin waishi 儒林外史)

(3.149) 票子传著倒要去，
    Piaozi chuan zhe dao yao qu,
    Ticket summon-ZHE on-the-contrary want go,

帖子请著倒不去？这不是不识抬举了！
    tiezi qing zhe dao bu qu? Zhe bu shi bu -shi -ta -ju le!
    invitation invite-ZHE on-the-contrary not go? This not is not recognize raise lift LE!

“Served with (a) summons, you want (to) go; asked (by) invitation, you don’t. You simply don’t know what’s good for you!”
    (From Rulin waishi 儒林外史)

In examples (3.148) and (3.149), the extreme degree is expressed by the idioms xi-chu-wang-wai ‘overjoyed’ and bu-shi-tai-ju ‘not know what’s good for someone’ respectively. In sentence (3.148), the particle le indicates that the speaker, Shi Zhixian, believes that the person’s
emotional state will switch into an extreme degree, i.e., ‘being overjoyed.’ In sentence (3.149), the particle le may denote the subject’s change into the extreme situation ‘not knowing what’s good for him,’ or the speaker’s new realization or conclusion on the subject’s attitude. In other words, the change into an extreme degree may be the objective change in the situation or the speaker’s mental activity on a long-lasting situation. This is in line with Chao’s (1968) new situation or new to the speaker distinction (Chao, 1968, p. 798).

I have analyzed the three new senses associated with the particle le found in the data from the Qing dynasty (1644–1912) – ‘a state/situation change along a continuum,’ ‘a change soon to happen’ and ‘a change into an extreme degree.’ The systematic development of these three senses of the particle le is diagrammed in Figure 3.19 (see page 297).

The last new sense of the particle le found in the text from the Qing dynasty (1644-1912) is to express conviction, i.e., assurance or certainty about the content of a predication. As shown in Table 3.10 above, this sense is the second most frequently used sense of the particle le in the data from the Qing dynasty. Whorf (1938) points out that sentence-end marking can denote a “force of conviction” in his table of Language: Plan and Conception of Arrangement (in Carroll edited, 1956, p. 127). The conviction sense of the particle le may extend from the function of marking the completion or closure of an event or event complex. When the predication closed up by the particle le is a certain judgement, the particle le functions as a force of conviction to express the speaker’s attitude about the judgement. In the data, all of the predications marked by the particle le as a force of conviction are copulative or adjectival, that is, the lexical meaning of the verb is bleached, but serves to indicate the identity, quantity or condition of the subject.
Without the particle *le*, it is assumed that the predication expresses a general truth. With the particle *le*, it signals that it is the speaker’s conviction. Here are the examples in which the particle *le* exhibits force of conviction.

**Figure 3.19 Liao/le’s semantic network 9**

*(Rulin waishi 儒林外史 [The Scholars], Qing dynasty [1644-1912]*)

297
He thinks (that that guy must) be (the) host, (as that guy) sits in (the) lowest place (and) pour (the) wine.'

(From *Rulin waishi* 儒林外史)

In sentence (3.150), the particle *le* marks the judgement ‘(that guy) is the host’ to show that the speaker has a strong feeling of confidence about the judgement being right or true. The clause following the particle *le* is to provide evidence supporting the judgement that ‘(that guy) is the host.’

(3.151) 前 日 小 婿 来 家, 带 二 斤 乾 鹿 肉 来 见 惠,
Qian ri xiao xu lai jia, dai er jin gan lu rou lai jian Hui,
Before day little son-in-law come home, bring two-CL dried deer meat come see Hui

这 一 盘 就 是 了。
zhe yi pan jiu shi le.
this one plate exactly is LE.

‘The day before yesterday, my son-in-law came to visit me, bringing two catties (of) dried venison – this plate (of dish) is (it).’

(From *Rulin waishi* 儒林外史)

In sentence (3.151), the particle *le* is used to promote conviction on the statement that ‘this plate of dish exactly is the dried venison that my son-in-law brought.’

(3.152) 那 瘦 子 道: “危 老 先 生 要 算 一 个 学 者 了。”
Na shouzi dao: “Wei lao xiansheng yao suan yi ge xuezhe le.”
That thin-person say: “Mr. Wei will/should consider one-CL scholar LE.”

‘That thin man said: “Mr. Wei should be considered a scholar.”’

(From *Rulin waishi* 儒林外史)

In sentence (3.152), the speaker, ‘the thin man,’ passed a judgement about ‘Mr. Wei’s being considered a scholar.’ The particle *le* denotes the speaker’s attitude or stance (i.e., epistemic viewpoint) (Dancygier & Moder, to appear) toward the content of the predication. That is, the
speaker is confident that the predication is either true or right, but it is unclear if his opinion is accepted by the public. In contrast, without the particle *le*, it is assumed that the predication is true by default, i.e., ‘Mr. Wei should be considered a scholar’ is commonly accepted as true. It is worth mentioning that in the text what follows sentence (3.152) is another person’s statement about how the emperor showed respect to Mr. Wei. In this conversation, the thin man made a predication and expressed his conviction about the truth or rightness of the predication by using the particle *le*. The listener replied by providing evidence to support the thin man’s conviction.

Based on Dancygier and Moder, *le* in this usage functions as a “modal” particle signaling stance-related viewpoint, i.e., “strength of speaker’s commitment to the proposition or epistemic” (Dancygier & Moder, to appear). Dancygier and Moder point out that modal constructions can express “the speaker’s stance on the likelihood of the future event occurring or the past events being factual” (Dancygier & Moder, to appear). Example (3.153) below illustrates the use of the modal particle *le* for a future event.

(3.153) 河水北流，天下自此将大乱了。
River water north flow, sky below since this will big messy *le*.
‘River water flows northward (which has left its course). This invariably is (a) prelude to (a period of) great chaos.’
(From *Rulin waishi* 儒林外史)

In example (3.153), the speaker made a prediction that ‘there will be great chaos in the world,’ and the speaker is convinced of this as it is signaled by the fact that the water flow has left its course.

The data shows that during the Qing dynasty (1644-1912), the particle *le* can not only denote the speaker’s conviction on the predication, but also indicate the listener’s confirmation about the speaker’s conviction. For instance,
(3.154) 那 翟 买办 道：
Na Zhai maiban dao:
That Zhai comprador say:

“只位 王相公，可就是会画没骨花的么？”
“zhi -wei Wang xianggong, ke jiu shi hui hua mei gu hua de me?”
“this-CL Wang sir, really exactly is can draw no bone flower DE ME?”

老道：“便 是了。亲家，你怎得知道?”
Qin lao dao: “bian shi le. Qin jia, ni zen de zhidao?”
Qin old say: “then is LE. Closely-related family, you how get know?”

‘That Bailiff Zhai said: “Is this Mr. Wang exactly the painter who can draw no-bone flower?”
Old Qin said: “(Yes, he) is. My friend, how (did) you get (to) know (of him)?”
(From Rulin waishi 儒林外史)

In example (3.154), Bailiff Zhai expressed his judgement about a person in a question formation.

Old Qin confirmed Mr. Zhai’s judgement by using bian shi le ‘then is LE.’ The particle le
denotes the listener’s attitude about the truth or rightness of the speaker’s utterance. (Note that in
contemporary Chinese, sentence final interjection a 啊 is used instead of the particle le.)

I have analyzed how the particle le extends from marking the closure of an event or event
complex to expressing speaker’s stance, i.e. ‘conviction.’ This sense of le is illustrated in Figure
3.20 (see page 301).

The data from the Qing dynasty (1644-1912) suggests that the particle le does not have to
appear at the sentence final position, although it is called the ‘sentence final particle le’ by many
linguists (e.g., Li & Thompson, 1981). Sentence (3.150) above is an example. Here is another
example.
如果（the）牛（is）口渴，（it can）在湖 边上 饮水。

"If (the) cow (is) thirsty, then (it can) drink water at (the) side (of the) lake."

(From *Rulin waishi* 儒林外史 [The Scholars], Qing dynasty [1644-1912])

Figure 3.20 Liaole’s semantic network 10

*Rulin waishi* 儒林外史 [The Scholars], Qing dynasty [1644-1912]
Sentence (3.155) shows that by this period the particle *le* has acquired its grammatical freedom and does not have to appear at the end of a sentence or a sequence of clauses. Instead, it can be used in the middle of a sentence to convey the sense of state change between ‘not thirsty’ and ‘thirsty.’ These examples demonstrate that although the senses of state/situation change and conviction of the particle *le* are extended from its sense of closure of an event or event complex, once the extended senses are established in the Chinese language, they obtain the freedom in regards to the sentential location, and do not have to be constrained to the sentence final position.

Moreover, Li and Thompson claim that “*-le in general does not occur in negative sentences” (Li & Thompson, 1981, p. 204), but the data from the Qing dynasty (1644-1912) shows that the suffix *-le* could be used in negative sentences\(^65\). For example,

(3.156) 中了，也不枉了今日这一番心事。
Zhong-le, ye bu wang-le jinri zhe yi -fan xinshi.
Pass -LE, also not waste-LE today this one-CL load-on-one’s-mind.
‘(If he) passes (the examination), today’s suffering is not wasted.’
(From *Rulin waishi* 儒林外史)

In sentence (3.156), the second suffix *-le* is used right after the negative verb and before the object. This suffix *-le* emphasizes the result of ‘not wasting anything.’ (The warning/emphasis sense of the suffix *-le* has been discussed in the previous section/period.) Below is another example of the suffix *-le* appearing in a negative sentence.

(3.157) 每日点心钱，他也买不了吃，聚到一两个月
Mei ri dianxin qian, ta ye bu mai-le chi, ju dao yi liang-ge yue
Every day snack money, he also not buy-LE eat, accumulate to one two -CL month
‘(As for the) everyday snack money, he also (does) not buy (a snack and) eat (it), (but) saves up for one (or) two months’ (From *Rulin waishi* 儒林外史)

\(^{65}\) Note that although the division between modern Chinese and contemporary Chinese is the middle of the nineteenth century (Peyraube, 2016), the modern usage of *-le* in examples (3.156) and (3.157) is similar to its contemporary usage.
The suffix -le is used in a negative clause in sentence (3.157). The -le functions to sequence events – first to buy snack and then eat it. The negation adverb bu ‘not’ negates this entire series of events. In other words, -le and negation are not always incompatible as proposed by Li and Thompson (1981). -Le can be used to sequence a series of events, and at the same time the entire series of events can be negated.

Not only can le as a suffix appear in negative context, le as a complement can also be used in negative construction. In addition to the familiar fixed expressions ba-liao/le罢了 ‘that’s it’ and bian-liao 便了 ‘that’s it,’ a new fixed expression bu-liao 不了 (literally ‘not-end’) as a verb complement emerged in the text from the Qing dynasty. Here are the examples.

(3.158) 家家都兴龙灯, 我料想看个不了,  
Jia jia dou xing long deng, wo liao xiang kan ge bu-liao,  
Family family all flourish dragon lantern, I predict think watch GE not-end, 

那得功夫来看乡里这条把灯。  
na de gongfu lai kan xiang li zhe tiao ba deng.  
where get time to watch village in this strip handle lanton. 

‘Every family is having dragon lanterns, (so) I think I cannot watch (them) all, (as) where do I get (the) time to look at (all) the lanterns in the village?’  
(From Rulin waishi 儒林外史) 

In sentence (3.158), the fixed expression involving ‘negative + liao,’ bu-liao ‘not-end,’ is used after the verb kan ‘watch, look at’ to mean ‘cannot finish watching all.’ (The word ge 个 is beyond the scope of this study, and is not discussed here.) In this example, bu-liao ‘not-end’ is a complement indicating that the subject does not have the potential to complete the action expressed by the verb.
In example (3.159), negative form *bu-liao* ‘not-end’ is used after the adjective *taoqi* ‘naughty’ to describe how naughty the subject is. In this case, *bu-liao* ‘not-end’ is a complement denoting the degree of the situation described by the adjective.

To sum up, *le/liao* flourished in the Qing dynasty (1644-1912). The suffix *-le* and the particle *le* are used more frequently. This demonstrates that the previously established senses of *le* have become entrenched in the semantics of *le*. More senses or functions of *le* emerged, including the particle *le* conveying ‘a change of state/situation along a continuum,’ ‘a change soon to happen,’ ‘a change into an extreme degree,’ and ‘a conviction.’ Additionally, the negative complement *bu-liao* ‘not-end’ also surfaced. During the Qing dynasty, the suffix use and the particle use are still the most and second most frequently used functions of *le/liao* respectively. Both the suffix *-le* and the particle *le* exhibit flexibility in regards to sentential location. The suffix *-le* denoting time, condition, cause, and manner is no longer constrained in the first event of a series of events. The particle *le* expressing a change of state/situation and conviction is not restricted to the sentence final position. This signals that these senses or functions of *le* have been more firmly established in the language by the Qing dynasty (1644-1912).
The Corpus of Center for Chinese Linguistics of Peking University (Modern Chinese Section)

I examined the first 300 tokens of le/liao and their contexts extracted from the Modern Chinese Corpus of the CCL. More fixed expressions or words with le/liao emerge and represent a big portion (15%) of the data (Table 3.1). The fixed expressions or words with LE/LIAO are *wei-le* ‘in order to, for,’ *chu-le* ‘except for, in addition to,’ *liao-jie* ‘know, understand,’ and *ming-liao* ‘clear.’ Of course, the 300 tokens do not reveal all the fixed expressions and words with le/liao in modern Chinese. The suffix *-le* is still the dominant function of le/liao with 243 tokens or 81.0% of the total tokens examined.

**Table 3.11**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexical liao</strong></td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Suffix -le</strong></td>
<td>243</td>
<td>81.0%</td>
</tr>
<tr>
<td><strong>Particle le</strong></td>
<td>10</td>
<td>3.3%</td>
</tr>
<tr>
<td><strong>Suffix/Particle</strong></td>
<td>2</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>In fixed forms</strong></td>
<td>45</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Except for the fixed expressions or words, only one new sense of le/liao is found in the data, which is the suffix *-le* indicating ‘actualization.’ As shown in Table 3.12, for the suffix *-le*, the most frequently used senses are denoting ‘past event,’ ‘actualization,’ and ‘last or resulting event.’ The particle *le* is mainly used to express ‘change of state/situation.’
Table 3.12
Senses of LIAO/LE in the Modern Chinese Corpus of the CCL

<table>
<thead>
<tr>
<th>Sense</th>
<th>Lexical liao</th>
<th>Suffix -le</th>
<th>Particle le</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘sequencing events’</td>
<td>0 (0.0%)</td>
<td>3 (1.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘temporal information’</td>
<td>0 (0.0%)</td>
<td>12 (4.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘condition’</td>
<td>0 (0.0%)</td>
<td>4 (1.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘cause’</td>
<td>0 (0.0%)</td>
<td>11 (3.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘pivot’</td>
<td>0 (0.0%)</td>
<td>5 (1.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘last or resulting event’</td>
<td>0 (0.0%)</td>
<td>38 (12.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘past event’</td>
<td>0 (0.0%)</td>
<td>114 (38.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘actualization’</td>
<td>0 (0.0%)</td>
<td>56 (18.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>‘contrastive change of state/situation’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>6 (2.0%)</td>
</tr>
<tr>
<td>‘change of state/situation along a continuum’</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (1.3%)</td>
</tr>
</tbody>
</table>

Before I analyze the new sense ‘actualization,’ I demonstrate the difference between the most frequently used senses of the suffix le – ‘past event,’ ‘actualization,’ and ‘last or resulting event’ – with examples from the corpus data.

(3.160) 泰勒 提出 了 选择 学习 经验 的 五 条 原则
Tyler put forward five principles for choosing study experience.

In example (3.160), the suffix -le is attached right after the verb to indicate the action ‘put forward’ was finished prior to the reference point, i.e. the speech time or ‘now,’ hence, a past event.

(3.161) 我 国 教育 理论 工 作者 学习 马 克思 列 宁 主义、
Our country education theory work person study Marxism-leninism
Our country’s education theory researchers studied Marxism-leninism (and) Mao Zedong’s thoughts, […], summed up (the) experience (of) education (in) our country, (and) compiled (and) wrote many […] education theory books.’

In example (3.161), there are three verbs ‘study,’ ‘sum up’ and ‘compile-write.’ However, there is only one le which is suffixed to the last verb as ‘compiled/wrote many education theory books’ is the last, resulting event.

(3.162) ‘The Law on Compulsory Education puts forward several types (of) restrictive measures towards (the) various kinds (of) behavior that obstruct compulsory education in society, […]’

In example (3.162), the suffix -le is used right after the verb ‘put forward;’ however, the event marked by -le is interpreted neither as a past event nor as a resulting event. Instead, the event marked by -le in (3.162) describes a fact which is true since it came into being, i.e., since the law was made in this case. Hence, the suffix -le functions to denote the actualization of the event expressed by the verb. Once the event is actualized, it exists or lasts as a fact, general truth or belief. The event marked by the suffix -le denoting ‘actualization’ can even be interpreted as a state ‘has restrictive measures.’ Without the suffix -le, the expression in (3.162) is odd.
In this section, I focus on analyzing the ‘actualization’ sense of the suffix -le. Here are more examples from the CCL in which the suffix -le denote ‘actualization’.

(3.163) 心理学 研究表明，在婴儿期，
Psychology research show, in infant period,

心理学研究表明，在婴儿期，
Psychology research shows (that) in infant period,

孪生子的语言和认知能力就有差异。
Twins' language and cognition ability then have difference.

‘Psychology research shows (that) twins’ language and cognition abilities have had differences during the infant period.’

(3.164) 一个，作为生命个体，从出生之日起，就与周围环境，特别是社会环境构成矛盾。
One-CL person, as life individual, from birth of day start, then with surrounding environment, especially is social environment form contradiction

A person, as a life, starting from (the) date of birth, has formed (a) contradiction with (the) surrounding environment, especially (the) social environment.’

(3.165) 受精卵中的遗传基因既包含父方的
Fertilized egg in of genetic gene both contain father side of

受精卵中的遗传基因既包含父方的遗传信息，又包含母方的遗传信息。
Fertilized egg of genetic gene both contain father side of hereditary information and contain mother side of hereditary information.

‘The genetic genes in a fertilized egg contain both the father’s genetic information and the mother’s genetic information.’

(3.166) 我国的《义务教育法》规定了义务教育的
My country of compulsory education law stipulate compulsory education of
Our country’s *Law on Compulsory Education* stipulates (that the) starting age for compulsory education is 6 years old, […]’

As we can see, examples (3.163)-(3.166) describe a certain fact, general truth or belief. The use of the suffix *-le* in these examples is different from the uses of the suffix *-le* discussed previously (e.g., sequencing, conveying temporal information, condition, cause or manner of the following event, pivot, last or resulting event, past event, or warning/emphasis). This use of the suffix *-le* treats the stative like fact, general truth or belief as an event that has actualized at a starting point prior to the reference point (e.g., speech time or ‘now’) and exists hereafter. That is, the suffix *-le* can be used to indicate the actualization of events. The actualization sense of the suffix *-le* is illustrated in Figure 3.21.

![Figure 3.21 ‘Actualization’ sense of the suffix *-le*](image)

In Figure 3.21, the event is profiled by the suffix *-le* as shown by the heavy lines. It is actualized prior to the reference point (RP). The event exists after its actualization and its endpoint is unspecified, as shown by the heavy-lined span on the time line.

In examples (3.163) and (3.164), the initial point of the actualization of the event marked by the suffix *-le* is specified as ‘in the infant period’ and ‘the date of birth’ respectively.
Although example (3.165) does not have a temporal clause explicitly stating the initial point of the actualization of the event, the subject ‘fertilized egg’ implies that the starting point is the time when an egg is fertilized. For example (3.166), the initial point of the actualization of the event marked by the suffix -le is the time when *The Law on Compulsory Education* came into being before the speech time. Once the events are initialized or actualized as marked by the suffix -le, they last as if they are states, i.e., ‘have differences,’ ‘are contradictive,’ ‘have parental genetic information,’ and ‘has a stipulation on the age’ respectively for examples (3.163)-(3.166).

Smith points out that “there are three main viewpoint types, perfective, imperfective, and neutral. […] Perfective viewpoints focus a situation in its entirety, including both initial and final endpoints. Imperfective viewpoints focus part of a situation, including neither initial nor final endpoints. Neutral viewpoints are flexible, including the initial endpoint of a situation and at least one internal stage (where applicable).” (Smith, 1997, p. 3) This use of the suffix -le denotes Smith’s neutral viewpoint. This may solve Li and Thompson’s self-contradiction in claiming the suffix -le as a perfective aspect marker that “need not necessarily signal completed action” (Li & Thompson, 1981, p. 215).

The actualization use of the suffix -le reveals that Chinese speakers can include the concept of a state (e.g., fact, general truth or belief) in a description of an action or a non-stative event. In this usage, the suffix -le can be attached to an action verb (e.g., *tichu-le* ‘put forward-le’). Moreover, because the suffix -le marks completed actions more frequently and has a long history of doing so, the use of the suffix -le gives rise to a reading of an action. However, different from what the surface structure might suggest, the content of the expression is in fact a state. A similar argument has been made by Whorf (1941). Whorf points out that the expression *I
*hold it* actually describes a state of relative positions; however, it is commonly thought of as an action because of the SOV formulation, which expresses actions more frequently (In Carroll edited, 1956, p. 243).

As mentioned above, the actualization use of the suffix *-le* can be used to resolve Li and Thompson’s self-contradictory example (3.46) mentioned in the literature review section and repeated here.

(3.46) 墙上挂了一幅画。
Qiang -shang gua -le yi -fu hua
Wall -on hang -PFV one -CL picture
‘A painting was hung on the wall.’
‘A painting had been hung on the wall.’
‘On the wall hangs a painting.’

While Li and Thompson (1981) argue that the suffix *-le* marks a perfective (PFV) event, they also believe that sentence (3.46) can be either perfective or stative as shown by their English translations. In fact, the structure of this sentence is Place Word-Verb-Object. This is a typical existential sentence structure in Chinese. Therefore, the sentence is better understood as ‘there is a painting hanging on the wall,’ and this event is actualized by the suffix *-le*. Without the suffix *-le*, the event is not actualized yet, namely, there is no painting on the wall. The expression without the suffix *-le*

墙上挂了一幅画。
Qiang -shang gua yi -fu hua
Wall -on hang one -CL picture
‘Hang a picture on the wall.’

-- is an imperative expression or a suggestion.

The ‘actualization’ sense of the suffix *-le* seems to have derived from the ‘finish/complete/end’ sense of *liao*. Based on our experience, when an event or action was
finished prior to the reference point, it may become the starting point of a certain existence. For instance, when the action of hanging a picture on the wall was performed and finished, the picture exists on the wall after that. The ‘actualization’ sense of the suffix -le is illustrated in Figure 3.22.

Figure 3.22 Liaolle’s semantic network 11
(Center for Chinese Linguistics of Peking University [Modern Chinese Section]
北京大学中国语言研究中心[现代汉语])
The data from the modern Chinese section of the CCL corpus reveals that *le/liao* has fused with more Chinese characters and has formed more fixed expressions and words. Furthermore, these fixed expressions and words are used rather frequently in modern Chinese. Nevertheless, these fixed expressions and words still revolve around the previously established senses of *le/liao*. For instance, *wei-le* ‘in order to, for’ usually appears before an action to denote the cause of the action. (Sometimes the *wei-le* clause can appear after the action, e.g., when the *wei-le* clause is too long.) A *chu-le* ‘except for, in addition to’ clause generally is used before an event or action to denote the prerequisite. The disyllabic verb *liao-jie* ‘know, understand’ and the disyllabic adjective *ming-liao* ‘clear’ replaced the monosyllabic word *lia* for ‘know, understand’ and ‘clear’ in modern Chinese. The formation of new words separates verbs from adjectives and the increased number of syllables of words would seem to facilitate comprehensibility as longer words provide more phonetic information and hence are more salient. In other words, this change of *le/liao* likely makes communication more precise and easier.

### 3.3 The principled polysemy network of *LE*

In this corpus study, I examined texts from the early Western Zhou (1046-771 BCE) to modern times, including eleven books and a modern corpus – Center for Chinese Linguistics of Peking University (Modern Chinese Section). 1026 tokens of *liaolle* were examined and over 30 functions or senses of *liaolle* are identified. The analysis shows that all the senses are systematically extended from the primary sense or the proto-scene of *liaolle*, as illustrated in *liaolle*’s semantic network 11 (Figure 3.22), repeated here.
Figure 3.22 Liaolle’s semantic network 11
(Center for Chinese Linguistics of Peking University [Modern Chinese Section]
北京大学中国语言研究中心[现代汉语])
The semantic network illustrates how the senses are connected and extended from one another in a systematic and motivated way. The proto-scene, as suggested by the shape of the Chinese character in seal script 了 and  in later periods and testified by the earliest Chinese dictionary *Shuowen jiezi* (Explaining Graphs and Analyzing Characters), depicts a newborn baby without arms. The proto-scene involves a number of invited inferences involving knowing the fate or probable end of the child, which lead to meanings involving end, change from one state (being alive) to a second state (being dead), etc. This proto-scene led to two important senses, ‘know/understand’ and ‘finish/complete/end,’ for as soon as people saw a newborn baby without arms, they knew immediately that this life was to be soon finished in the formidable natural and living conditions thousands of years ago. Without recognizing the proto-scene, it is impossible to know why two rather different senses ‘know/understand’ and ‘finish/complete/end’ are associated with the same Chinese character 了, even early in its use. Once these two senses of 了 were established in Chinese, many other senses extended from them and 了 began to grammaticalize from liao to le.

Essentially, there are two major meaning clusters in the semantic network of liao and le, one revolving the sense of ‘know/understand’ and another revolving the sense of ‘finish/complete/end.’ The ‘know/understand’ cluster stays at the lexical level, whereas the ‘finish/complete/end’ cluster includes all kinds of functions and senses from lexical words to grammatical and speaker’s stance markers. Under the ‘finish/complete/end’ sense, except for the lexical usages, the senses in the ‘closure’ cluster and the ‘ended/decided/unchangeable event’ sense are conveyed by the particle le, and all other clusters contain senses denoted by the suffix -le.
The semantic network of *liaolle* is also organized clockwise to roughly represent the
diachronic evolution of the senses of *liaolle*, e.g., the ‘completion of the first event’ sense and the
‘completion of the last event’ sense were established before the ‘closure (of an event or event
complex)’ sense, and the ‘closure (of an event or event complex)’ sense came into being before
the ‘actualization’ sense. In general, assuming the data examined is representative, the corpus
study reveals that *liao* began to grammaticalize from a lexical word into a grammatical element
around the Tany dynasty (618-907 CE). During the Yuan (1271-1368) and Ming (1368-1644)
dynasties, the suffix and particle functions of 了 were well established in the language, and thus,
I hypothesize that 了 also experienced phonological reduction from *liao* to *le* during this period
(and thereafter I use *le* for these grammaticalized functions of 了). The suffix *-le* and the particle
*le* obtained syntactic independence during the Qing dynasty (1644-1912), i.e., they were more
flexible in terms of sentence locations. In modern Chinese, more disyllabic words were formed
with *liaolle*, probably for the sake of part of speech and efficient communication, and the
‘actualization’ function of the suffix *-le* is an important evolution in modern Chinese.
Chapter 4 Inter-lexical polysemy of GUO and LE

As demonstrated in chapters 2 and 3, guo and le are highly polysemous, and they share several similar senses (e.g., ‘completion’/perfectivity, ‘past [event],’ ‘after’/sequencing events, etc.). This is what Evans terms “inter-lexical polysemy.” As Evans notes, “the challenge is to account for apparent similarities in the nature of lexical concepts associated with distinct lexical forms” (Evans, 2015, p. 112). One key goal of this chapter will be to more precisely define the lexical profile for each particle, and thus, distinguish the subtle differences in use. A second factor that makes guo and le even more elusive to learners of Chinese is the fact that guo and le can be used together in one sentence and the correlating English translations are not very helpful in adequately demonstrating the difference between only using one of them and using both of them. In this chapter, I compare the semantic networks of guo and le, or in Evans’s term, discuss “inter-lexical polysemy” (Evans, 2015). Importantly, the discussions in this chapter shed light on how events or situations including time are perceived, construed, and categorized by the speech community and culture as reflected in the language. In other words, different speech communities and cultures categorize entities in the world that is structured with natural clusters in different ways. Thus, language, as a reflection of human perceptual and conceptual systems, develops its own categories, and words are labels for the categories. For instance, English speakers generally categorize concrete entities into objects and substances. This categorization is reflected in language as count nouns and mass nouns, and affects syntactic structures (e.g., the singular/plural distinction). In contrast, Chinese speakers do not specify the ontological difference between objects and substances. All nouns in Chinese “are lexically equivalent to English mass nouns, […] referring to the substances or material composition of an object” (Imai
The syntactic representation of this perception of entities in the world is the numeral + classifier construction. With regards to events, Chinese speakers implicitly emphasize the distinction between a type of event (i.e., indefinite past event marked by *guo*) and an instance of event (i.e., definite past event marked by *le*), whereas this conceptual distinction regarding events is not prioritized by English speakers. Chinese speakers also implicitly pay attention to event/situation change in addition to marking perfective events (e.g., the marker *le*), whereas English speakers generally do not link the notion of event/situation change to perfective events.

This chapter lays out the key aspects regarding how Chinese speakers construe and categorize events as reflected in language, through analyzing a few important concepts conveyed by *guo* and *le*, i.e., type vs. instance, completion vs. termination, perfect, perfective vs. past events, and extreme degree.

4.1 ‘Past (event)’ – event type vs. instance

As shown in the semantic networks of *guo* and *le* in chapters 2 and 3, *guo* and *le* can both convey the sense of ‘past (event).’ In other words, *guo* and *le* share the lexical concept of ‘past (event).’ However, their “semantic selectional tendencies” (Evans, 2015) are distinct. Specifically, the ‘past (event)’ lexical concept associated with *guo* selects for semantic arguments that describe event type or indefinite past events, whereas the semantic arguments that co-occur with *le* denote specific instances of a type of event or specific past events. Note that English does not seem to make the distinction between indefinite past events and definite past events. In this corpus study, *guo* is first found to indicate indefinite past events in the text from the Yuan (1279-1368) and Ming (1368-1644) dynasties. In this use, *guo* is attached right after a
verb to denote that the event described by the verb has been completed at least once prior to the speech time. I repeat one example from the chapter on guo here.

(4.1) 当日曹操果是重待某，某已斩颜良，诛文丑，解白马之围，报过他了。
Dang ri Cao Cao guo shi zhong dai mou, mou yi zhan Yan Liang, zhu Wen Chou, jie baima zhi wei, bao -guo ta le.

‘(It) is true (that) Cao Cao treated me well that day, (but) I (have) repaid him (by) killing Yan Liang (and) Wen Chou (two of his most redoubtable opponents), (and) raising (a) siege at Boma.’
(From Sanguo yanyi, 49, 三国演义・第49回)
(The English translation is adapted from the Chinese Text Project website.)

In example (4.1), the verb bao ‘repay’ marked by -guo refers to a type of event. For the ‘repaying’ type of event, there are three instances – ‘killing Yan Liang,’ ‘killing Wen Chou,’ and ‘raising a siege at Boma.’ The speaker used three specific instances to prove that he has done the ‘repaying’ type of event.

In contrast, the past events marked by le are specific events or particular instances of a type of event. In this corpus study, this use of le is also first found in the text from the Yuan (1279-1368) and Ming (1368-1644) dynasties. I repeat one example from the chapter on le here.

(4.2) 陈 登 献 了 徐 州。
Chen Deng xian-le Xu Zhou.

‘Chen Deng gave Xu Zhou Region (to the enemy).’
(From Sanguo yanyi 三国演义)

Different from guo which denotes indefinite past event or a type of event that has been completed at least once prior to the speech time, in example (4.2), the verb xian ‘give [to the enemy]’ marked by le describes a specific event that took place in the past.
Moreover, the ‘past (event)’ lexical concept associated with *guo* and *le* displays different “formal selectional tendencies” (Evans, 2015). The corpus data shows that if there is a series of events, *le* in the sense of ‘past (event)’ usually occurs with the last event; whereas *guo* does not show this pattern. In a series of events, the last event is usually the resulting event. As discussed in chapter 3, *le* has the function of highlighting the resulting event because the proto-scene of *le* invites people to focus on the end point, not the process. By marking the last event, *le* fulfills a dual task of emphasizing the resulting event and denoting the sense of ‘past (event).’ I repeat several examples from the chapters on *le* and *guo* here to show the differences between the formal selectional tendencies of the ‘past (event)’ lexical concept associated with *le* and *guo*.

(4.3) 操乘马正行，忽田中惊起一鸠，
Cao cheng ma zheng xing, hu tian zhong jing qi yi jiu,
Cao ride horse ZHENG move, suddenly farm-field middle surprise up one dove,

那马眼生，窜入麦中，践坏了一大块麦田。
na ma yan sheng, cuan ru mai zhong, jian-huai-le yi da kuai mai tian.
that horse eye new, flee enter wheat middle, stomp bad -LE one big patch wheat farm-field.

‘(While) Cao was riding (a) horse, a dove suddenly got up (from the) farm field (by) surprise, startling the horse (so that it) swerved into (the standing) grain, (and) stomped down a large patch (of) grain.’
(From *Sanguo yanyi* 三国演义)

In example (4.3), there are five events in a series. There is only one suffix -*le* used for the last event in the series, which not only highlights the result of the preceding events, but also effectively alludes that the preceding events are also past events as these events are arranged chronologically.

Different from *le*, when *guo* is used in the sense of ‘past (event),’ it can occur with the first, middle or last event in a series of events expressed, as shown in examples (4.4), (4.5) below, and (4.1) above.
(4.4) 关某前曾禀过丞相，
Guan mou qian ceng bing -guo chengxiang,
I person before before report-GUO prime minister

今故主在河北，不由某不急去。
jin gu zhu zai he bei, bu you mou bu ji qu
today old lord in river north, not allow I not urgent go

‘I informed (you) Prime Minister before (that my) former lord was in (the) North (of Yellow) River now, (so) I had to leave at once.’
(From Sanguo yanyi, 27, 三国演义・第 27 回)
(The English translation is adapted from the Chinese Text Project website.)

(4.5) 叔叔自离许都，于路独行至此，
Shushu zi li Xu du, yu lu du xing zi ci,
Brother-in-law since leave Xu city, with road alone travel arrive here

历去过多少艰难，未尝要军马相随
li guo duo-shao jiannan, wei chang yao jun ma xiangsui
experience-GUO many difficulty, not once want soldier horse accompany

‘Brother-in-law, since (you) left Xu City (and) traveled alone here, (you have) experienced so many dangers, (but have) never wanted (any) military assistance.’
(From Sanguo yanyi, 28 三国演义・第 28 回)
(The English translation is adapted from the Chinese Text Project website.)

As shown in examples (4.4), (4.5) and (4.1), guo may occur with the first, middle and last event in a series of events respectively. In other words, under the ‘past (event)’ lexical concept, guo and le show different formal selectional tendencies. Note that the event series in which le and guo exist are different. Essentially, the event series in which le appears consists of specific events arranged chronologically; whereas the event series in which guo occurs is a mix of specific instances of event and types of event which may or may not follow the chronological order. In a series of specific events arranged chronologically, by marking the last event as a completed or finished event before the speech time (i.e., a past event), le indicates that all preceding events should also be past events. In a series of events composed of specific instances
and types of event, *guo* selects to mark the types of event (i.e., the indefinite past events), regardless of its syntactic position in the series of events. As we can see, the differences between the formal selectional tendencies of the ‘past (event)’ lexical concept associated with *guo* and *le* are intrinsically linked to the differences between their semantic selectional tendencies. This echoes the CL claim that grammar is meaningful. The differences between the semantic and formal selectional tendencies of the ‘past (event)’ lexical concept associated with *guo* and *le* can be traced back to the proto-scenes of *guo* and *le*. The proto-scene of *guo* describes a frequently repeated process in our daily lives, and therefore, *guo* lacks the notion of specificity and is used to mark a type of event that has been completed at least once before the speech time. In contrast, the proto-scene of *le* depicts an unusual situation – a newborn baby without arms – which invites people to focus on the specific event and infer the end point of the event (i.e., the end point of the baby’s life or the baby’s death). Thus, *le* is used to mark the specific, last, resulting event in a series of events.

4.2 Completion or termination?

The grammaticalization paths of *guo* and *le* show that the ‘past [event]’ senses conveyed by *guo* and *le* are both derived from the sense of ‘completion.’ However, the ‘completion’ lexical concepts associated with *guo* and *le* have markedly different lexical profiles. Based on the proto-scene of *guo*, the ‘completion’ sense means that the TR successfully goes through the entire course of an event (e.g., moving along a certain path [in the manner of walking] from one side of the LM to the other side). In contrast, the proto-scene of *le*, a newborn baby without arms, invites people to infer the death (i.e., the end of the life) of the newborn baby, especially in the formidable natural and living conditions in China two thousand years ago. This invited inference
(i.e., the death of a newborn baby) (Bybee, Perkins & Pagliuca, 1994; Traugott & Dasher, 2002, 2010), in turn, can be analyzed in two ways – a) the baby’s life is viewed as a discrete, bounded event; b) the baby’s life is discontinued before he/she goes through the normal life stages (e.g., infant→toddler→child→teenager→adult). That is, the ‘completion’ lexical concept associated with \textit{guo} implies that a whole course has been gone through successfully; whereas the ‘completion’ lexical concept associated with \textit{le} encompasses two situations – a) a discrete, bounded event regardless of the notion of course or process; b) a discontinued event without going through the entire relevant course, i.e., the sense of ‘termination’ (Smith, 1997). In certain contexts, the different lexical profiles of the ‘completion’ lexical concept associated with \textit{guo} and \textit{le} make it so that only one of the two markers is suitable or grammatical to use. For instance,

(4.6) a. 我去 了 奶奶 家, 可是 还 没 到 就 得 回 来, 因为…
   Wo qu -le nainai jia, keshi hai mei dao jiu bei hui -lai, yinwei…
   ‘I did go to grandma’s house, but had to come back even before (I) got there, because…’

   b.*我 去 过 奶奶 家, 可是 还 没 到 就 得 回 来, 因为…
   Wo qu -guo nainai jia, keshi hai mei dao jiu bei hui -lai, yinwei
   ‘I did go to grandma’s house, but had to come back even before (I) got there, because…’

Examples (4.6a) and (4.6b) are identical except that in the first clause, (4.6a) has a \textit{le}, and (4.6b) has a \textit{guo}. Note that (4.6a) is grammatical, while (4.6b) is not. Since the event, ‘going to grandma’s house,’ is not completed successfully, but discontinued or terminated, as indicated by the second clause, ‘but had to come back even before I got there,’ (4.6b) with \textit{guo} is not grammatical because \textit{guo} denotes that the event, ‘going to grandma’s house,’ is completed by going through the starting point, traverse, and the end point (i.e. ‘grandma’s house’). Note that English does not mark the distinction between completion and termination for perfective events.
That is, English and Chinese developed different ways of seeing these elements of the scene prompted.

The distinction that *guo* profiles the whole course of event while *le* does not can also explain why ‘experientiality’ is conveyed by *guo*, not *le*. For the sense of ‘experientiality,’ going through the course or process of any instance of a type of event is more relevant than simply focusing on the end point of a specific event. Thus, if one wants to say that “he/she has the experience of eating shark’s fin,” *guo* should be used right after the verb ‘eat.’ Replacing *guo* with *le* will change the focus from experientiality to the end point of a specific eating event.

### 4.3 Perfect vs. perfective vs. past

Following Hopper (1979), Heine et al. claim that “the sense of completion associated with perfective aspect derives from a need for signaling successive events in narration, which is a discourse notion: when such events are discrete and bounded, they suggest a perfective or completive interpretation. This interpretation may lead to the grammaticalization of that discourse function to an aspect or tense; that is, the marker involved may come to express the notion of a perfect, perfective, or past category” (Heine, Claudi & Hunnemeyer, 1991, p. 240).

With the sense of ‘completion,’ -*guo* has evolved to express perfect events (i.e. ‘indefinite past (event)’ and/or ‘experientiality’ in Chinese language), whereas -*le* has evolved to indicate specific past events. For example,

(4.7) a. 他 去过 北京。
    Ta  qu-*guo* Beijing
    He  go-*guo* Beijing
    ‘He has been to Beijing’ (i.e., the agent has the experience of going to Beijing).
b. 他 去 了 北京……
   Ta qu-le Beijing
   He go-le Beijing
   ‘He went to Beijing…’ or ‘After he goes/went to Beijing…’

Note that there exists another similar expression (4.7c).

(4.7) c. 他 去 北京 了。
   Ta qu Beijing le
   He go Beijing le
   ‘He went to Beijing.’
   ‘He went to Beijing (so he is gone or he is not here).’

Example (4.7b) has a verb suffix -le, whereas example (4.7c) has a particle le. As shown in the semantic network of le, one major function of the verb suffix -le is to sequence events by marking the completion of the first event. Thus, example (4.7b), without any context (e.g., being the first or last event), can give rise to a feeling of an unfinished utterance as the listener may well assume that this is the first event in a sequence of events due to the frequent co-occurrence of the first event and the suffix -le. In contrast, example (4.7c), with a particle le (rather than the verb suffix) marking the closure of the whole event or event complex before the speech time, is a finished sentence or utterance. Furthermore, in actual language use, (4.7c) can denote more senses than what is overtly uttered, i.e., ‘he is not here.’ This implicature can be understood as a contrastive state/situation change between ‘be here’ (presence) and ‘go’ (absence) indicated by the particle le.

Moreover, a particle le can be added to examples (4.7a) and (4.7b):

(4.7) d. 他 去 过 北京 了。
   Ta qu-guo Beijing le
   He go-guo Beijing le
   ‘He has been to Beijing’ (i.e. the agent has completed at least one instance of the type of event, ‘go to Beijing,’ and does not need to do this type of events again).
In the following paragraphs, I compare (4.7a) and (4.7d), and (4.7b) and (4.7e) to show how the particle le interacts with the suffix -guo and the suffix -le.

Examples (4.7a) and (4.7d) are a minimal pair. (Repeated here for convenience.)

(4.7) a. 他 去 过 北京。
   Ta qu-guo Beijing
   He go-guo Beijing
   ‘He has been to Beijing’ (i.e., the agent has the experience of going to Beijing).

d. 他 去 过 北京 了。
   Ta qu-guo Beijing le
   He go-guo Beijing le
   ‘He has been to Beijing’ (i.e., the agent has completed at least one instance of the type of event, ‘go to Beijing,’ and does not need to do this type of event again).

Note that (4.7a) and (4.7d) have similar English translations, and they both have a suffix -guo attached to the main verb, qu ‘go.’ However, (4.7d) also has a particle le at the end of the sentence. Sentence (4.7a) without the particle le merely focuses on experientiality, that is, ‘he has the experience of going to Beijing.’ In contrast, sentence (4.7d) with addition of the particle le emphasizes the closure of the type of events, ‘go to Beijing,’ i.e., the agent does not need to do the action, ‘go to Beijing,’ again, and/or the agent is ready for the next action. In light of this, ‘go to Beijing’ is a planned, volitional event. Note that, since (4.7a) and (4.7d) both have the suffix -guo, both of the events described are indefinite, i.e., not a particular instance but the type of event – ‘go to Beijing,’ though it is very possible that the agent in (4.7d) did the action only once as a planned event.
Similar to (4.7a) and (4.7d), examples (4.7b) and (4.7e) are also a minimal pair.

(Repeated here for convenience.)

(4.7) b. 他 去 了 北京……
Ta qu-le Beijing
He go-le Beijing
‘He went to Beijing…’ or ‘After he goes/went to Beijing…’

e. 他 去 了 北京 了。
Ta qu-le Beijing le
He go-le Beijing le
‘He went to Beijing.’
‘He went to Beijing (so he is gone or he is not here).’
?’He has gone to Beijing’ (with a stressed pronunciation of the main verb) (i.e., the round trip to Beijing is completed by the speech time or ‘now’ and the agent is not in Beijing).

Examples (4.7b) and (4.7e) both have a suffix -le right after the main verb, qu ‘go.’

Example (4.7e) also has a particle le at the end of the sentence. Unlike (4.7b) which reads like an unfinished sentence with at least two possible readings (i.e., ‘He went to Beijing…’ or ‘After he goes/went to Beijing…’), (4.7e) with the particle le is a finished sentence or expression because the particle le suggests the closure of the event articulated in the utterance. However, (4.7e) has several possible readings. The first reading, ‘He went to Beijing,’ comes from the fact that the suffix -le marks the closure of the event, ‘go to Beijing,’ prior to the speech time and the particle le indicates the closure of the utterance. The second reading, ‘He went to Beijing (so he is gone or not here),’ is possible because the particle le also suggests a contrastive state/situation change (between ‘be here’/presence and ‘go’/absence in this case). Note that the third reading of (4.7e) ‘he has gone to Beijing (i.e., the round trip to Beijing is completed by the speech time or ‘now’ and the agent is not in Beijing)’ has a question mark before it because this reading of (4.7e) is questionable though some native Chinese speakers might think that this reading is possible. The third reading essentially describes a round trip (including the starting point, traverse and end
point) that has been completed successfully. As discussed previously, the sense of completing an entire course successfully is best expressed with -guo, not -le, as -le only focuses on the end point and may suggest ‘termination.’ However, (4.7e) has a suffix -le, not -guo. Thus, the third reading of (4.7e) is questionable. For the native Chinese speakers who believe that the third reading is possible, certain pronunciation devices (e.g. a stressed pronunciation of the main verb) have to be applied. How pronunciation devices affect meaning is beyond the scope of this study. Nevertheless, we can see that the meaning conveyed by (4.7e) is rather vague, thus, the expression in (4.7e) may not be the optimal choice in actual language use. In other words, if the focus of communication is on experientiality, (4.7a), *Ta qu-guo Beijing* ‘He has been to Beijing’ (i.e. the agent has the experience of going to Beijing), would be used. If the speaker wants to say that the agent has completed at least one instance of the type of event, ‘go to Beijing,’ and does not need to do it again or is ready for the next action, (4.7d), *Ta qu-guo Beijing le* ‘He has been to Beijing,’ would be the most appropriate expression. If a series of events need to be sequenced, (4.7b), *Ta qu-le Beijing* ‘After he goes/went to Beijing…,’ may be used. If it is a past event and there is a contrastive state/situation change, (4.7c), *Ta qu Beijing le* ‘He went to Beijing (so he is not here),’ would be a good choice contextually. All in all, the choice between guo versus le has to do with speaker stance (i.e., epistemic viewpoint or strength of speaker’s commitment to the proposition; see Dancygier & Moder, to appear), construal, and context. This goes back to the usage-based model of language. That is, the form-function and function-form relationships of guo and le are established during situated, purposeful communications, which on one hand contain item-specific knowledge, on the other hand, represent typological patterns of information structuring (Robinson & Ellis, 2008). However, traditional accounts of Chinese grammar
generally do not recognize the concepts of speaker stance or epistemic viewpoint, which makes a fuller understanding of *guo* and *le* and the correct choice between *guo* and *le* depending on the context impossible. Moreover, Chinese and English differ in the way they structure information and window attention to aspects of event (Talmy, 2000, 2008). Therefore, appreciating the differences in categorization/construal is crucial to understand how *guo* and *le* are used to direct attention to different aspects of event, and how *guo* and *le* coordinate to represent an event or scene from the Chinese perspective. Still, all of the extended functions of *guo* and *le* are rooted in their proto-scenes.

4.4 Sequencing events or the ‘after’ sense

As shown in the semantic networks, both *guo* and *le* can be used to sequence events. In other words, they share the lexical concept of ‘after.’ However, there are distinct differences in their lexical profiles, especially in their formal selectional tendencies.

First, *guo* can be followed by a time period or a pronoun referring to an event, as shown in *guo qi yi nian* ‘after one year’, and *guo ci* ‘after this,’ but *le* cannot. This is because *guo* as a verb can convey the sense of ‘pass (time)’ or ‘go through (a certain event/process),’ but *le* does not have these usages.

Second, *le* can be used after a “verb + resultative complement” construction to sequence events as shown in the example from the chapter on *le*, repeated here, but *guo* cannot.

(4.8) 喂饱了马，曹操先睡。

*Wei bao le* 马, Cao Cao xian shui.

‘After (they) fed (the) horses, Cao Cao slept first.’

(From *Sanguo yanyi* 三国演义)
Under my analysis which emphasizes the ‘process’ interpretation of *guo*, a resultative complement, which usually indicates a resulting state (e.g., ‘full’ in [4.8]), is incompatible with the ‘process’ sense\(^{66}\) residing in the proto-scene of *guo*. In contrast, *le* with the function of indicating a ‘contrastive state/situation change’ fits well with “verb + resultative complement” constructions, which allude to a change between a previous state and the resulting state.

Third, when sequencing events, *guo* usually appears with the first event, whereas *le* can be used in the first event and the pivot event. The pivot event usually is the resulting event of the preceding event and the prerequisite event for the following event in the series. Although the event marked by *guo* can be the prerequisite event for the following event, *guo* profiles the sense of ‘process,’ which is incompatible with the sense of ‘result.’ Therefore, *guo* is not used to mark the pivot event. Moreover, along with the function of sequencing events, *le* can not only indicate the temporal information but also the cause, prerequisite or manner of the following event. However, *guo* only functions to sequence events, i.e., after the process of the first event, the second event then takes place.

In a limited set of examples, *guo* and *le* can both be used to mark the first event in a series of events to convey the sense of ‘after.’ Even a Chinese textbook widely adopted by high schools and universities in the United States claims that *guo* and *le* are interchangeable in this context. Here are the relevant examples from the textbook.

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\(^{66}\) As discussed in the Chapter on *guo*, the proto-scene of *guo* is a physical motion event – to move along certain path in the manner of walking [in space through time]. When *guo* was frequently used with LMs that were not locative or not typically associated with physical motion events, *guo*’s specific features of meaning for physical motion events were backgrounded and consequently generalized to suit appropriate contexts or target domains, i.e. non-locative LMs. Hence, *guo* developed a less richly defined, contextual meaning (Bybee, 1994), ‘go through a certain situation/process.’
Examples (4.9a) and (4.9b) are a minimal pair. There are two events in a sequence – ‘take a shower’ and ‘leave.’ The events are sequenced by -guo and -le respectively in (4.9a) and (4.9b), and they have the same English translation. Admittedly, for certain situations, either guo or le is “good enough” to convey the information of sequence. Ellis, Romer and O’Donell (2016) and Casasanto and Lupyan (2015) argue for the notion of “good enough.” For instance, sometimes speakers might think either ‘above’ or ‘over’ is good enough to convey their perspective. The picture is over the mantle and The picture is above the mantle both work to generally indicate the placement of the picture. However, this does not adequately support the claim that -guo and -le are always interchangeable with respect to the function of sequencing events. In addition to the distinct formal selectional tendencies discussed above, they also differ in the semantic selectional tendencies. For example,

(4.9) a. 别急, 我洗过澡就走。
   Bie ji, wo xi -guo zao jiu zou.
   Don’t worry, I wash-GUO bath then go.
   ‘What’s the big rush? I’ll leave as soon as I take a shower.’

b. 别急, 我洗了澡就走。
   Bie ji, wo xi -le zao jiu zou.
   Don’t worry, I wash-LE bath then go.
   ‘What’s the big rush? I’ll leave as soon as I take a shower.’
(From Integrated Chinese, Level 2, Part 2, pp. 50-51)
In (4.10), there are two events, ‘watch TV’ and ‘write homework,’ which are sequenced by -guo and -le respectively in (4.10a) and (4.10b). Note that (4.10a) with -guo is questionable as marked by the question mark in front of the expression. As discussed previously, -guo profiles the whole course/process of the event, while -le highlights the endpoint of the event. This distinction is inherent in the proto-scenes of guo and le. When sequencing events, -guo denotes ‘after completing the course of the first event.’ However, in (4.10), the course of the first event ‘watch TV’ (e.g., at what point it can be considered completed) is undetermined. Therefore, the use of -guo in (4.10a) is questionable or even ungrammatical. In contrast, (4.10b) with -le marking the endpoint of the first event that may be terminated at any point is acceptable. It can be seen that although both guo and le can be used to sequence events, their sequencing functions are related to and constrained by other extended senses of guo and le (e.g., ‘completion’ versus ‘termination’) which, in turn, can be traced back to the proto-scenes or the primary senses. In sum, although guo and le both have the lexical concept of ‘after’/sequencing [events], their lexical profiles are distinct as defined by their proto-scenes or primary senses.

4.5 Extreme degree

As shown in the semantic networks of guo and le, both guo and le can be used to denote an ‘extreme degree.’ However, the lexical profiles of the ‘extreme degree’ lexical concept associated with guo and le are different. Specifically, le actually denotes ‘a change into an extreme degree,’ whereas guo does not have the ‘change’ sense. Moreover, guo must exist in the “adjective + bu + guo” construction to convey this sense, whereas le appears right after the predicate. I select two examples from the chapters on guo and le to illustrate the differences.
In example (4.11), -guo, along with the negation adverb 不 bu ‘no, not,’ functions as a complement attached right after the adjectives ‘loyal’ and ‘upright’ to convey an extreme degree of ‘loyalty and uprightness.’ In contrast, in (4.12), le is a particle used after the adjectival predicate ‘too obstinate’ to indicate a change into this extreme degree. The differences in the lexical profiles of the ‘extreme degree’ lexical concept associated with guo and le relate back to the proto-scenes of guo and le. As shown in the semantic network of guo, guo has evolved from the proto-scene to indicate ‘pass [from a place],’ and then to convey the sense of ‘go beyond/exceed/surpass.’ When guo in the sense of ‘go beyond/exceed/surpass’ is combined with the negation adverb bu ‘no, not,’ the bu-guo construction denotes that ‘nothing can go beyond/exceed/surpass [the situation expressed],’ i.e., an extreme degree. While, as shown in the semantic network of le, le has evolved from the proto-scene to mark the end point of an event, and then to indicate ‘contrastive state/situation change’ and ‘state/situation change along a continuum.’ When the particle le is used for a change of state/situation along a continuum, it projects a scale from the lowest degree to the highest degree, and even to the extreme degree, which is the end point of the progression scale. As an event progresses along with the scale, the last step of change is to reach the end point, i.e. the extreme degree. Therefore, the particle le can...
be used to denote a change into the extreme degree, which is also the end point of the projected scale.

I have mainly used Evans’s Theory of Lexical Concepts and Cognitive Models (LCCM Theory) to analyze the inter-lexical polysemy of *guo* and *le*. The LCCM Theory provides us with a systematic way to tackle the nuanced structures of *guo* and *le* during their occurrence in seemingly interchangeable situations. Generally, in these situations, concepts from CL, such as speaker stance, construal and communicative context, play a crucial role in choosing *guo* versus *le*. As Robinson and Ellis point out, “choice of one or another construction for describing an entity or situation in the L1 are the result of our unconscious structuring of the aspects of experience we wish to convey. Alternative construals of entities or situations are achieved by a variety of cognitive operations, and constructions are the linguistic reflex of these operations” (Robinson & Ellis, 2008, p. 513). This entails that learners and teachers of Chinese need to pay attention to the cross-linguistic differences in categorization and construal and the interlocutor’s epistemic viewpoint. In this light, participation in situated action (Tyler, 2008; Coventry & Guijarro-Fuentes, 2008), rather than syntactic-oriented instruction, will potentially help learners obtain a fuller understanding of the meanings and communicative effectiveness associated with the target linguistic items, because such situations naturally involve “understanding of the speaker’s intention, and learning how it motivates a particular choice of linguistic expression” (Robinson & Ellis, 2008).
Chapter 5 Conclusion

This dissertation has focused on accounting for the semantics of the polysemous Chinese *guo* and *le*. The methodology employed in this exploration is the Principled Polysemy Model (PPM; Tyler & Evans, 2003). In contrast to most previous studies which started as investigations stemming from the aspectual senses of *guo* and *le*, the analyses in this dissertation start from the discussion of the proto-scenes or the primary senses of *guo* and *le*. Subsequently, the grammaticalization paths of the two linguistic items are explored using diachronic corpus data, and the semantic networks for *guo* and *le* are established. The inter-lexical polysemy (Evans, 2015) of *guo* and *le* has also been discussed, addressing the seemingly exchangeable situations between the two linguistic items. In the rest of the chapter, I first recap my rationale for the selection of the target linguistic items and the theory and methodology used to analyze the target linguistic items. Then, I summarize my conclusions with regard to my analyses on *guo* and *le* and the semantic comparisons. Finally, I point out the limitations associated with this study.

*Guo* and *le* have been selected as the target of this exploration because they have long been considered two of the most mysterious and confusing linguistic phenomena in Chinese. My position is that this difficulty is primarily due to their polysemous nature. Moreover, they both play crucial roles in expressing events (e.g., aspect, event sequence), time (e.g., ‘past’) and speaker’s stance (i.e., epistemic viewpoint or strength of speaker’s commitment to the proposition; see Dancygier & Moder, to appear). Previous studies have made important findings on the semantics of *guo* and *le*; however, no satisfying, unified account has been offered. For instance, Chao (1968) makes important observations on the senses of *guo* and *le* and sets up the foundation for the subsequent modern studies of the two linguistic items. However, his
discussions on *guo* and *le* are scattered throughout his analysis of other linguistic elements of the Chinese language, and thus lack a systematic organization. Li and Thompson (1981) try to unify the senses or functions of the suffix -*guo*, the suffix -*le* and the particle *le* with three notions – experiential aspect, perfective aspect (PFV), and “Currently Relevant State” (CRS) – respectively, but the relationship between the suffix -*le* and the particle *le* is neglected. Moreover, many important uses of *guo* are not addressed by Li and Thompson, such as *guo* as a complement indicating PATH or ‘completion’ and *guo* as a suffix denoting ‘indefinite past’ events. In addition, while discussing the perfective aspect conveyed by the suffix -*le*, Li and Thompson mistakenly equate the environments in which the suffix -*le* tends to appear (e.g., certain types of objects or verbs) with the concept of bounded/perfective events. Smith (1997) examines three types of *guo* – the perfective morpheme -*guo*, the resultative verb complement -*guo*, and the verb *guo* – but she does not address the relationship between these different types of *guo*, and mainly focuses on analyzing the perfective morpheme -*guo* (i.e., the suffix -*guo*). Additionally, Smith (1997) points out the ‘termination’ sense associated with the suffix -*le*, which is an important finding; however, she does not tackle the particle *le*.

One major gap in previous studies is the lack of systematicity. Moreover, none of the previous studies have tried to offer complete accounts for *guo* and *le*. In addition, the inter-lexical polysemy of *guo* and *le* has not been addressed as a polysemous phenomenon in a systematic fashion in the literature. With the aim of filling these gaps, this present study takes a cognitive, usage-based approach because I am convinced that language is a reflection of general cognitive processes, including the human experience and interaction with the physical, social world, and all linguistic units arise from usage events. A Cognitive Linguistics (CL) approach
allows us to understand and explain linguistic units, the systematic relationships among the linguistic units, and linguistic phenomena in general based on our everyday real-world experience. Such an approach is, therefore, more accessible to language learners (Tyler, 2012). Furthermore, the CL approach, which views all linguistic units, from lexicon to grammar to discourse structures, as form-meaning pairings and words as access points to encyclopedic knowledge, has the potential to provide a more accurate and complete account of linguistic phenomena (Tyler, 2012).

The Principled Polysemy Model (PPM; Tyler & Evans, 2003) is a CL approach to analyzing the many-to-one mappings between meanings and a single linguistic form, which was developed when Tyler and Evans accounted for the polysemy of English spatial particles. Cognitive linguists generally agree that the multiple meanings associated with one linguistic form create a semantic network with the additional meanings being systematically extended from the primary sense. However, in many accounts, what counts as a distinct sense and the selection of the primary sense are arbitrary largely based on the linguists’ intuition (Tyler & Evans, 2003). The PPM provides a methodology for determining the primary sense (i.e., the proto-scene) and the distinct senses of an English preposition with systematic and constrained principles. Central to the PPM are CL explanations for meaning extension, especially embodied meaning, experiential correlation, perceptual resemblance, and pragmatic strengthening (or pragmatic inferencing). This present study illustrates how the PPM can be applied to analyze Chinese particles with rich corpus data. Extending the PPM to different word classes and to an unrelated language is a significant contribution to our understanding of polysemy generally.
In this investigation, I have presented the primary senses for *guo* and *le*, which stem from their oldest attested meanings. Through analyzing the diachronic corpus data, I have also established the semantic networks for *guo* and *le*, which not only show how *guo* and *le* are systematically grammaticalized from their primary senses to various meanings, but also represent the synchronic interrelationship among the meanings. Subsequently, I have compared the semantic networks of *guo* and *le* and addressed the semantic relatedness or the seemingly similar semantic representations (Evans, 2015) between *guo* and *le*. I summarize my conclusions with regard to my analyses on *guo* and *le* and the semantic comparisons as follows.

Firstly, most previous studies regard the aspectual senses of *guo* and *le* as their central senses. This dissertation argues that this is wrongheaded. Without identifying the proto-scenes or the primary senses of *guo* and *le*, the analyses can only struggle at the surface level, and thus, cannot provide a motivated and systematic account for *guo* and *le*. The proto-scenes or the primary senses of *guo* and *le*, a physical motion event with the TR moving along a certain path from one side of the LM to the other side in the manner of walking and a newborn baby without arms respectively, provide the foundation or the starting points to understand the semantic potential of these two linguistic items and the cognitive motivation underlying the polysemous phenomena. In other words, it is the proto-scenes or the primary senses of *guo* and *le* that have prompted “the elaboration of cognitive structure, which includes the interlocutors’ knowledge of the world and their prior experiences with the world, including their prior experience with language” (Tyler & Evans, 2003, p. 229). For instance, it is not surprising that the sense of ‘to finish/put to an end’ is inferred from the proto-scene, a newborn baby without arms, based on our understanding that it is almost impossible for a baby lacking limbs to survive in the formidable
natural and living conditions in China two thousand years ago. Also, it is reasonable to infer that the most common physical motion event with the TR moving along a certain path from one side of the LM to the other side in the manner of walking is generalized to convey the abstract notion of ‘to go through a certain process.’ In short, it is “the non-linguistic knowledge to which words facilitate access” (Evans, 2015, p. 100) that has promoted the semantic extension and led to the phenomena of polysemy.

Secondly, the corpus study shows that all of the senses or functions of guo and le are systematically and diachronically derived from their proto-scenes or primary senses. The establishment of an extended meaning, to a large extent, is determined by usage events, i.e., “actual utterances in the full richness of their phonetic detail and contextual understanding” (Langacker, 1987, p. 2). For example, when the LM associated with the word guo is not a physical object (e.g., road or bridge) but time, guo takes on the role of expressing ‘to pass [time]’ or ‘after [time].’ This process of meaning extension involves “erosion” (Bybee, 1994, p. 281) of the primary sense, i.e., the loss of part of the content of the primary sense. Another example is that when le in the sense of ‘to finish/put to an end’ is used at the end of an utterance to mark the closure of the utterance, it has experienced semantic extension from a noun (i.e., a newborn baby without arms) to a verb (i.e., ‘to finish/put to an end’), and grammaticalization from a verb (i.e., ‘to finish/put to an end’) to a particle or discourse marker indicating state/situation change or speaker’s stance (i.e., epistemic viewpoint or strength of speaker’s commitment to the proposition; see Dancygier & Moder, to appear). The path of grammaticalization from a verb to a discourse marker is not specific to Chinese. As Heine et al. note, “the rise of a discourse function ‘change in subject/topic’ in Tamil or ‘present relevance’ in English or French appears to be
subject to the same kind of evolution from verb to marker of discourse function as many other grammatical functions” (Heine, Claudi & Hunnemeyer, 1991, p. 243).

Thirdly, inter-lexical polysemy is an integral part of the polysemous phenomena of *guo* and *le*. The comparison of the semantic networks of *guo* and *le*, or the discussion on inter-lexical polysemy (Evans, 2015), is useful to learners of Chinese as a foreign language. Although *guo* and *le* have unique sets of distinct senses evolved from their proto-scenes or primary senses, they also have several similar senses in their synchronic semantic representations, such as, ‘completion,’ ‘past (event)’ and ‘after’/sequencing events. The inter-lexical polysemy makes the highly polysemous *guo* and *le* even more complicated and elusive to Chinese learners. As Evans points out, “the challenge is to account for apparent similarities in the nature of lexical concepts associated with distinct lexical forms” (Evans, 2015, p. 112). With the methodology of principled polysemy (Tyler & Evans, 2003), this dissertation is able to show where the apparent similar senses of *guo* and *le* originate from, and thus, is able to account for the subtle use differences between *guo* and *le* based on context. For instance, the ‘completion’ sense conveyed by *guo* is derived from completing a physical motion event including its starting point, traverse, and end point. In contrast, the ‘completion’ sense indicated by *le* is derived from the scene of a newborn baby without arms, which only projects or focuses on the death of the newborn baby, i.e., the end point, presumably at an early stage of life. Therefore, the ‘completion’ sense associated with *le* can also be interpreted as ‘termination’ in appropriate contexts, but the ‘completion’ sense associated with *guo* does not have this reading.

To my knowledge, this current study is the first work that provides a unified and fuller explanation of the semantics of *guo* and *le* from a CL perspective. It is also the first analysis of
both *guo* and *le* to draw on large diachronic corpus data. It shows the evolution of the semantics of *guo* and *le* throughout a history of three thousand years. One observation is that new senses were consistently added to the semantic networks of *guo* and *le*, with the Jin dynasty (260-420 CE) and Yuan and Ming dynasties (1279-1644) being the golden ages for meaning extension. A second observation is that while the number of new set phrases or words created with *guo* and *liaolle* increased, the number of new senses associated with the two linguistic items declined markedly in modern times. The key ideas throughout this dissertation are (1) the synchronic representation of the polysemy of *guo* and *le* is a result of their historical semantic development; (2) a more accurate explanation and understanding of any particular sense or function associated with *guo* or *le* involves a comprehension of the sense or function within the larger semantic network (especially the relationship between the primary sense and the extended sense, and the relationship between the extended sense and other comparable senses) and the communicative context.

I admit that there are limitations associated with this study. Although the corpus data covers a history of three thousand years, this particular data set may not contain all senses of *guo* and *le*. However, as Tyler and Evans (2003) point out, this should not be viewed as a flaw of the principled polysemy networks. The principled polysemy networks are dynamic reflecting language use and evolution. When more senses, even clusters of senses are identified, they can be added to the semantic networks. That is, the semantic networks of *guo* and *le* can be dynamically refined. I am confident that new senses should be derived from the existing senses on the semantic networks. This awaits further corpus analyses to verify. In addition, although this dissertation has potential benefits to learners and teachers of Chinese as a foreign language,
there is still a lot of work to do until this principled polysemy account of *guo* and *le* can be adapted to classroom teaching materials and the actual teaching and learning effect hinges on later empirical verification.

In summation, this corpus-based study of *guo* and *le* has shown that the Principled Polysemy Model (Tyler & Evans, 2003) can be used to establish a systematic, unified account for *guo* and *le*. The comparison on the semantic networks of *guo* and *le*, especially the discussion on the inter-lexical polysemy (Evans, 2015), has constructively addressed the instances that are traditionally viewed as interchangeable situations between the two items and shown that they differ in subtle but important ways. It is hoped that this principled polysemy account of *guo* and *le* will provide learners and teachers of Chinese a fuller and more systematic and motivated explanation of *guo* and *le* and the possibility of teaching and learning the two linguistic items from a cognitive approach. The next step of research involves developing the semantic networks of *guo* and *le* into teaching materials and testing the efficacy in promoting a more accessible and accurate learning of *guo* and *le* in classroom settings.
References


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