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Constructional change and emergence in Chinese Expressions involving BA

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Abstract

In this thesis, I discuss the grammatical constructionalization involving BA in some depth. I aim to present how a constructional approach can be used to rethink diachronic change in Chinese Expressions involving BA.

In previous research of relevance (e.g. Sun 1996; Xing 2006), BA is considered to be a single item that has undergone grammaticalization. From a constructional perspective (e.g. Goldberg 1995, 2006; Traugott 2003a; Trousdale 2008a, 2010; Traugott and Trousdale forthcoming), this view requires some revision. I attempt to provide a constructional account in which an Expression involving BA is understood as a “construction” at the micro-level. As constructions change over time, the form-meaning pairings involving BA are associated with more schematic higher-level constructions. I show the constructionalization process in which an Expression involving BA is reanalyzed and incorporated into different constructions with increased schematicity at higher-levels. Therefore, I assume that a network of correlated constructions is implicated.

The diachronic research is conducted mainly based on data collected from the BA corpus, which is a subcorpus I compiled based on the Peking (CCL PKU) Corpus. Using the constructional framework, I also analyze Expressions involving BA in Contemporary Chinese. The aim of the synchronic research is to explore how an Expression involving BA is used currently, and to associate the synchrony with diachrony in some respects.
Declaration

I declare that this thesis has been composed by me and that the work contained within is my own, except where explicitly stated in the text. None of this material has previously been submitted for another degree or professional qualification.

Jing Han
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I feel extremely fortunate to have spent several years of my life in the Department of Linguistics and English Language in Edinburgh, a place for me to learn and grow. A number of people provided me with immense help to make this thesis possible.

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I need to thank some other academic staff in Edinburgh Linguistics Department. Those support staff in PPLS deserve acknowledgments here as well: Thanks to Katie Keltie, Toni Noble, and Lynsey Buchanan for their numerous help.

I would also like to thank my dear friends, Christina, Wang, and Yi, for sharing their time and company along the way. I will never forget them who gave me great care and strength to overcome all those difficulties. They helped to make my life more enjoyable.

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### Abbreviations (alphabetical) and typographical conventions:

<table>
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<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ASP</td>
<td>aspect marker</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
</tr>
<tr>
<td>CL</td>
<td>classifier</td>
</tr>
<tr>
<td>CONJ</td>
<td>conjunction</td>
</tr>
<tr>
<td>DEM</td>
<td>demonstrative</td>
</tr>
<tr>
<td>EC</td>
<td>Early Chinese</td>
</tr>
<tr>
<td>INCL</td>
<td>including</td>
</tr>
<tr>
<td>INTERJ</td>
<td>interjection</td>
</tr>
<tr>
<td>LC</td>
<td>Late Chinese</td>
</tr>
<tr>
<td>MC</td>
<td>Middle Chinese</td>
</tr>
<tr>
<td>NEG</td>
<td>negation</td>
</tr>
<tr>
<td>OBL</td>
<td>oblique</td>
</tr>
<tr>
<td>PERF</td>
<td>perfective</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>POSS</td>
<td>possessive</td>
</tr>
<tr>
<td>PRO</td>
<td>pronoun</td>
</tr>
<tr>
<td>PRON</td>
<td>pronoun</td>
</tr>
<tr>
<td>PRT</td>
<td>particle</td>
</tr>
<tr>
<td>PURP</td>
<td>purposive</td>
</tr>
<tr>
<td>REFL</td>
<td>reflexive</td>
</tr>
<tr>
<td>REL</td>
<td>relativiser</td>
</tr>
<tr>
<td>RVC</td>
<td>resultative verb compound</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SVC</td>
<td>serial verb construction</td>
</tr>
<tr>
<td>TMA</td>
<td>tense, mood, aspect</td>
</tr>
<tr>
<td>*</td>
<td>ungrammatical</td>
</tr>
<tr>
<td>?</td>
<td>of questionable grammaticality</td>
</tr>
</tbody>
</table>

Small letters: conventional use of linguistic terms, e.g. CONSTRUCTION

Initial capital letter: to mark the use of a category name, e.g. COVERB

“““ quotation of special terms or texts from referential literature
translation of data; sometimes to highlight a term for attention

(e.g.)

a particular type of verb, 'take' verb)

Italics original words e.g. English word *considering*, Chinese phrase *cong Qin*
CHAPTER 1: INTRODUCTION

This chapter outlines the reasons why I take a constructional approach to Chinese Expressions involving BA. I briefly present a number of issues that will recur in later chapters throughout this thesis.

1.1 Introduction to the thesis

In this thesis, I take a constructional approach to Chinese Expressions involving BA in their synchronic and diachronic dimensions. In this thesis I use ‘Expressions involving BA’ in initial capitals to highlight this term. From a synchronic perspective, I mainly draw on Cognitive Construction Grammar (Goldberg 1995, 2006; see e.g. Langacker 2005; Fried and Östman 2004; Croft 2001, 2005; Croft and Cruse 2004; Boas 2007 for different constructional approaches to language) to explore Expressions involving BA in Contemporary Chinese. Diachronic analyses of Expressions involving BA are based on recent work on interfaces between diachronic construction grammar and grammaticalization (e.g. Traugott 2003, 2006, 2007, 2008a, 2008b; Trousdale 2006, 2007, 2008a, 2008b, 2010; Traugott and Trousdale 2010, forthcoming; Noël 2007; Diewald 2006; Fischer 2007, 2008; Hilpert 2007; Patten 2010; Gisborne and Patten 2011; see Chapter 2 on Theoretical Framework for further references).

I firstly exemplify what an Expression involving BA is by the following instance (1.1) in Contemporary Chinese:

(1.1) 她把书装回自己包里

Ta ba shu zhuang hui ziji bao li.

3SG BA book put back own bag inside

‘She put the book back into her own bag.’

---

1 Every example sentence in this thesis is represented in the following format:
original texts in Chinese characters;
transcription in the pinyin system;
gloss;
translation
In (1.1), zhuang (‘put’) is the main verb taking a noun shu (‘book’). BA occupies a preverbal position marking the object shu (‘book’). In much previous work, Expressions involving BA have received considerable interest. In what follows, I briefly examine what has been and what has not been the subject of a great deal of attention in synchrony and diachrony, respectively.

1.1.1 Synchrony

Expressions involving BA in Contemporary Chinese have generally been discussed within the framework of generative grammar (e.g. A. Li 1991; Chao 1968; Cheung 1973; Huang 1974; Huang 1982; Hsuëh 1987; Koopman 1983; Li 1974; Li 1985; Li and Thompson 1974a, c, 1975; Mangione 1982; Sybesma 1992; Shuan-fan Huang 1986; Travis 1984; Tsao 1987; Wang 1947). An Expression involving BA is analyzed by the traditional transformationalists as a base-generated expression involving NP-movement from a postverbal position to a preverbal position. Compare the following instances for example:

(1.2) 我写了这篇文章。

\[
\begin{align*}
\text{Wo & xie & le & zhe & pian & wenzhang} \\
1SG & write & ASP & DEM & CL & article
\end{align*}
\]

‘I wrote this article’

(1.3) 我把这篇文章写了。

\[
\begin{align*}
\text{Wo & ba & zhe & pian & wenzhang & xie & le} \\
1SG & BA & DEM & CL & article & write & ASP
\end{align*}
\]

‘I wrote this article’

The presence of BA in (1.3) is assumed to give rise to a word order variation, as opposed to the SVO word order pattern in (1.2) (e.g. Li and Thompson 1976; Chao 1968). In Chapter 3 I will discuss the main differences between Expressions
involving BA and the SVO transitive expressions, and thus explain the reasons why they are not interchangeable. My purpose is to show that an Expression involving BA is not simply derived from the SVO pattern but exists as an independent construction.

Much of the previous work has separately discussed the co-occurring parts in an Expression involving BA (Li 1991: 186). For example, James Huang (1991) observes that in an Expression involving BA, the main predicate is more likely to be followed by a resultative, although this is not an obligatory requirement. Sun (1996: 58) claims that BA generally marks a definite object (e.g. in the form of [DEM CL N/NP]). However, traditional research presents potential problems in that there has been a tendency to discuss the syntax and semantics of an Expression involving BA as largely separate and independent. As I will show in Chapter 3, in the spirit of Construction Grammar (e.g. Goldberg 1995, 2006), an Expression involving BA should not be regarded as a product of movement but an idiosyncratic construction. A construction involving BA is understood as a symbolic form-meaning pairing in the sense of the constructionalist literature (see Chapter 2 for an overview). A fundamental difference in a constructional approach is that a construction involving BA is accessed holistically (Croft 2001): it is therefore not appropriate to dissociate the meaning from the form of an Expression involving BA (e.g. see Figure 3-14 in §3.4.1 for a constructional representation and analysis of the resultative Expression involving BA).

In addition to a fundamentally different approach in a synchronic analysis, there are currently at least three special issues which have been debated as below. I will incorporate these issues into my constructional account in some detail in Chapter 3.

1. The word category of BA

Hashimoto (1971) maintains that BA is a verb subcategorizing a verbal complement. In contrast, Li and Thompson (1974b on Coverbs, 1981; see also e.g. Wang 1947; Bennett 1981) claim that BA is a preposition. Audrey Li (1991) argues that BA assigns case to the NP in the preverbal position. In Chapter 3, I will argue for the position that BA is a ccoverb in Contemporary Chinese.
2. The properties of the preverbal noun (NP)
In the literature there has been considerable discussion of whether the preverbal noun (after BA) is always definite (e.g. Chao 1968; Hashimoto 1971; Li 1974; Li and Thompson 1975, 1981; Sun and Givón 1985; Tsao 1987; Ho 1993). In Chapter 3, I will elaborate on the referential properties of the noun after BA in the light of the “Givenness Hierarchy” model (Gundel, Hedberg, and Zacharski 1993).

3. The semantics of Expressions involving BA
Many synchronic researchers on Expressions involving BA prefer using the term “disposal” (e.g. Li and Thompson 1981: 482-490; Wang 1947) or transitivity (e.g. Chao 1968; Thompson 1973; Ying-che Li 1974; Sun 1996) for the semantics of Expressions involving BA. However, I think both accounts are questionable, as will be discussed below; therefore, I present a novel analysis of the BA expressions in Modern Chinese as resultatives. Here I need to clarify that this is my own idea.

Let us first look at the “disposal” account: “the disposal form states how a person is handled, manipulated, or dealt with; how something is disposed of; or how an affair is conducted” (Li 1974: 200). However, there are counterexamples to “disposal” as the semantics of Expressions involving BA, as in (1.4). The object tou (‘head’) is not an entity that can be “disposed of” as defined above. Hence, “disposal” is not applicable to all Expressions involving BA.

(1.4) 司机把头伸出窗外
Siji ba tou shen chu chuang wai.
Driver BA head reach out window outside
‘The driver reached his head out of the window.’
(Yong-shi-wo-ai, 1994)
An alternative position is that an Expression involving BA expresses high transitivity (e.g. Chao 1968; Thompson 1973; Ying-che Li 1974; Sun 1996). However, this view does not always hold, either. For example:

(1.5) 雨水把他们淋湿了。

\[
\text{Yushui ba ta-men lin shi le.}
\]

Rain BA 3PL pour wet ASP

‘The rain made them wet by pouring.’ (Beican Shijie, 2007)

In (1.5), there is no high transitivity between the non-volitional subject yushui (‘rain’) and the object ta-men (3PL). This suggests that the high transitivity position needs to be rethought for synchrony, although I will show in Chapter 6 (§6.1.1) that BA used to appear as a full verb in the transitive construction in Old Chinese.

Therefore, I am sceptical of the transitivity account, considering the fact that there is not transitivity in the above instance (1.5). Instead, I will argue in §3.2 that the BA expression is the resultative construction. By using the term “resultative”, all the above instances can be accounted for in a unified manner. For example, the above (1.5) is a resultative expression in which shi (‘wet’) is the result caused by the action lin (‘pour’).

In Chapter 3 I will further discuss the properties of the resultative Expressions involving BA. I will further classify and represent various event types of Expressions involving BA from the constructional perspective. More importantly, these different event types are inherently connected by the Compulsive Force Schema (Johnson 1987). In addition, my synchronic analysis of Expressions involving BA covers other relevant topics such as aspectual properties.

1.1.2 Diachrony

Previous diachronic work on BA focused on the grammaticalization of BA (e.g. Mei 1978; Sun 1996; Xing 2006). For such researchers the issue was primarily how to account for categorial change of BA from a full verb to a function word. In Chapter 4,
I will review the grammaticalization process of BA in more detail and in Chapter 5 I will present the history of Chinese.

Considering a grammar in which form-meaning pairings play a central role, the conventional view contrasts with a constructional approach (see Chapter 2 and Chapter 6). The key idea is that the construction, as a primitive, is central to both synchronic and diachronic analysis. Since a constructional approach to the development of Expressions involving BA in Chinese has not been seen so far in the literature on BA, I attempt to fill in this gap and go beyond previous work: to incorporate prior work on the grammaticalization of BA and rethink it in a constructional framework. In Chapter 6, I will provide an account of how the entire Expression involving BA (rather than an individual BA) has undergone diachronic development. I will show that a network of constructions is involved and central to the grammatical constructionalization of Expressions involving BA. Micro-constructions (these constructional terms will be defined and discussed in Chapter 2) involving BA change over time while being associated with different constructions at higher levels. They are recruited into different constructions with increasing schematicity at higher levels. Since Expressions involving BA are reanalyzed as different form-meaning pairings, the process has come to be known as “constructionalization” (Traugott and Trousdale forthcoming). This will be further discussed in Chapter 6.

What should also be clarified here is that I mainly take a qualitative approach in this thesis, while recognising that the qualitative and quantitative approaches both have their own advantages. For example, the qualitative approach which I mainly adopt focuses on description of corpus data rather than presenting a quantitative analysis of variation in frequency. Considering my research question, accordingly, my research is not intended to be quantitative or statistical for the purpose of categorization.

To be more specific, my main aim is to present the constructionalization process in which BA participates (see Chapter 6). The constructionalization story pertains to expansions and increased schematicity. This requires a plentiful source of examples of BA in history to enable me to describe and track how new constructions emerge. As will be shown in Chapter 5, I constructed a BA Corpus. This was a
specialised corpus based on the ‘Ancient Chinese Sub-corpus’ as part of the PKU-CCL\(^2\) Corpus (the “Peking University – Center for Chinese Linguistics Corpus”, the Old Chinese Corpus) with my searches restricted to BA. The BA Corpus enabled me to access a source of examples and examine a considerable amount of data of BA distributed in historical Chinese. Accordingly, the BA Corpus was mainly intended for the qualitative study (not quantitative research) of an Expression involving BA in relation to its grammatical constructionalization.

Some basic statistics including token frequency counts and percentage calculation were incorporated in my thesis as well for the purpose of supporting aspects of my qualitative arguments. They contributed to demonstrating increased schematicity in relation to token frequency (see §6.3 in Chapter 6). As there were more micro and meso constructions involving BA, the token frequency of the construction became higher and thus a more schematic BA-X construction emerged. In Chapter 5, I will provide more information about the corpus and methodology, including how I mainly take a qualitative approach while using supplementary quantitative evidence for directional increase in schematicity.

### 1.2 Structure of the thesis

The thesis is organized as follows:

Chapter 2 (theoretical framework) lays out some theories and principles adopted in the present research, as background to later chapters. In particular I discuss integrating work on Construction Grammar and grammaticalization theories, which will be taken as the basis of an approach to diachronic change involving BA.

The subsequent Chapter 3 (synchronic analysis) begins with a case study that illustrates the form and meaning in an Expression involving BA in Contemporary Chinese. The syntax, the semantic template, the event types, and the constructional analyses of Expressions involving BA are brought to the fore.

Chapter 4 (grammaticalization of BA and relevant typological work) builds on and expands the analysis of the historical change of BA. I review existing

\(^2\) For more information about this corpus online, please visit the URL: http://ccl.pku.edu.cn:8080/ccl_corpus/.
literature and present five categories of BA in the process of grammaticalization. The intention of this chapter is to show problems which have arisen from previous approaches to the grammaticalization of BA. This leads me to give a constructional account in Chapter 6 which aims to give a better understanding of the diachronic development of Expressions involving BA in Old Chinese. Chapter 4 also reviews relevant typological work which will pertain to my diachronic study of the BA Expressions in Chapter 6, i.e. on Chinese transitivity, the serial verb construction, the prepositional instrument construction, the causative construction, object marking and resultatives.

Chapter 5 (methodology) outlines the methodology adopted in collecting data for the diachronic part in this thesis. In this chapter, I provide more information about the size and the composition of the corpus which was constructed by me from part of the “Peking University – Center for Chinese Linguistics Corpus” (PKU-CCL Corpus). In addition, this chapter outlines the criteria I used to make a different periodization of the history of Chinese for the present research.

Chapter 6 (a constructional account) is devoted to the current constructional approach to diachronic change involving BA. I elaborate on how an Expression involving BA is reanalyzed as a form-meaning pairing and how it forms part of five Chinese constructions which constitute a constructional network. This approach has never been seen in previous literature. To set up a constructional account, I apply some insights which have been proposed in Chapter 2 to evaluate the constructionalization story involving BA, e.g. in terms of increased schematicity (e.g. Traugott and Trousdale 2010, forthcoming).

Finally, Chapter 7 (conclusion and outlook) gives concluding remarks and proposes various issues remaining for future research.
CHAPTER 2: THEORETICAL FRAMEWORK

This chapter provides a general discussion of integrating work on Construction Grammar and grammaticalization theories (e.g. Traugott 2007; Trousdale 2008 a, b, c), as background to later chapters. I address some essential issues on constructions in diachronic change especially relevant to this thesis. In particular, I discuss some constructional concepts and terms to be adopted for elaborating on diachronic change involving BA in Chapter 6.

2.1 Constructions and construction grammar

2.1.1 Constructional approaches to grammar

Construction Grammar³ presents a functional account of how language works, rather than positing constraints on presupposed rules. What is required additionally is “a special mini-grammar embedded within the general grammar, whose properties are not deducible from those of the larger grammar” (Fillmore et al. 1988: 510). So, on top of the “rules and lexicon”, one needs a wide range of idiosyncratic constructions (e.g. the Way construction, (Goldberg 1995: 199-218)) and “a list of substantive idioms” (Croft and Cruse 2004: 241) to interpret a language. And this language knowledge, in Construction Grammar, can all be included into “a network of constructions” (Goldberg 2003 b: 219), or “a repertory of clusters of information” (Fillmore et al., 1988: 535; cf. Croft 2001: 25). These new approaches renovate the traditional view on language knowledge, providing a uniform account of the contents and organization of a language (see Croft and Cruse 2004).

³ There is a wide body of literature on a number of versions of Construction Grammar, such as Goldberg (1995, 2006), Kay and Fillmore (1999), Croft (2001), Fried and Östman (2004), Lambrecht (1994), Fillmore, Kay and O’Connor (1988), and so on.
2.1.2 Constructions defined in Cognitive Construction Grammar

What is a construction in Cognitive Construction Grammar? Since I take a constructional approach in this thesis, it is important to clarify how constructions are understood. According to Goldberg (1995), constructions are treated as idiosyncratic form-meaning pairs, the “conventional symbolic units” (Croft 2005: 274; see also Langacker 1987, 1991b, 2005; Lakoff 1987; Fillmore et al. 1988).

C is a CONSTRUCTION if and only if C is a form-meaning pair \(<F, S_i>\) such that aspect of \(F_i\) or some aspects of \(S_i\) is not strictly predictable from C’s component parts or from other previously established constructions. (Goldberg 1995: 4)

As shown above, Goldberg’s (1995) emphasis is primarily on idiosyncracy and non-compositionality which is indicative of constructions. However, Goldberg (2006; cf. Goldberg and Jackendoff 2004: 533) has recently revised her earlier definition of constructions. The basic assumptions are as below:

Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg, 2006: 5)

In the 2006 model, as long as a linguistic pattern is used with sufficient frequency, it will obtain a constructional status. Accordingly, either compositional or non-compositional expressions can be entrenched and accessed as constructions (see also Bybee and Hopper 2001; Losiewicz 1992; Pinker and Jackendoff 2005).

Despite differences, Goldberg’s two models are compatible in the way that they both see constructions as form-meaning pairings and the basic units of grammar. A central feature is that semantics is directly mapped onto syntax to

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4 As will be shown soon in the subsequent sections, Goldberg (1995) is adopted as the main reference in this thesis while differences between Goldberg (1995) and Goldberg (2006) will be discussed as well later.

5 However, the question still remains as to what counts as a high enough frequency to be counted as “sufficient” (e.g. Blumenthal-Dramé 2011; Clark and Trousdale 2009; Traugott and Trousdale 2010).

6 Goldberg (2006: 5) also claims that constructions are “pairings of form with semantic or discourse function”.
constitute a conventionalized “symbolic structure” (Croft 2001: 18; Croft and Cruse 2004: 258; Croft 2005: 274; Langacker 1987: 57-63; Goldberg 2002, Culicover and Jackendoff 2005; Fried and Östman’s 2004: 18). This sharply contrasts with the generative approach which presupposes transformational rules of grammar and dissociates semantics from syntax (see Chapter 4 on problems with a traditional approach to diachronic work on BA).

Here I explain how Goldberg’s models (1995, 2006) are used in this thesis. As will be discussed in Chapter 3 and Chapter 6, my analyses of Expressions involving BA involve a range of idiosyncratic argument structure constructions such as the Chinese transitive construction, the Chinese causative constructions, and the Chinese resultative constructions. In this sense, my research conducted on complex pairings of structure and meaning mainly aligns with Goldberg (1995). This is especially appropriate in the case of research on Expressions involving BA synchronically as well as diachronically.

With respect to Goldberg (2006), “sufficient frequency” (Goldberg 2006: 5) is emphasized and treated as a more important criterion than whether a linguistic pattern is fully or strictly predictable (Goldberg 1995). Goldberg (2006) aims to explore how generalizations are learnt by both adults and children. Despite these differences, Goldberg (2006) shares commonalities with her previous work (1995): form-meaning pairings, i.e. “constructions”, are recognized as the basic linguistic patterns which are stored and learnt. Also, “constructions” could be fully and partially filled (Goldberg 2009: 2; 2006, 1995).

I adopt the 1995 model as the primary reference particularly because idiosyncracy serves as a crucial sign for constructionalization: idiosyncratic associations (or, mismatch) between form and meaning during change. There is another reason why I use Goldberg (1995) as my model: I work on Argument Structure constructions, as Goldberg (1995) does; the model does not change significantly with respect to its treatment of those constructions in the later book (2006) which is concerned with a much larger range of construction types, and more ‘background’ theorising about the nature of constructions and grammar and language and mind. What I wish to clarify here is that, by holding Goldberg (1995) as the main
reference, I do not suggest that Goldberg (2006) would contradict the claims I make in this thesis in any unsuitable manner.

2.2 Diachronic construction grammar

In this section, I reflect on some claims about the relation between constructions and grammaticalization in the literature.

2.2.1 Constructions in traditional approaches to diachronic change

2.2.1.1 Grammaticalization

The traditional term grammaticalization concerns “the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions and, once grammaticalized, continue to develop new grammatical functions” (Hopper and Traugott 2003: 18). Reanalysis has been a recurring theme in much of the grammaticalization literature, and it has been construed as “the formulation of a novel set of underlying relationships and rules” (Timberlake 1977: 141; Harris and Campbell 1995; Harris 2003; Andersen 2001, 2006; Hopper and Traugott 2003). Reanalysis is a mechanism which is primarily concerned with “change in the structure of an expression or a class of expressions that does not involve any immediate or intrinsic modification of its surface structure” (Langacker 1977: 58). Therefore, reanalysis operates on structural change in general. Local reanalysis is abrupt and innovation takes place by micro-steps (e.g. Lightfoot 1979, 1991, 1999; Hale 1998; Roberts 2007; Traugott and Trousdale 2010). By comparison, analogy/extension as another mechanism has recently been identified more significantly with grammaticalization in a paradigmatic manner (see Givón 1991; Lehmann 2004; Fischer 2007; Anttila 1989; Kiparsky forthcoming for discussion from different perspectives, what are not elaborated on here). Note that individual lexical items including words and morphemes are in the center of grammaticalization. A lexical item loses its independence to become more dependent on other components in the entire pattern.
Along a grammaticalization cline, lexical items become grammatical items, or less grammatical items become more grammatical ones in a dynamic, unidirectional historical process (cf. Traugott and König 1991). The grammaticalization process via reanalysis can be exemplified by the well-known instance of be going to which gradually acquired grammatical functions to become a futurity marker and ultimately took on the morphosyntactic form of be gonna (cf. Heine, Claudi and Hünnemeyer 1991; Hopper and Traugott 2003):

(2.1) a. Bill is going to church.
    b. Bill is going to get married.
    c. Bill is going to pray.
    d. It is going to rain.
    e. Bill is going to go to church.
    f. Bill is gonna go to church.

The reanalysis process of be going to can be broken down into a couple of stages, as shown below: In (a), go is a verb of motion referring to the physical movement to a locative, i.e. ‘Bill is moving through space to the place of church’. However, the original use of be going to develops to express the intention as in (b), which is associated with purposive to. It develops further to a futurity marker (an auxiliary) as in (d). By means of metaphorical extension, this instance (d) expresses a kind of movement through time, i.e. the event ‘to rain’ will happen at a point in the future. Interestingly, there is an intermediate stage between (b) and (d), i.e. (c) where two possible interpretations are allowed: One is ‘Bill is travelling (to the location of church) in order to do praying’ [intention], the other is ‘Bill will pray’ [futurity]. Nonetheless, with the co-occurrence of the other content verb go with be going to, (e) tends to adopt the reanalysis like (d) while be going to marks the future (which will be further discussed subsequently). Instance (f) witnesses the phonetic reduction of be going to as be gonna. In short, the content meaning of be going to is gradually bleached while performing grammatical functions in semantic reanalysis. In terms of syntax, it is reanalyzed as an auxiliary.
Regarding the intersection between diachronic gradualness and synchronic gradience, the grammatical change as described above is a gradual process. On the one hand, the impression of gradualness could only come from an observation of the overall change, and the language user’s multiple analyses of a given pattern over a course of time (Harris and Campbell 1995: 86-88). On the other hand, each observable macro-change should be achieved by “micro-steps” of changes (Traugott and Trousdale 2010: 39), and these small changes are “discrete” and “identifiable” for individual speakers: there must be a time point by which an innovation is achieved (possibly after moments of gradual changes) (Lightfoot 1979, 1991), so that a change could be attested. Overall, gradualness could be seen as gradience from a synchronic point of view, and this will be applied to the discussion on Coverbs in Chapter 3 on Synchrony.

2.2.1.2 Constructions as used in grammaticalization theories

In the traditional approaches to grammaticalization as suggested above, the notion “construction” is particularly treated as the syntagmatic context necessary for the grammaticalization of lexical items, “shaping the structure of grammatical forms” (Heine and Kuteva 2002: 2; cf. Meillet 1958 [1912]: 131) in “the element-based view on grammaticalization” (Himmelmann 2004: 31). There has been growing consensus that constructions play an important role in grammaticalization, since the studies of lexical items cannot be isolated from the surrounding context which builds up the “syntagmatic relations of the elements” (Lehmann 1992: 406; cf. Givón 1979; Bybee, Perkins and Pagliuca 1994, Heine 2003; Hopper and Traugott 2003; Traugott 2003a; Himmelmann 2004). For example, it is argued that “the development of grammatical items is shaped by the constructions in which these items occur” (Heine 2003: 581). Similarly, it is claimed that “grammaticalization does not merely seize a word or morpheme […], but the whole construction formed by the syntagmatic relations of the element in question” (Lehmann 1982: 406). It is understood that a lexical item which undergoes a development (e.g. from verb to auxiliary) can’t be entirely independent of its combinatorial relationship with other components within a pattern (traditionally, “construction”).
Indeed, the literature on grammaticalization has emphasized the importance of “construction”. However, the difference lies in what the term “construction” denotes: traditionally, it refers to a string of words which provides the surrounding context for “evolution of grammatical categories” (Heine and Kuteva 2002: 6); in contrast, as a form-meaning pairing, “construction” per se is subject to grammaticalization in the Construction Grammar approach, as discussed more fully in the following section §2.2.2.

### 2.2.2 Constructions in a constructional approach to diachronic change

The constructional approach raises an important question: what is the proper unit that is undergoing change? From the perspective of Construction Grammar, lexical items and larger patterns are all in the list of “constructions” as the basic linguistic units. Accordingly, a larger and more complex grammatical pattern should be taken as the same “symbolic form-meaning pair” in grammaticalization (Gisborne and Patten 2011: 94; cf. Croft and Cruse 2004: 255; Croft 2001) for the purpose of diachronic research.

It has been realized that a construction does not only provide the surrounding context for lexical items (or, less grammatical ones) to change by acquiring grammatical (or, more grammatical functions), but also undergoes diachronic change in its own right (see Traugott 2003a: 645; Trousdale 2008a: 33-34). Therefore, Construction Grammar provides a unified framework for understanding the basic unit of change as the “construction” (Himmelmann 2004; Bybee 2003a), the whole form-meaning pair\(^7\). I shall argue this in three respects as below. Note that in §2.3.4, 

\(^7\) As far as the locus of the change is concerned, it is more precisely the symbolic relation between form and meaning that changes from the perspective of Radical Construction Grammar (Croft 2001: 366; Croft 2000), as the “primary mechanism for innovation of altered replication of grammatical structures”.

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I will discuss more about how constructions form taxonomic hierarchies, and how a network of constructions is applicable to diachronic research.

In the first place, it is the construction rather than atomic lexical item that undergoes grammaticalization (e.g. Croft 2001; Traugott 2006; Trousdale 2010). The same machinery of grammatical change could be applied to a lexical item and a complex pattern, which are both viewed as form-meaning pairs in a list of constructions. Therefore, the object of reanalysis is treated as the whole expression rather than a single lexical item, and the lexical change is only part of the constructionalization process. A complex pattern of configuration is also subject to grammaticalization since it has its own non-compositional meaning and constructional properties which cannot be derived from its components.

In the second place, given that the construction serves as the single unit to grammaticalize (e.g. Bybee 2003a; Traugott 2003a), changes include form and meaning both of which are required for attesting the emergence of constructions in evolution. In a constructional approach to grammaticalization, the whole form-meaning pair undergoes a process of change, including shifts in grammatical structure which is in line with grammatical function (cf. Croft 2001: 261).

In the third place, the unit of reanalysis in construction grammar framework (e.g. Croft 2001; Traugott 2006; Trousdale 2010) is the construction. That is, the construction is not only the basic unit of language, but also the basic unit of language change. The constructional approach provides a new way of thinking about grammaticalization.

To take a constructional approach, the same reanalysis process of *be going to > be gonna* (see §2.2.1.1) presents that it is the whole expression rather than a single lexical *go* that changes, which can be particularly supported by the following instances (as in (2.1b) and (2.1e) in previous section, but repeated here for convenience):

(2.2) d. It is going to rain.

e. Bill is going to go to church.
As mentioned earlier, it is clear that be going to in (2.2d) indicates futurity. More importantly, sentence (2.2d) shows that be going to appears in a wider range of contexts (compared with (2.1a, b, and c)) (see Bybee 2003a who raises a cognitive discussion of grammaticalization) where the subject is non-volitional and the verb does not entail intention. These changes are of significant relevance in that the whole grammatical string (including the elements apart from single go) are affected in the grammatical change.

Similarly, in (2.2e), the main verb go contributes to the downgrading of be going to towards an auxiliary. This suggests that the position following be going to is no longer restricted to a location NP, but extends to verbal phrases. In this case, we can see the important role of the context for judging the grammaticalizing status of be going to in evolution. The co-occurrence of the main verb go favours such a semantic and syntactic reanalysis that the whole instance is a futurity marking expression. Also, we witness that a broader range of words (even beyond nominal phrases) appear in the position after be going to, which is attributed to generalization.

2.3 Diachronic change from the constructional perspective

This section focuses on several issues with regard to how grammaticalization is integrated with Construction Grammar (e.g. Bergs and Diewald 2008; Traugott 2008a; Trousdale 2008c).

2.3.1 Constructionalization

Since constructions serve as the basic units of language, change involves the development of new constructions. Citing Traugott and Trousdale (forthcoming: §1.4 and §3.2; cf. Rostila 2004; Noël 2007), I adopt the position that “constructionalization” is such a process as below:
A process in which form_{new}-meaning_{new} (combinations) of signs are created through a sequence of small steps in which form and meaning are reanalyzed.

This is a constructional definition which emphasizes a “holistic” (e.g. Fried and Östman 2004: 24; Croft 2005: 273) change of both subcomponents, i.e. form and meaning. It is important to note that constructionalization is distinct from other possible changes such as “constructional change” (see Traugott and Trousdale forthcoming for a fuller comparison) in that both form and meaning changes must have taken place. We will witness in later chapters (e.g. Chapter 6) the emergence of new formal and functional characteristics of constructions involving BA (via reanalysis), which is typically identified as constructionalization.

2.3.2 The syntax-lexicon continuum

Constructions can be of any complexity, and schematicity (Croft and Cruse 2004: 256; Traugott and Trousdale forthcoming), ranging from “elementary lexical items” to “larger and more complex” ones (Fillmore et al. 1988: 534). Language is therefore a repertoire of “symbolic signs” which constitute a “multi-dimentional framework” (Fried and Östman 2004: 18-19). A crucial difference between construction grammar and modular accounts lies in the non-existence of strict division between modules such as lexicon and syntax (Goldberg 1995: 7), leading to the “syntax-lexicon continuum” (Croft 2005: 275; Croft and Cruse 2004: 256; Kay 2002).

With respect to the theme about how language is understood as “a network of constructions” (Goldberg 2003: 219), I will continue discussion in the following section §2.3.4. The concept of a network in construction grammar has commonalities with closely related models of grammar known as Cognitive Grammar (e.g. Langacker 1987) and Word Grammar (e.g. Hudson 2007). Conitive grammarians also work on networks and advocate that language is a “structured inventory”.

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8 There are two types of constructionalization, i.e. grammatical constructionalization, and lexical constructionalization (see e.g. Traugott and Trousdale forthcoming; Trousdale 2008a, b for detailed distinctions between them). The chief difference is what changes have occurred to schematicity, productivity and compositionality. As will be discussed in Chapter 6, the sequence of changes exemplified in the case of Expressions involving BA illustrates grammatical constructionalization: a form-meaning pair involving BA becomes more grammatical since BA has lost its substantive meaning and has become an object marker. In this thesis, therefore, I focus on grammatical constructionalization.
(Langacker 1987: 63-76). The syntax-lexicon continuum concerns organization of "grammatical units and schematization of those units" in language (Langacker, 1987: 25-27, 35-36, 53-54; cf. Langacker 2000, 2005). Word Grammar accounts for linguistic structure by suggesting that "language is a conceptual network" (see Hudson 1984: 1 for "The Network Postulate"): there is "hierarchical modularity" (Barabási 2003: 236) rather than absolute modularity in the entire network structure (see further Hudson 2007, 2010: 34, 63, 189 for discussion in considerable detail). In terms of developing a hierarchical network, the syntax-lexicon continuum proposed by construction grammar is compatible with Word Grammar as well.

I now turn to how the syntax-lexicon continuum is applicable to research on a diachronic dimension: First, a construction of any size, i.e. either an atomic element or a complex configuration, is subject to grammatical change by acquiring grammatical (or more grammatical) functions (e.g. Diewald 2008; Langacker 1990b). This hypothesis has been tested in the case studies such as the development of the English light-verb constructions (see Trousdale 2008a). Second, since there is a continuum between lexical constructions and grammatical constructions, a network of constructions at different levels of schematicity and abstractness (e.g. Croft and Cruse 2004: 256; cf. Traugott and Trousdale forthcoming; Lehmann 2004; Brinton and Traugott 2005) tends to be implicated in grammatical constructionalization (see also §2.3.4 for a fuller discussion on the notion of a network of constructions). A substantive and lexical micro-construction may develop to a functional and grammatical (or more grammatical) one, being subject to attraction into more schematic constructions at higher levels.

2.3.3 The interplay between verbs and constructions

Goldberg (1995) highlights the interaction between verbs and argument structure constructions (see Pinker 1989). Similarly, Fried and Östman (2004: 12) claim that "linguistic expressions reflect effects of interaction between constructions and the linguistic material which occur in them". Verbs usually play an important part in instantiating the construction. As will be discussed in Chapter 3 (§3.3.1), the BA constructions of different event types in Contemporary Chinese largely depend on
different types of main verbs. Particularly I seek to discuss the interplay between the lexical semantics and the constructional semantics in some interesting cases. In diachrony, we can also see the interplay between the entire pattern involving BA and the verbs which occur in it in the history of Expressions involving BA. For example, while examining collocational features (see §6.1), I find that certain types of the micro-constructions involving BA only fuse with certain clusters of verbs.

2.3.4 A network of constructions

As mentioned in § 2.3.3, language is not modular but a network of constructions in construction grammar (Goldberg 2003; Croft 2010). Here I further discuss how these constructions are organized in a system.

The basic linguistic units of constructions are independent but are not isolated. Instead, mutual relationships exist among constructions at intersecting levels in a constructional taxonomy (cf. “taxonomic hierarchy”, Croft 2001: 25, 2010; Traugott and Trousdale forthcoming; Traugott 2007; Trousdale 2010; Patten 2010a; “taxonomic network”, Croft and Cruse 2004: 262). The constructional network is highly organized in that constructions are connected via “multiple inheritance links” (Goldberg 1995: 97; Fillmore 1998: 115). For research on networks from a Word Grammar perspective, it is the basic unit of word that constitutes a “node” in “a conceptual network” (Hudson 1984: 1, 2007: 153, 2010; for the use of “network”, see also Gisborne 2008, 2010, 2011). However, the relations of these nodes are also at the heart of Word Grammar.

The hierarchical inheritance is often thought of in terms of “default inheritance” (e.g. Hudson 2010: 24, 1990, 2000, 2007; Fraser and Hudson 1992; cf. Goldberg 1995: 5, 2006; Lakoff 1987; Pollard and Sag 1994: 36; Langacker 1987, 1990a). It means that the characteristics of a super-category are inherited unless they are “overridden” (see further Hudson 1984: 20 for “the Best Fit Principle”, cf. Winograd 1976). One of the most remarkable benefits of “default inheritance” is to permit “more and less prototypical members” of a category depending on the extent

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9 “Default inheritance” is usually contrasted with “complete inheritance” which is adopted by unification-based grammar (see Kay and Fillmore 1999; Patten 2010 a: 31).
10 The non-prototypical members override inheritance from the superordinate construction.
to which properties are inherited\textsuperscript{11} (see Gisborne and Patten 2011: 95; Hudson 2010: 24 for fuller accounts of “prototype effects”). As suggested by research on various constructions with types of GIVE verbs in a network (Newman 1996), for example, constructions share certain properties while distinguishing themselves from each other in some way. Regarding constructional differences, constructions tend to show gradable degrees of schematicity, abstractness and productivity, at a set of constructional levels.

According to recent work on constructional levels (e.g. Traugott 2007, 2008a, b; Trousdale 2008a, b, c, 2010), there are macro-constructions, meso-constructions, micro-constructions, and constructs with an increased schematicity from the bottom to the top. As mentioned above, constructions at different levels interplay with each other in a network. Macro-constructions at the highest level are the most superordinate categories, highly general, abstract, schematic and productive. The lower-level constructions, as sanctioned instances, are subordinated to such higher-level constructions. Meso-constructions are less schematic or abstract than macro-constructions. Micro-constructions are associated with clusters of variants which are generalized from tokens, or the “specific instances of use” (Bybee 2006: 714), i.e. the constructs.

At the level of a micro-construction, there are generally non-prototypical members which radiate out from the prototypical member by way of extension (Lakoff 1987; see also Fischer 2007, 2008 for the analogy mechanism). These variants at the micro-level can be known as micro-expansions. Prototypical and non-prototypical micro-constructions are all generalized from tokens in use and sanctioned by a more general and schematic construction at a higher level. Existence of prototypical and non-prototypical members suggests the intersection of gradience with gradualness (Traugott and Trousdale 2010; see also Rosch 1978; Geeraerts 1997; Lewandowska-Tomaszczyk 2007 for prototype theory).

Now I discuss how a network of constructions is applicable to diachronic research. Since language is a network of constructions, diachronic change concerns

\textsuperscript{11} In a structured network, on the one hand, constructions are partially overlapping in terms of sharing some properties; on the other hand, they differentiate from others by displaying idiosyncratic properties (see Croft and Cruse 2004; Fried and Östman 2004 for properties of categorization and family resemblance).
emergence and conventionalization of constructions (see Nunberg et al. 1994; Croft and Cruse 2004 for how “conventionality” distinguishes from “non-compositionality”). New constructions enter the language while old ones demise, and existing constructions show symptoms of life-cycle (see Traugott and Trousdale forthcoming for arguments on “the life-cycle of a construction”). It has already been brought into view that there is a directional bottom-up mechanism in grammatical change, i.e. accumulation of schematicity (Trousdale 2008a: 55, 2008c: 170-171, 2010: 61-63; Traugott 2007, 2008a; Fried 2008). Here I focus on how increased schematicity is involved in constructionalization. Generalized from attested tokens, micro-constructions are fairly substantive and specific. They are sanctioned instances of higher-level constructions which increase in generality, schematicity and abstractness. The more schematic constructions are formed and they in turn overarch more potential micro-expansions. Together, grammatical change can be considered in part as a dynamic process of schematization known as “directional change” (Gisborne and Patten 2011: 100; Patten 2010: 252). New constructions emerge from language use, while the existent ones become further schematized with the effect of “category strengthening” (Gisborne and Patten 2011: 97). A number of works combine grammatical change with increased schematicity. Trousdale (2008b) attributes the emergence of English transitive constructions to the loss of the impersonal constructions by identifying schematization and generalization. In her study of the historical development of English it-cleft structure, Patten (2010a: 2) finds that “the construction has become increasingly schematic and productive over time, sanctioning instances which override inheritance from the more basic specificational schema”.

In sum, while thinking of grammatical change in a given pattern, we should have in mind a network of constructions: there is a network of constructions, in which certain nodes are associated with one another via multiple inheritance links. This is how “constructions” are “motivated” (Goldberg 2003 a: 120; Lakoff 1987) in the diachronic process. As a consequence, I endeavour to explore “complex mesh of interlinked constructions, with and across several categories” (Denison 2006: 297) in the present research of Expressions involving BA

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2.3.5 Usage-based account of some mechanisms of change

In this section, I discuss some other factors which are associated with the development of grammatical constructions. In a usage-based model (e.g. Bybee 1985, 1995, 2003, 2006; Langacker 1987, 1988; Barlow and Kemmer 2000; Bybee and McClelland 2005; Bybee and Hopper 2001; Bybee and Scheibman 1999; Croft 2000; Goldberg 1999; Culicover 1999; Israel 2002), we can see the interplay of mechanisms such as frequency and priming effects which are relevant to diachronic change.

2.3.5.1 The role of context

This section focuses on how context is understood in diachronic construction grammar. According to Catford (1965: 31), context encompasses two subtypes, i.e. “co-text” and “context” (see Bergs and Diewald 2009 for a review from a constructional point of view).

Using “co-text”, Catford refers to language-internal factors, such as the co-occurrences of syntactic elements and collocational patterns. The surrounding text has an impact on the given element within the clause or even across sentences in a conversation (see also Terkourafi 2009; Stefanowitsch and Gries 2003; Hilpert 2008; Wekker 1976; Wide 2009 for a number of case studies on co-textual effects). By comparison, “context” concerns language-external factors such as socio-cultural knowledge, pragmatic and discourse factors. To avoid confusion, I examine “co-text” and “context” respectively in the following discussion, addressing how they are reinterpreted in the construction grammar framework.

2.3.5.1.1 Constructions and co-text

\[12\] In this section, “context” with quotation marks refer to the subtype (language-external factors) as opposed to “co-text”. The general use of context is without quotation marks.
In historical linguistics, “construction” is typically used in a pre-theoretical sense. It is usually linked with the syntactic environment in which an item undergoes change (e.g. Heine 2002). In this sense, contexts, constructions, and co-texts are synonyms referring to the textual environment. For example, Diewald (2002, 2006) finds that three kinds of contexts play an important role in the grammatical development of German modal verbs. Here contexts can be replaced by traditional use of constructions, or co-texts.

In the traditional approaches, a role of syntactic co-text in the grammaticalization cline is to warrant “yesterday’s syntax” to become “today’s morphology” (Givón 1971: 413). Consider the following cline of grammaticalization based on the “degree of fusion” (Bybee, Perkins and Pagliuca 1994: 40; Bybee 1995; Lehmann 1985: 304):

**Grammaticalization scale:**
Phrases or words  non-bound grams  inflection

![Grammaticalization scale](image)

**Degree of fusion:**
Syntactic  non-bound grams  inflection  derivation  lexical

![Degree of fusion](image)

As shown above, there is gradual change from phrases/words (as starting point) to non-bound grams and eventually to inflection. That is, a particular element grammaticalizes out of co-text. In the framework of construction grammar, constructions are reconsidered as the locus of change (see Bergs and Diewald 2008: 21-43). The key idea is that a construction (or, co-text) in the traditional sense
participates in change in its own right. Recall that the syntax-lexicon continuum (see §2.3.2), constructions (in construction grammar terms) consist of form-meaning pairings of any size and complexity. Syntactic environment (or, co-text) is treated as construction in the new sense. On the diachronic dimension, co-text is subject to change and conventionalization as well.

2.3.5.1.2 “Context”

In Catford’s (1965) terms, “context” traditionally refers to extra-linguistic factors such as pragmatics and discourse which is treated as a distinct module. In the literature, the importance of “factors external to language structure” (e.g. Traugott and Dasher 2002: 36; Lass 1980, 1997) has been acknowledged. These factors include pragmatic inference, cognitive constraints and “communicative situation”. (Fischer 2007: 121). For example, Traugott (2003a: 633; see also Fried and Östman 2004: 24) argues that “pragmatic force” motivates the meaning change and acquisition of grammatical functions (see also Harris 2003: 537 for the role of “expressiveness” in the interaction between structure and language use in diachronic change).

In construction grammar, “context” is integrated into constructions in general. In her research of the Old Czech participial adjective in relation to the complementation patterns, Fried (2009) shows that distinct communicative context are different combinations of form and meaning, whereby the meaning expressed by them functions to distinguish each type of complementation pattern. For another example, Terkourafi (2009) suggests that the French Context Focusing Parce que Construction also consists of formal and functional properties with constructional status.

On the diachronic dimension, “context” is also subject to change as subconstructions. When “context” comes to be part of a construction, the “context” is

\[\text{More accurately, “context” is encoded in (or, is part of) the meaning side of construction. On the one hand, constructions are associations between form and meaning. On the other hand, in the constructional model, there is no strict division between semantics and pragmatics (Goldberg 1995: 7). As a consequence, pragmatic implicature and discourse is integrated into the meaning side of constructions (see also e.g. Boas and Sag 2011; Sag 2011 for how semantics and contextual factors are incorporated in the framework of Sign-based Construction Grammar).}\]
associated with this particular form-meaning combination only and contributes to the constructional idiosyncrasy. It is argued that different “contextual source” might render different “instances of grammaticalization” (Traugott 2003a: 645).

Contextual construction (Traugott 2003a: 645) participates in diachronic change by means of conventionalization (or, “entrenchment”, Langacker 1987: 59-60) and semanticization (or, “semantic fixing”, Gisborne and Patten 2011: 96). “Context” is a part of the change of construction and tends to be fixed in the process of the emergence of new constructions and the conventionalization of existing constructions.

The role of “context” (discourse-pragmatics) in diachronic change has received much attention in the literature. According to the grammaticalization cline proposed by Givón (1979: 209), there is a gradual process of lexical change starting from discourse through syntax towards morphophonemics. This suggests that discourse-pragmatics serves as a starting point for grammaticalization (see Heine et al., 1991; Heine 1992).

On a constructional account, “context” (or, discourse-pragmatics) in the traditional sense is integrated into the meaning side of construction. As part of the construction, “context” is semanticized and conventionalized to form an idiosyncratic construction. Contextual preferences are different across different constructions of distinct formal and functional properties.

The literature on pragmatic inference (Traugott and Dasher 2002: 34) provides a compelling account of how semantic reanalysis takes place. As is claimed by Bolinger (1971: 523; Grice 1989[1975]; Geis and Zwicky 1971; Levinson 1979.), “inferences do become references in the course of time”. It is possible and usual for “a conversational implicature to become conventional” (Grice 1975) from propositional to expressive. To put this differently, conventionalized pragmatic meanings of utterance-based tokens in the context could become exploited as semantically encoded meanings at the “macro level” (see Nerlich and Clarke 1992: 127 on “the micro-dynamics of semantic in semantic innovation” and “the macro-dynamic” change). Context change often invites reinterpretation of a pattern and induces the reanalysis of this pattern, which results in semantic conventionalization of the pragmatic inference.
In a word, yesterday’s pragmatic implicature becomes tomorrow’s semantic polysemies. This can be evidenced by the grammatical development of *be going to* into a futurity marker which witnesses the semanticization of ‘intention’ (Hopper and Traugott 2003: 3). For another example, Nicolle (2007) proposes that the grammaticalization of movement verbs into tense markers results from semanticization of pragmatic inferences.

To review “co-text” and “context” from the constructional perspective, it is not necessary to make a distinction between them. In construction grammar, grammatical change occurs to both form and meaning. As mentioned, “co-text” and “context” largely refer to the syntactic and pragmatic factors respectively in historical linguistics. In the constructional model, they are incorporated into the form and meaning parts of constructions. Therefore, they collectively contribute to the change of constructions. With regard to context, Himmelmann (2004: 32) proposes three types of expansion (see §2.3.5.4 for more accounts; see also Traugott and Trousdale forthcoming for a summary of GE approach which adopts the idea of grammaticalization as expansions). The process in which a grammaticalizing element spreads in more contexts can be summarized as host-class expansion, syntactic expansion, and semantic-pragmatic expansion. In Himmelmann’s terms, “syntactic expansion” can be associated with expansions of the traditional “co-text”, while “semantic-pragmatic expansion” is associated with expansions of the traditional “context”.

### 2.3.5.2 The role of frequency

In the literature on grammaticalization there has been much discussion of the role of frequency (e.g. Bybee 2003a). Some argue that grammaticalization occurs prior to change in frequency (usually with an increase), which suggests that frequency is a consequence of grammaticalization (see e.g. Hundt 2001; Mair 2004). For many others, frequency often facilitates (or, motivates) grammatical change as a precursor, or “triggering device” (e.g. Bybee 2003a: 602, 605):

Frequency is not just a result of grammaticalization; it is also a primary contribution to the process, an active force in instigating the changes that occur in grammaticalization.
Increased frequency contributes not only to emergence of new constructions but also to automatization of existant constructions (e.g. Bybee 2003a: 621, 2003b: 152, 2006; Pawley and Syder 1983; Haiman 1994; Langacker 1987, 2009; Goldberg 1995, 2006). There have been a number of corpus-based studies in this field (e.g. Bybee and Hopper 2001; Krug 2001). For example, studies in Korean negation forms (e.g. Kawanishi and Sohn 1993) have shown that increased frequency exerts strong influence on the development of –ci anh(a) (‘not’) into the utterance-final “interactive marker” –canh(a). This suggests how repetition and high frequency\(^{14}\) contributes to “the creation of grammar” (Bybee 2003a: 622).

In constructional terms (e.g. Goldberg 2006), “sufficient frequency” is treated as central to entrenchment of a construction (see §2.2.2; see Clark and Trousdale 2009 for discussion on how much frequency counts as “sufficient frequency” for a string of words to get entrenched; cf. Bybee 2007; Hay 2001; Hay and Baayen 2002; and Phillips 2006). From the constructional perspective, frequency is considered to be important for grammatical change. This point is more explicitly illustrated as follows:

First, since constructions are the basic units of change (Goldberg 2006; Pinker and Jackendoff 2005), repeated use and high frequency tend to facilitate automatization (or, conventionalization) of these form-meaning pairings. Due to the cumulative effect of increased frequency, a pattern is subject to habituation and storage while undergoing semantic bleaching and formal reduction (see Bybee 2003a: 605; Traugott and Trousdale forthcoming; Fischer 2007; Trousdale 2008c, 2010; Himmelmann 2000 for accounts of the role of frequency in grammaticalization from different perspectives).

Second, frequency represents an important characteristic of grammatical change. An expression with developed grammatical (or more grammatical) functions tends to enter an increasing number of contexts as a consequence of generalization and abstraction. This process, known as expansion (see Himmelmann 2004.) is often

\(^{14}\) As shown above, there has not been consensus of whether frequency motivates and precedes grammaticalization (e.g. Hundt 2004; Hoffmann 2005). Regardless the debate on this issue, what we are sure is that frequency is essential to grammaticalization (particularly, frequency plays a part in reduction, see Traugott and Trousdale forthcoming; Bybee and Scheibman 1999).
reflected (or, evidenced) by increase in the (type and token) frequency (cf. Bybee 2003a, b, 2007) and productivity. In other words, measuring increase in the frequency usually indicates increased schematicity and generalization in the development of grammatical constructions. Bybee (2003a: 604; see also Bybee 1985) makes a distinction between “token frequency” and “type frequency. Token frequency refers to the number of actual tokens, while type frequency refers to the number of types of expressions. Frequency (especially, type frequency) is closely related to productivity: when an expression spreads in more contexts and appears with more collocational possibilities (e.g. Traugott and Trousdale forthcoming; Bybee and McClelland 2005: 391), there tends to be a rise in type frequency. When an expression acquires grammatical (or, more grammatical) function and becomes more widely used, there is usually increase in the token frequency as well.

In the subsequent section, I try to locate repetition and increased frequency in the overlapping area between psychology and language change. Using the concept of priming, I try to explain why particular expressions tend to increase in frequency.

### 2.3.5.3 Priming effect

Studies of priming in diachronic change have been seen in the literature such as Bock and Kroch (1989), Loebell and Bock (2003), and Ferreira (2005). Particularly, priming relates to the direction of evolution (e.g. Jäger and Rosenbach 2008).

Priming operates as a psychological mechanism (for approaches to “priming”, see Bock 1986; Luka and Barsalou 2005; Dell 1986; Pulvermüller 2002 and elsewhere). It has an effect on grammaticalization by directing the pathways of diachronic change:

(Priming) basically means ‘preactivation’ in the sense that the previous use of a certain linguistic element will affect the subsequent use of the same or sufficiently similar element, the ‘target’. Priming is a largely unconscious and automatic process, operating without the speakers’ awareness. (Jäger and Rosenbach 2008: 91)

The above texts suggest that priming is associated with “repeated exposure” (see also e.g. Luka and Barsalou 2005), or “repetition” (Bybee 2003a: 621), or “linguemes” as
linguistic replicators in evolution (Croft 2000). And repeated use in turn leads to the speaker’s preference for certain expressions.

In the priming model, one way to generalize the motivations for language change is the priming effect and the variation/creation. Priming as a foundational mechanism mainly contributes to replication before variations come into being (e.g. Haiman 2010):

The previous use of an element A will enhance the likelihood of the same element A to occur in discourse, hence acting like an amplifier of A. (Jäger and Rosenbach 2008: 107)

Priming concerns similarity which enables an expression to re-occur leading to reproduction. Repeated use of the similar elements or expressions gives way to “habituation” and storage effect (Bybee 2003a: 603; Haiman 1994). Besides, creative factors are also taken into account. As suggested by Weinreich, Labov and Herzog (1968:187), “all change involves variability and heterogeneity”. Variations (or, expansions) arise for the sake of the expressive enrichment (Keller 1994; see also Croft 2010). These variations take place by micro-steps (e.g. Traugott and Trousdale 2010: 39; Traugott and Trousdale forthcoming) leading to observable language change.

I take the same example be going to (see §2.2.1) to illustrate the role of priming in diachronic change. In this case, grammaticalization unfolds in a direction from a motion expression involving a verbal phrase be going to to a futurity marking expression involving an auxiliary be going to. In the development of grammatical function, the spatial (motion) verbal phrase primes the temporal (futurity) marking auxiliary via metaphoric extension. Therefore, the grammatical development occurs in this direction rather than the other way around. This is consistent with what has been generally adopted in conceptualization: the spatial (source) primes the temporal (target) (e.g. Boroditsky 2000; Heine et al. 1991; Haspelmath 1997; Heine and Kuteva 2002; Hopper and Traugott 2003; Svorou 1994; Lakoff and Johnson 1980). A polysemy of be going to as a temporal marking expression emerges based on replication and priming: the spatial use of this expression increases the chances of the same string of words be going to to recur and get entrenched as a grammatical
construction. Also, change accommodates the functional extension by which the temporal usage differs from the spatial one.

2.3.5.4 Directionality

Unidirectionality is proposed as one of the foremost hypotheses in diachronic change (e.g. Traugott and Trousdale forthcoming; Herring 1991: 253; Lass 2000; Hopper and Traugott 2003; Haspelmath 2004; Bybee 2003a; see also e.g. Norde 2009; Bybee, Perkins, and Pagliuca 1994; Himmelmann 2004 for different approaches to directionality). Grammaticalization is understood to be a directional process either of increasing reduction, abstractness and dependency, or of expansions to wider use (see Traugott and Trousdale forthcoming for a summarizing account of approaches to directionality). In either model, grammaticalization involves directionality despite different interpretations.

In the framework of construction grammar, change is also largely directional from a historical perspective. There has been strong tendency that grammatical constructionalization is characterized by increased schemativity, productivity and decreased compositionality (e.g. Trousdale 2010; Traugott and Trousdale forthcoming; Langacker 1987, 2008, 2009). Schematicity (or, generality, Langacker 2008: 244; Goldberg 2006; Kemmer 2003; Tuggy 2007; Traugott and Trousdale forthcoming) concerns how abstract or generalized a construction is. Degrees of schematicity vary in that constructions may not be limited to “item-specific”. In a constructional network, macro-constructions at the superordinate level are most schematic and instantiated by less schematic form-meaning pairings at lower levels. They tend to be represented with more slots which are unspecified or incomplete, like the transitive construction. Increased schematicity usually results in rise in another parameter, i.e. productivity. A more schematic and abstract construction generally enters more contexts with more collocational freedom (this view is thus in line with the grammaticalization as expansions approach as proposed by Himmelmann 2004: see Traugott and Trousdale forthcoming for more comments). As a consequence, there arises increase in (type and token) frequency which leads to
high degree of productivity (e.g. Hoffmann 2005; Traugott and Trousdale forthcoming). A third parameter to be considered is decrease in compositionality. This means that the syntactic structure is not compositional with respect to the semantics leading to the loss of transparency of the form-meaning match (Traugott and Trousdale forthcoming).

Directionality can be viewed from another perspective in constructional terms. There is inheritance from the level of macro-constructions through meso-constructions to micro-constructions, from less to more specific. This is understood as a process of unidirectional generalization.

In addition, directionality can be associated with the life-cycle of constructions (Traugott and Trousdale forthcoming). Constructions are said to have a life-time of some length. Those constructions which just have started life and which are imminent to demise are more likely to be marginalized (e.g. Diewald 2002) with typically low frequency. A construction tends to increase in its frequency as its life continues. During the whole life of a construction, the frequency changes in a particular direction (not uni-directional, though). However, an extant construction during its life-time may also stay at the margins; not all constructions go on to become more frequent. This tends to be a non-prototypical micro-construction within a macro-construction (Traugott and Trousdale forthcoming; Geeraerts 1997), since members within a category generally vary in terms of prototypicality.

As shown above, grammatical constructionalization is generally acknowledged as a directional process. However, what should also be noted is that directionality is an “epiphenomenon” (Traugott and Trousdale forthcoming). This suggests that unidirectionality could be not observed in every micro-step of change. To be more explicit, non-directionality might occur during the generally unidirectional change. In fact, language change is not necessarily an “irreversible” matter (Haspelmath 1999). Instead, unidirectionality might exist independent of diachronic change (Janda 2001: 286; Keller 1994), in the sense of linguists’ generalization rather than the users’ knowledge. On the usage-based account, speakers have no awareness about the direction in which language has been changing; what they have is an inventory of constructions. Unidirectionality is largely built up over general observation of the tendency in a non-strict sense. This will prove to
have an explanatory value for accounting for the frequency counts which seemingly conflict with the unidirectionality hypothesis (Kiparsky 2011).

To conclude this section, diachronic change is generally unidirectional in the construction grammar framework. Most importantly, unidirectional change is understood as increased productivity, increased schematicity and decreased compositionality relative to grammatical constructionalization. However, since unidirectionality is not inherent in language change on the usage-based account, non-unidirectionality might be observed sometimes. These two views are not conflicting: the former considers the entire and general tendency, while the latter allows those exceptions in the background of the general directionality.

To conclude this chapter, this chapter introduced the constructional framework, focusing on some principles, concepts and machinery that are specifically important in shaping my analysis of the grammaticalization of Expressions involving BA in this thesis. I reviewed how constructions are defined in Cognitive Construction Grammar, constructional approaches to diachronic research compared with non-constructional theories. I discussed diachronic change from the constructional perspective, in terms of constructionalization, compositionality, the syntax-lexicon continuum, the interplay between verbs and constructions, a network of constructions, the role of frequency and context, and directionality. In the following Chapter 3, I analyze the resultative Expressions involving BA in Contemporary Chinese.
CHAPTER 3: SYNCHRONIC ANALYSIS OF THE RESULTATIVE EXPRESSIONS INVOLVING BA

In this chapter, I analyze Expressions involving BA in Contemporary Chinese, which are placed in the foreground of the diachronic research in Chapter 6. I discuss the syntactic and semantic properties of Expressions involving BA, and particularly I focus on the resultative Expressions involving BA (in other words, there are non-resultatives such as the transitive constructions involving BA which are not included in this thesis due to the limited space.). Moreover, I present four event types encoded by Expressions involving BA and illustrate them from the perspective of construction grammar. Furthermore, I show how all event types of Expressions involving BA are related to the Compulsive Force Schema. Apart from some self-invented instances, data in this chapter mainly comes from previous research, or the Peking University – Center for Chinese Linguistics Corpus (PKU-CCL) Modern Chinese Corpus.

3.1 The syntax and semantics of the resultative Expressions involving BA

This section analyzes how the structure of the resultative Expression involving BA in Contemporary Chinese is represented, how the semantics of an Expression involving BA is constructed, and why an Expression involving BA differs from the SVO transitive construction in terms of form and meaning. I use the following example (3.1) as a basis for my analysis in this section:

(3.1) 我把他拖回码头了。  
\[
\begin{align*}
\text{Wo} & \quad \text{BA} & \quad \text{ta} & \quad \text{tuo} & \quad \text{hui} & \quad \text{matou} & \quad \text{le}. \\
1SG & \quad OBJ & \quad \text{marker} & \quad 3SG & \quad \text{drag} & \quad \text{back to} & \quad \text{dock} & \quad \text{ASP} \\
& & & & & & & \text{ASP}
\end{align*}
\]

‘I dragged him back to the dock.’ \ (Wo de shijie wo de meng, 2004)
Before I adopt a constructional analysis (Goldberg 1995, 2006), I represent the argument structure of the above sentence in the style of Word Grammar as in Figure 3-1\textsuperscript{15} in order to show the argument structure:

![Diagram](https://via.placeholder.com/150)

Figure 3-1: Argument structure of an instance of Expressions involving BA in Contemporary Chinese

The above Figure 3-1 illustrates the syntactic and semantic properties of an Expression involving BA, including the main verb *tuo* in relation to BA and another predicate *hui*. In (3.1), *tuo* (‘drag’) is a two-place main predicate taking two NPs (Arg1 and Arg2 in red). BA is an object marker which syntactically takes only one NP (Arg in green). The relationship between *tuo* and BA is that BA marks the object of *tuo* in a preverbal position; in other words, *tuo* and BA share the same object NP, i.e. *ta* (3SG). As shown in Figure 3-1, there is another predicate, preposition *hui* (‘back to’) taking two NPs (Arg1 and Arg2 in purple), i.e. *ta* (3SG) and *matou* (‘dock’). The relationship between *tuo* and *hui* is that *hui matou* (‘back to the dock’) is a resultative adjunct attached to the main action denoted by the matrix verb *tuo* (‘drag’). The resultative contributes to the constructional meaning ACTION-RESULT (to CAUSE a CHANGE) (as marked in blue letters). Aspect marker *le* finishes the whole sentence and indicates the perfective aspect (e.g. Comrie 1976). What has been briefly proposed here will be further elaborated on in the following sections.

\textsuperscript{15} Aspect marker *le* has two functions here: one is to finish this sentence; the other is to indicate the perfective aspect of the main predicate including the matrix verb and the resultative, i.e. *tuo hui matou* (‘drag him back to the dock’).
3.1.1 The main predicate

In this section I am concerned with two questions regarding instance (3.1): (1) What is the evidence for *tuo* (‘drag’) as a verb? (2) Why does *tuo* function as a main predicate? I start with answering the first question which relates to the constituency tests (verb-hood) of *tuo*. *Tuo* means ‘drag’ and designates a process, which is typically a verbal meaning according to the notional criterion. I further use the following tests to determine the verb-hood of *tuo*:

One basic test of verb-hood is the **Ellipsis Test** as in (3.2). In an answer to a question, the entire string of words (*BA ta* *tuo* (*hui matou*)) is deleted; instead, the auxiliary use of *neng zheyang zuo* (‘can do so’) substitutes for the whole string, as a kind of pro-form. Accordingly, *neng zheyang zuo* (‘can do so’) and the string of words (*BA ta* *tuo* (*hui matou*)) belong to the same verbal category.

(3.2) 我能把他拖回码头吗？

*Wo neng BA ta tuo (*hui matou*) ma?*

1SG AUX OBJ marker 3SG drag (back to dock) INTERJECTION

‘Can I drag him back to the dock?’

*Answer:*

我能（把他）这样做。

*Wo neng (BA ta) zheyang zuo.*

1SG AUX (OBJ marker 3SG) so do

‘Yes, I can do so (with him).’

I further show why *tuo* (*hui matou*) is verbal, by using the following tests such as the **Coordination Test**. In (3.3), the verb phrases of the same type, i.e. *fang zai dishang* (‘put at ground’) and *kan zhe* (‘keep an eye on’), both refer to actions and can be coordinated with *tuo* (*hui matou*). Therefore, *tuo* (*hui matou*) is a VP.
(3.3) 我把他拖（回码头）了，放在地上，看着。

Wo  ba  ta  tuo (hui matou)  le,  fang zai dishang, kan  zhe.

1SG  OBJ marker  3SG  drag (back to dock)  ASP  put  at ground, keep an eye on  ASP

‘I dragged him (back to the dock), put him on the ground, and kept an eye on him.’

There is also an **Insertion Test**. A sentence involving a pattern *SHI...DE* in Chinese typically conveys an emphasis on the part between SHI and DE. The string of words to be stressed is verbal (e.g. Ross and Ma 2006: 233). As in (3.4), it is possible to insert a copula SHI into the position preceding *tuo (hui matou)* which ends with a particle DE. The use of *SHI...DE* stresses a past event that ‘(I) dragged him back to the dock’. This suggests that *tuo (hui matou)* is a VP.

(3.4) 我把他怎么样了。

Wo  ba  ta  SHI  tuo (hui matou)  DE  le

1SG  OBJ marker  3SG  BE  drag (back to dock)  PRT  ASP

‘I DID drag him back to the dock.’

Let us further look at the **Constituent Response Test**. As in (3.5), *zenmeyang* (‘how’) in the question substitutes for a string of words *tuo (hui matou)*. Also, *tuo* or *tuo hui matou* alone functions as a short answer to the interrogative question without the presence of other constituents (*hui matou* can appear, but it is not obligatory, either). Therefore, a pair of constituency tests including a question and a short answer shows that *tuo (hui matou)* is a verb phrase.

(3.5) 我把他怎么样了?

Wo  ba  ta  zenmeyang  le?

1SG  OBJ marker  3SG  how  ASP

‘What did I do with him?’

---

16 SHI is a copula, and DE is a particle.
**Answer:** 拖（回码头）了。

* Tuo (hui matou) le.
  Drag (back to dock) ASP
  ‘(I) dragged (him) (back to the dock).’

With respect to the **Movement Test**, it is also possible to move the string of words *tuo (hui matou)* from its original position to the beginning of the sentence as in (3.6). This suggests that *tuo (hui matou)* is a syntactic constituent.

(3.6) 拖 (回码头）了，我把他。

  * Tuo (hui matou) le, wo BA ta.
  Drag (back to dock) ASP 1SG OBJ marker 3SG
  ‘I dragged him back to the dock’

Altogether, *tuo* is a syntactic constituent belonging to a verbal category. Now let us move onto the other question proposed in the beginning of this section: Why does *tuo* (‘drag’) function as the main predicate in example (3.1)? There are three potential predicators in (3.1), including *tuo*, BA, and *hui*. Neither BA nor *hui* can stand alone without the presence of *tuo* (‘drag’) as in (3.7) and (3.8). The only grammatical sentence is (3.9) in which *tuo* is present as a transitive verb while BA and *hui* can be absent:

(3.7) * 我 把 他 了

  * wo BA ta le
  1SG OBJ marker 3SG ASP

(3.8) * 我 他 回 码 头 了

  * wo BA ta hui matou le
  1SG OBJ marker 3SG back to dock ASP
The ungrammatical examples (3.7) and (3.8) suggest that neither BA nor hui (matou) can function as an independent predicate. In contrast, grammatical (3.9) shows that tuo is the only possible main predicate that governs the whole sentence. As shown in the following section, I discuss properties of NPs taken by the main predicate tuo (‘drag’) with diagnostics. I take the same sentence (3.1) as an example for analysis.

### 3.1.2 Syntactic arguments of the main predicate

Recall the instance (3.1); the main predicate tuo (‘drag’) takes two NPs as arguments, i.e. wo (1SG) and ta (3SG). They are the subject and the object, respectively (see §4.2 of Chapter 4 for further discussion on the notions of subject, object and transitive construction in Chinese as a topic-comment language). Consider the following diagnostics:

In (3.1), wo (1SG) is the subject of the main predicate tuo: First, pronoun wo (1SG) denotes the DOER (AGENT) which performs an action of ‘drag’ designated by tuo. Second, NP1 wo (1SG) is “the first NP we come across” (Aarts 1997: 11; cf. Her 1991, 2009; Cheng 1983; Tan 1991 for the notion of subject in Chinese grammar) and it is obligatory. It is to the left of the matrix verb tuo, in a typical position for a subject in a declarative sentence (Jackson 1990: 147). For the above reasons, wo is the subject of the main predicate tuo in (3.1).

Let us then look at the object-hood of ta (3SG) in (3.1): First, pronoun ta in (3.1) refers to an entity that undergoes a process denoted by the verb tuo. Accordingly, ta bears the patient role, as the Direct Object typically does (Aarts 1997: 15). Second, in terms of structure, ta precedes the verb tuo (‘drag’), not in the post-verbal position of the Direct Object as usual. However, ta has a “strong relationship” (Aarts 1997: 16) with the verb tuo (‘drag’); the transitive verb tuo (‘drag’) requires the presence of a NP to “complete its meaning” (Aarts 1997: 16). Third, if we
transform an Expression involving BA into a passive expression, i.e. an expression involving Chinese passive marker BEI, ta would become the subject of the passive sentence as in (3.10):

(3.10) 他被我拖回码头了

\[
\text{Ta BEI wo tuo hui matou le.}
\]

3SG passive 1SG drag back to dock ASP

‘He was dragged by me back to the dock.’

This suggests in turn that the subject ta (3SG) in the passive construction corresponds with the object in an active expression (such as Expressions involving BA). The following section deals with the controversial BA and the NP after BA in a [BA NP] phrase.

3.1.3 The [BA NP] phrase

In this section, I start with the preliminaries of the word category of Coverbs, in relation to diachronic gradualness and synchronic gradience (e.g. Traugott and Trousdale 2010). In my opinion, BA as an object marker falls into the category of Coverbs in an Expression involving BA and contributes to the syntax and semantics of the resultative Expressions involving BA in Contemporary Chinese. In addition, I discuss the definite properties of the BA object in the light of “the Giveness Hierarchy” (Gundel, Hedberg and Zacharski 1993).

3.1.3.1 A definition of a coverb

Coverbs are a class of words including “a closed subgroup of verbs”, the function of which is equivalent to prepositions (Eifring 1995: 56). From this definition, we can see that Coverbs are closely associated with both verbs and prepositions: Coverbs are “on the fuzzy ground between verbs and prepositions” (Van Valin 1993: 201). I therefore mainly discuss the characteristics of Coverbs in relation to Verb and Preposition in a gradient continuum. From the diachronic perspective, Coverbs used
to be verbs and thus tend to have ambiguous status between verbs and prepositions in Modern Chinese.

I firstly consider the close relation between Coverbs and full Verbs. On the one hand, a coverb is defined as a subtype of verb (e.g. Eifring 1995). For one thing, a coverb is derived from a full verb in diachronic development. As will be shown in §3.1.3.2 and §6.1.1, BA originally appeared as a verb in the transitive construction in Old Chinese, but functions as a coverb in Contemporary Chinese. For another thing, some coverbs (less grammaticalized or semantically bleached ones; see Figure 3-3 for coverbs on a scale of grammaticalization) still have polysemous uses as full verbs in Contemporary Chinese, due to synchronic gradience and the layering effect (Hopper 1991: 22). For example, although the coverb use of BA (with the prepositional function) in Expressions involving BA predominates in Contemporary Chinese, there are still instances involving a transitive verb BA currently. As in (3.11), BA is a full verb meaning ‘guard’ used in the transitive construction. Hence, a coverb is in close association with the category of verb, in both dimensions of diachrony and synchrony.

(3.11) 铁将军把门
tie-jiangjun BA men
iron-locker guard door
‘The iron-locker the door’
(Renmin Daily, 1996)

Despite close relation between Coverbs and verbs, Coverbs are a distinct category of words. Coverbs have been defined by some researchers as “transitive verbs incapable of acting as main verbs” (Eifring 1995: 56, emphasis added; see also Peyraube 1988) in the center of predication. This implies that coverbs cannot stand alone as the main predicate in a sentence. In order to elaborate on this issue, I focus on three salient characteristics of coverbs (Eifring 1995: 56-59) which differentiate them from ordinary verbs:

First, Coverbs always require an obligatorily overt object (Chao 1968: 330). In contrast, the object of a full verb could be absent, since in Chinese grammar
either subject or object of a verb can be omitted if it can be recovered in context. Compare the following sentences: In (3.12), the object of the coverb cong (‘from’), i.e. guo-li (‘pot’) is obligatory. In contrast, in (3.13), the object of a full verb yao (‘ladle-out’), tang (‘soup’), can be left out since it can be recovered from the previous clause in the context.

(3.12) 我从锅里舀了热水
    wo cong guo-li yao le reshui
    1SG from pot ladle-out ASP hot-water
    ‘I ladled out hot water from the pot’

(3.13) 汤没有人动，于是提出去
    tang meiyou ren dong, yushi tichuqu
    soup NEG person touch thereupon carry-out

一勺一勺舀在孩子们的小手里
    yi-shao yi-shao yao zai haizi-men de xiao-shou-li
    one-CL (scoop) one-CL ladle-out in child-PL REL hand
    ‘Nobody touched the soup, so (the soup) was carried out and ladled into the small hands of the children, scoop by scoop.’

(Adapted from Eifring 1995: 57)

Second, Coverbs cannot take the aspectual markers as the ordinary verbs do. For example, BA in an Expression involving BA cannot take the aspectual markers including LE, ZHE and GUO. In contrast, these aspectual markers are required by verbs in Modern Chinese (e.g. Yang 1999).

Third, Covverb phrases do not function as predicates on their own as opposed to full verbs. For example, as in (3.12), the coverb cong cannot be an independent predicate in a sentence. For these three reasons, Coverbs are a different category of words compared to verbs.

Now I move on to the relation between Coverbs and Prepositions. As argued above, a coverb does not function as a main predicate as an ordinary verb

Also, a coverb differs from a pure preposition in these respects: when a coverb takes the function of a preposition, it does not entirely lose all the verbal properties and lexical contents due to the generally incomplete semantic bleaching (Givón 1975:82-86). From the perspective of grammaticalization, the Coverb category is on a continuum (as in Figure 3-2 and Figure 3-3) without a neatly distinct boundary between coverbs and verbs, or, between coverbs and prepositions. To put it in a different way, Coverb is an intermediate word category that exists between Verb and Preposition. There is an intersection between this synchronic gradience and diachronic gradualness, as discussed below.

Now I discuss how Coverbs serve as intersection between synchronic gradience and diachronic gradualness. There is an intermediate “coverb stage” on a scale of grammaticalization of verb towards adposition (preposition) diachronically, as in Figure 3-2 (Clark 1979; cf. Chang 1977 for a continuum of full verbs and coverbs):

---

17 This characteristic also applies to the variant of BA as a coverb in diachronic change (see chapter 6).
### Figure 3-2: The grammaticalization of coverbs (Clark 1979: 3)

As illustrated above, a coverb derives from a full verb (Eifring 1995: 56), but it has not reached the adposition stage in the process of gradual grammaticalization. Therefore, the diachronic gradualness results in a layering effect and synchronic gradience, i.e. a coverb generally occurs both as a verb and an adposition. For example, the following pair of instances in the Hmong language shows that the same word *nyob* can occur as a full verb in (3.14) or a coverb (with prepositional function) in (3.15):

\[
\begin{align*}
\text{(3.14) } & \text{ Kuv } \text{ txiv } \text{ tsis } \text{ nyob } \text{ hauv } \text{ tsev} \\
& \text{ I male not be.in inside house}
\end{align*}
\]

‘My father is not at home.’ (Clark 1979:7)

\[
\begin{align*}
\text{(3.15) } & \text{ Maivmim } \text{ npaj } \text{ ib } \text{ roog } \text{ qav } \text{ nyob } \text{ hauv } \text{ tsev.}
\end{align*}
\]

Maimee prepare one table food in inside house

‘Maimee is preparing a meal in the house.’ (o.c. 6)

(Lehmann 2002: 93)

<table>
<thead>
<tr>
<th>Stage</th>
<th>category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>V</td>
<td>The word occurs only as a verb.</td>
</tr>
<tr>
<td></td>
<td>↓</td>
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<tr>
<td>II.</td>
<td>1. V (P)</td>
<td>The word occurs both as a verb and as an adposition: the Coverb stage.</td>
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<td></td>
<td>2. V P</td>
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<td></td>
<td>3. (V) P</td>
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</tr>
<tr>
<td></td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>a. - P</td>
<td>The word occurs only as an adposition.</td>
</tr>
<tr>
<td></td>
<td>b. V ≠ P</td>
<td>Underlying verb and adposition become homophones.</td>
</tr>
</tbody>
</table>
Here are two Chinese instances involving coverbs *yong* and *gei* which take the prepositional function as below:

(3.16) 我用剪刀剪纸

Wo *yong* jiandao jian zhi.
I *with* scissors cut paper
‘I cut paper with the scissors.’

(3.17) 你借给他伞

Ni *jie* *gei* ta san.
You *lend* to *he* umbrella
‘You lend him an umbrella.’
(Adapted from Lehmann 2002: 93)

In the above instances, either *yong* (‘with’) or *gei* (‘to’) takes the function of preposition. However, *yong* and *gei* can also be used as full verbs or serial verbs meaning ‘use’ and ‘give’ in Contemporary Chinese:

(3.18) 我用笔

*wo* *yong* bi
1SG *use* pen
‘I use a pen’
(Zhongguo Yuanzhengjun ru Mian dui Ri zuozhan, 2005)

(3.19) 那个男的给她俩金镯子

na-ge nan-de *gei* ta lia jin zhuozi
DEM-CL man *give* 3SG two gold bracelet
‘That man gave her two gold bracelets’
(Beijing-hua, 1982)

Given the word category of Coverbs is a continuum, the categorial members can be positioned at any point between verb and preposition on this continuum, as in Figure
3-2. The categorial distinctions are not clear-cut but could be very subtle: a member could be more or less canonical of a grammatical category. The distribution of canonical and non-canonical members of Coverbs can be represented in Figure 3-3.

Figure 3-3 illustrates a scale of grammaticalization from full verbs towards prepositions, involving an intervening Coverb stage. Coverbs with different degrees of grammaticalization correspond to variants of coverbs in synchrony, including coverb (a), (b), (c)… The circle in an unbroken line stands for the canonical member in the category of Coverbs. By comparison, other non-canonical coverbs are represented by circles in dotted lines. If a coverb shares more similarities with a canonical verb, it is less semantically bleached or grammaticalized. In contrast, if a coverb shares fewer similarities with a canonical verb, it is more grammaticalized and more similar to a canonical preposition.

Grammaticalization scale

```
  ○   ○   ○   ○   ○   ○   ○   ○
```

Full verb  Coverb (stage)  Preposition

Gradience: Coverb (a), coverb (b), coverb (c), coverb (d)……

Figure 3-3: Coverbs in the intersection between gradualness and gradience

More evidence can be found from literature regarding the special category of Coverbs. According to Yang and Kuo (1998: 20; cf. Francis 1946), coverbs normally do not stand alone being “secondary” to the main verb. However, “some coverbs are sometimes used as full verbs”. Such coverbs as mentioned by Yang and Kuo, are less grammaticalized, and thus they are more similar to full verbs in synchronic gradience. For example, the coverbs *zai* and *dao* in Mandarin Chinese are more similar to full verbs, compared with *cong* which is more like a preposition as in (3.12) (Eifring 1995: 56).

In sum, Coverbs are mainly used as prepositions in some expressions while retaining their verbal contents to a certain extent in some other expressions. With respect to the extent to which a coverb can be used as a full verb in synchrony, it
depends on where a coverb is positioned in the scale of grammaticalization (i.e. how much it is semantically bleached and grammaticalized in the grammaticalization from a full verb to a preposition). When a coverb assumes the function of a preposition, it is “an adverbiaxal relator providing a relation between a main verb and an NP” (Lehmann 2002: 94). In an Expression involving BA, BA is such an object marker indicating the relation between a main verb and the BA NP. More about the coverb BA will be discussed in the following section.

3.1.3.2 The coverb BA

As mentioned in Chapter 1 (§1.1), the categorial status of BA is a matter of some debate. For example, Hashimoto (1971) maintains that BA is a verb subcategorizing a verbal complement. Some others (e.g. Li and Thompson 1974b on coverbs, 1981; see also Bennett 1981; Zhu 1982; Peyraube 1988; Sybesma 1999; Li 1990) claim that BA is a preposition.

I adopt the position that BA is a coverb: On the one hand, BA retains traces of verbal contents; on the other hand, BA takes a function of marking the object in the resultative Expressions involving BA. In Contemporary Chinese, as in (3.11), BA can be used as a full verb occasionally in the transitive constructions (see also §4.2 on single verb BA in grammaticalization). More often, however, BA is a Coverb in an Expression involving BA. In a word, the coverb BA retains partial verb-hood although it is not equal to a full verb; it mainly functions as a preposition, although it is not a pure preposition. Here we have a couple of tests as evidence for the partial verb-hood of BA. The first one is the **positive-negative question test**: A verb can typically be in the form of V-Neg-V to constitute a positive-negative question, as in (3.20). BA can also constitute the BA-Neg-BA question, as in (3.21). This suggests the partial verb-hood of BA.

(3.20) 你写没写？
   Ni xie mei xie?
   2SG write NEG write
   ‘Did you write or not?’
The second test is the negation test: In a negative sentence, the negative word typically precedes the verb, as in (3.22). In the negative Expression involving BA as in (3.23), the negative word mei also appears prior to BA. In contrast, it is impossible to invert the positions of BA and the negative word mei as in (3.24). In other words, a negative word must precede BA in negation (e.g. Chao 1968; Ross 1981); otherwise, the sentence would be ill-formed as in (3.24). This also suggests that BA retains partial verb-hood to some extent.

(3.22) 我没写。
   Wo mei xie
   ‘I did not write’

(3.23) 我没把他拖回码头
   wo mei ba ta tuo hui matou
   ‘I did not drag him back to the dock.’

(3.24) *我把他没拖回码头
   wo ba ta mei tuo hui matou.
   ‘I did not drag him back to the dock.’

The above tests show the partial verb-hood of BA. Meanwhile, note that BA in an Expression involving BA is not a full verb but merely a coverb. For example, an ordinary verb can take the aspect marker LE (as in (3.25)) while BA cannot take LE as in (3.26):
(3.25) 我拖了他。
    Wo  tuo  le  ta
    1SG  drag  ASP  3SG
    ‘I dragged him’

(3.26) *我把了他拖回码头
    wo  ba  le  ta  tuo  hui  matou
    1SG  BA  ASP  3SG  drag  back to  dock
    ‘I dragged him back to the dock’

There is another piece of evidence to prove that BA in an Expression involving BA is not a full verb: BA alone cannot answer a yes-no question (cf. Mangione 1982; Li 1990) as in (3.28), while a full verb can do so as in (3.27). This also suggests that BA is not a full verb.

(3.27) 你写没写？
    Ni  xie  mei  xie?
    2SG  write  NEG  write
    ‘Did you write or not?’

*Answer:
- Positive answer: 写了。
    Xie  le
    Write  ASP
    ‘wrote’

- Negative answer: (没)写
    Mei  xie
    NEG  write
    ‘not wrote’
(3.28) 我把没把他拖回码头？

wo ba mei ba ta tuo hui matou?

1SG BA NEG BA 3SG drag back to dock

‘Did I drag him back to the dock?’

* 把了 / 没把

ba le / (mei) ba.

BA ASP / (NEG) BA

To sum up, the above discussion has shown that BA in an Expression involving BA retains partial verb-hood while BA is not a full verb. The following discussion explains how the coverb BA relates to prepositions. On the one hand, as mentioned, BA mainly functions as a preposition taking only one NP. On the other hand, BA in an Expression involving BA is viewed as a subcategory of verbs (i.e. coverbs), rather than a pure preposition. According to McCawley (1992: 219), “the prototype use of a P (preposition) is a/an (optional) modifier, and that of a V (verb) is as a predicate phrase”. BA is not a pure preposition in that it is impossible to delete the [BA NP] phrase which indicates the object in the resultative Expression involving BA. In this sense, BA and the main verb form a complex predicate with parts of the predication spread across different elements of it. Now I address the syntactic and semantic contribution of BA as follows:

BA in an Expression involving BA marks the object for the main predicate (e.g. tuo ‘drag’ in (3.1)). As will be shown in §3.4.2, there are three constructional roles including CAUSER, THEME, and RESULT-GOAL in the resultative Expression involving BA: the THEME refers to the object that undergoes change into a certain state (i.e. RESULT-GOAL) caused by the CAUSER. The NP taken by BA fuses with the constructional role of THEME. Moreover, the marked object-THEME is always totally affected. The existence of BA in an Expression involving BA implies that the object is completely under control, and thus subject to total affectedness (Sun, 1996: 55; cf. Tai 1984; Szeto 1988; Chen 1988). In other words, the BA object is always totally affected. In contrast, the canonical transitive construction expresses partial
affectedness which means that the object is not completely affected. Compare the following pair of sentences: BA in (3.29) indicates total affectedness of the object (due to the existence of BA, the object in a post-BA position is always totally affected), while (3.30) conveys partial affectedness.

(3.29) *我把苹果吃了，可是剩了一半。

Wo BA pingguo chi le, keshi sheng le yi-ban.
1SG OBJ marker apple eat ASP but leave ASP one-half
‘??I finished eating the whole apple, but I left a half unfinished.’

(3.30) 我吃了苹果，可是剩了一半。

Wo chi le pingguo, keshi sheng le yi-ban.
1SG eat ASP apple but leave ASP one-half
‘I ate the apple, but I left a half unfinished.’

In (3.29), an instance involving BA expresses that a transitive action chi (‘eat’) has been done upon pingguo (‘apple’). The presence of BA facilitates the perfective aspect marker le to convey that the whole pingguo (‘apple’) has been eaten (or, totally affected). Note that the BA object is always totally affected and highly accessible (see §3.1.3.3). Therefore, the conflict arises when the BA clause is followed by another clause (in italics) which means that the apple has not been finished yet. In the transitive counterpart as in (3.30), despite the same aspect marker le, the apple can be not finished. I will further discuss the differences between the Expressions involving BA and the transitive construction in §3.1.5.

This section has discussed the coverb BA, and I have shown that BA marks the object-theme and implies that the object is always totally affected. In Chapter 6 (§6.1.4), I will further discuss the origin and development of Coverbs, as well as a detailed historical reanalysis of BA particularly relative to the prepositional instrument construction in constructionalization. The NP following BA will be addressed in the model of the Giveness Hierarchy in the following section §3.1.3.3.
3.1.3.3 The BA Object in the light of the Givenness Hierarchy

In this section, I firstly show that the object in an Expression involving BA is highly accessible (specific, perceptible, known, and recognizable). Then, I introduce the theory of the Givenness Hierarchy (Gundel, Hedberg and Zacharski 1993). The definite feature of the BA object can be approached from a different perspective: the referent of the BA object could be associated with a range of categories in the Givenness Hierarchy including [In Focus], [Activated], [Familiar], [Uniquely Identifiable] or [Referential]. Each category of referent (cf. Garrod and Sanford 1982; Ariel 1988) bears a different degree of familiarity, definiteness, and high accessibility.

Let us firstly look at the definite feature of the BA object. Definiteness in Chinese is generally expressed by demonstratives, such as zhe (‘this/these’) and na (‘that/those’). Compare the following pair of sentences (3.31) and (3.32). In an Expression involving BA (3.31), the BA object zhe-ben shu (‘this book’) is definite (e.g. Chao 1968; Hashimoto 1971; Li 1974; Li and Thompson 1981, 1989; Tsao 1987) in the form of [DEM CL noun]. In contrast, the object in the transitive SVO construction is indefinite: there is not a demonstrative and the object is in the form of [one CL noun], as yi-ben shu (‘a book’) in (3.32):

(3.31) 他把这本书也带到伦敦来了。
Ta  ba  zhe-ben shu ye dai dao Lundun lai le.
3SG OBJ marker DEM-CL book also bring to London particle ASP
‘He also brought this book to London.’ (Renxing de jiasuo, 2007)

(3.32) 我写了一本书。
Wo xie le yi-ben shu.
1SG write ASP one-CL book
‘I wrote a book.’ (Wo de shijie wo de meng, 2004)

The difference between the object in an Expression involving BA and the object in the transitive construction correlates to the semantics and pragmatics of these two
kinds of expressions. The transitive construction expresses how an event takes place, thereby delivering the unknown (or, new) information at the end of a sentence. By comparison, an Expression involving BA expresses how a given object is changed (or, affected) by an action leading to a result. Therefore, the theme-object in an Expression involving BA is definite and thus subject to change.

Now I introduce “the Giveness Hierarchy” before I explain how it can be applied to explaining the definite feature of the BA object. Gundel, Hedberg and Zacharski (1993; see also Prince 1981 for “the Familiarity Scale” which structures categories of referent in a similar style) propose “the Giveness Hierarchy” based on their research of English, Chinese, Japanese, Russian and Spanish. The Giveness Hierarchy deals with the cognitive status of the referent (for extensive discussion on “reference”, see Karttunen 1976; Nunberg 1978; Hawkins 1984, 1991; Clark and Marshall 1981; Grosz 1981; Heim 1982; Maclaran 1982; Kronfeld 1990; Givón 1983 and elsewhere) depending on various degrees of familiarity (and definiteness) to the hearer. This results in whether or not a communicative cooperation between a speaker and a hearer succeeds (cf. Chafe 1976, 1987; Gundel 1978, 1985; Prince 1981; Grosz and Sidner 1986).

The following Figure 3-4 illustrates how the Giveness Hierarchy relates to definiteness. There are six cognitive statuses of the referent regarding the psychological processing and memory of the reference. On the hierarchy, “Uniquely Identifiable” is a very important category that draws the line of definiteness: it separates the definite subgroup from the non-definite subgroup. That is, those categories on the left of “Uniquely Identifiable” are definite referents while those on the right are indefinite ones. Accordingly, the left-most “In Focus” carries the highest degrees of definiteness, while the right-most “Type Identifiable” bears the lowest degrees.
As shown above, there are two subgroups of categories on the Givenness Hierarchy: the definite categories and the indefinite categories. The definite categories include [In Focus], [Activated], [Familiar] and [Uniquely Identifiable]; referents of these categories share definiteness in common although they vary in different degrees of definiteness. With respect to their differences, I will go through all the types of givenness in the following discussion, in terms of their definitions and how they are associated with the BA object. The other indefinite subgroup includes two categories, i.e. [Referential] and [Type Identifiable]. As will be shown below, since the object in an Expression involving BA is definite, the referent of the BA object can be any of the categories within the definite subgroup as in Figure 3-4. Also, the BA object can possibly be associated with an indefinite category [Referential] under certain circumstances. However, the BA object can never refer to the other indefinite category [Type Identifiable]. In the following part, I go through all the categories of givenness on the hierarchy: the definite ones first, and then the indefinite ones. Let us begin with [In Focus] with the highest degree of definiteness:

The category of [In Focus] means that “the reference is not only in short-term memory, but is also at the current center of attention” (p.279; cf. Hajicova 1987; Grosz and Sidner 1986 on psychological use of “focus” as focus of attention, as opposed to “focus” (topic) of a sentence in relation to topic-comment, cf. Halliday 1967; Chomsky 1971; Jackendoff 1972). Therefore, the referent of this type is similar to a topic that is brought into the focus of attention, and thus it is very often a pronoun. As shown in (3.33), the BA object $ta$ is a 3rd singular pronoun which has a definite reference to the metal pellet.
(3.33) 西班牙人把它运回西班牙

Xibanya-ren ba ta yun hui Xibanya
Spanish BA 3SG carry back to Spain
‘The Spanish carried it (the metal pellet) back to Spain’

Zhongguo Ertong Baike quan-shu, Encyclopedia

The second category within the definite subgroup is [Activated]. The object of this type features definite determiners including zhe (‘this/these’) or na (‘that/those’), such as zhe-zhi xiao-deng (‘this small candle’) in the following instance (3.34). This type is called “activated” because the referent of this type can be easily activated via the use of demonstratives.

(3.34) 我把这只小灯骤然地吹熄

Wo ba zhe-zhi xiao-deng zhouran-de chui xi
1SG BA DEM-CL small-candle suddenly blow out
‘I suddenly blew this small candle out’ (Deng, 1942)

The third category within the definite subgroup is [Familiar]. A referent of this category refers to an entity/a person which is previously familiar to the hearer (p.278). That is, the hearer have already had relevant information about this referent.

(3.35) Speaker A:

“我的孩子怎么不见了？”

Wo-de haizi zenme bujian le?
1POSS child why disappear ASP
‘Why has my child disappeared?’

Speaker B:

“一个朋友把孩子领走了。”

Yi-ge pengyou ba haizi ling zou le
One-CL friend BA child take away ASP
‘A friend took the child away.’
This is a dialogue between two speakers: Speaker A (a child’s mother) asked B why her child has gone, and Speaker B told her that her child was taken away by a friend. Apparently, the object *haizi* (‘child’) is a familiar referent to Speaker A, the mother. As a consequence, despite the non-definite form *haizi* (‘child’) without any definite determiner, the BA object is familiar and thus definite to the addressee.

Now let us look at the category [Uniquely Identifiable] which divides the definite subgroup and the indefinite subgroup. This category means “the addressee can identify the speaker’s intended referent on the basis of the nominal one” (Gundel, Hedberg and Zacharski 1993: 277). The referent could be an entity that either exists in the addressee’s memory (e.g. Hawkins 1978), or is sufficiently descriptive (e.g. by means of fully descriptive modifiers). As in the following (3.36), the referent of the BA object relies on very descriptive modifiers (in italics) to gain definiteness.

(3.36) 安琪把一本装裱精美的大册放在了我眼前的茶桌上。

Anqi ba yi-ben zhuangbiao-jingmei de da ce fang zai le
NAME BA one-CL with nice illustrations REL big book put at ASP

wo yanqian de cha-zhuo shang.
1SG in front REL tea-table surface

‘Anqi put a big book adorned with nice illustrations on the tea-table in front of me.’

(Zuojia Wenzhai, 1994)

I have shown above all the categories within the definite subgroup on the Giveness Hierarchy. Now I turn to the indefinite categories including [Referential] and [Type Identifiable]. By using the object of the [Referential] type, the speaker refers to “a particular object of objects” (Gundel, Hedberg and Zacharski 1993: 276), such as ‘this dog’, *zhe-zhi ji* (‘this chicken’). Generally speaking, a referent in the category of [Referential] has a non-definite reading. However, referents of this type are also seen in some cases of Expressions involving BA. The necessary and sufficient condition is
required, i.e. a discourse context which indicates relevant information for a definite reading, as in (3.37):

(3.37) 他刚买了一盆花，回到家

Ta  gang   mai le  yi-pen  hua,  huidao  jia,
3SG just now buy  ASP one-CL flower return home

他却不知道把花放在哪儿

Ta     que   bu    zhidao   ba   hua     fang   zai   na’r.
3SG but NEG know BA flowers put in where

‘He bought a pot of flowers just now. However, he had no idea about where to put the flowers.’

In (3.37), the indefinite referent of the BA object hua (‘flowers’) acquires a definite reading due to the context (‘he bought a pot of flowers just now’), so that the hearer could still identify the speaker’s intention and focus his attention on this referent. For another example:

(3.38) 孩子，我必须把一个消息告诉你,

Haizi, wo    bixu    ba  yi-ge  xiaoxi  gaosu  ni,
Child 1SG have to BA one-CL news tell 2SG

我失业了

wo     shiye     le.
1SG  unemploy  ASP

‘My child, I have to tell you the following piece of news, i.e. I am unemployed now.’

In this instance, the BA object yi-ge xiaoxi (‘a piece of news’) becomes definite due to the concurrent clause in the context, i.e. ‘I am unemployed’. Consequently, the hearer still easily accesses the referent of the BA object.
Considering the existence of the non-definite [Referential] BA object as in (3.37) and (3.38), I propose that it is the “high accessibility” (Comrie and Edward, 1977; 1979; Fox, 1987) (more appropriate than “definiteness”) that is shared by all types of the BA object. That is, the BA object can be definite or indefinite, but it is always highly accessible to the hearer. Recall that the BA object is always totally affected due to the existence of BA; the other feature of the BA object as shown here is high accessibility which is also attributed to the appearance of BA. In sum, total affectedness and high accessibility are both always inherent in an expression involving BA.

Compared with [Referential], the referent of the other indefinite category [Type identifiable] can never be highly accessible to the hearer and thus is rejected in the position of the BA object. This category introduces “what type of thing” (Gundel, Hedberg and Zacharski 1993: 276) is described by the nominal, and thus one could access this general category of things directly. Since the types of things belong to general knowledge, this category of referent tends to be in the indefinite form of [Numeral Classifier Noun] as in (3.39):

(3.39) *我把一个盘子洗干净了。

Wo ba yi-zhi panzi xi ganjing le.
1SG BA one-CL plate wash clean ASP
‘I washed a plate clean.’

In (3.39), there is not any information from the context to make the indefinite object yi-ge panzi (‘a plate’) become highly accessible. The post-BA NP merely denotes a general type of entities, and therefore the above Expression involving BA is not felicitous.

To summarize, the object in the resultative Expression involving BA has been known as definite, specific, perceptible, known, and recognizable. The definiteness of the BA object can be associated with the Givenness Hierarchy: First, the BA object could be a referent of any category within the definite subgroup on the hierarchy including [In Focus], [Activated], [Familiar], and [Uniquely Identifiable] which bear different degrees of familiarity/definiteness; second, the BA object could
also be associated with an indefinite category [Referential] on the Giveness Hierarchy, although certain context is required for the BA object to acquire definite reading. By attesting indefinite forms of the BA object, I propose that high accessibility would be a more appropriate term to characterize the BA object. In the following section, I turn to the adjunct-resultative part in Expressions involving BA.

### 3.1.4 The adjunct-resultative

In this section, I discuss the syntactic and semantic properties of the resultative *hui matou* (‘back to the dock’) as in the repeated instance (3.40). I show that *hui matou* is an adjunct with a number of diagnostics; and then I analyze the internal structure of *hui matou*.

(3.40) 我把他拖回码头了。

\[
\begin{align*}
\text{Wo} & \text{ BA } \text{ ta } \text{ tuo } \text{ hui } \text{ matou } \text{ le.} \\
1SG & \text{ OBJ marker } 3SG \text{ drag back to dock ASP}
\end{align*}
\]

‘I dragged him back to the dock.’

In terms of semantics, *hui matou* (‘back to the dock’) expresses the result of the action *tuo* (‘drag’). In terms of structure, *hui matou* is an adjunct for the following reasons: The first reason is, *hui matou* is an optional non-argument PP as is demonstrated by the following test (3.41). It is possible to delete *hui matou* (‘back to the dock’), while the sentence would still be grammatical. This suggests that *hui matou* is not an obligatory argument.

(3.41) 我把他拖了

\[
\begin{align*}
\text{wo} & \text{ BA } \text{ ta } \text{ tuo } \text{ le.} \\
1SG & \text{ BA } 3SG \text{ drag ASP}
\end{align*}
\]

‘I dragged him’
The second reason is that *hui matou* is not a complement selected by a verb, i.e. it is not an argument required by the subcategorization frame of the verb *tuo* (‘drag’). As a result, *hui matou* is an Adjunct. The third reason is that *hui matou* is not assigned any thematic role by the verb *tuo*. This also suggests that *hui matou* is not an argument but an adjunct.

It has been shown above that *hui matou* is syntactically an adjunct, and I further examine the internal structure of *hui matou* (‘back to the dock’). The preposition *hui* (‘back-to’) takes an internal argument, i.e. *matou* (‘dock’). It is claimed that the object of the main predicate can be “licensed by being the FIGURE of the small clause result relation” (Ramchand and Svenonius, 2004: 1; Hoekstra 1988). Since the prepositional phrase *hui matou* (‘back to the dock’) is a resultative, *hui* also has an external argument, i.e. *ta* (3SG), the patient-object of the main verb *tuo* (‘drag’) to be the FIGURE. As illustrated in Figure 3-5, *ta* (3SG) is the FIGURE in the resultative expression, i.e. who is ‘back to (the dock)’. By comparison, *matou* (‘dock’) is the GROUND based on which the result is realized, i.e. where *ta* (3SG) is ‘back to’.

The pattern shown in Figure 3-5 differs from my earlier diagram in the style of Word Grammar, and it shows schematically that a preposition prototypically has a Figure Subject and a Ground object.

![Figure 3-5: The FIGURE-GROUND relation in the resultative prepositional phrase in Expressions involving BA](image-url)
This section has shown that the result part in an Expression involving BA is syntactically expressed by an adjunct. In §3.4 I will give a constructional analysis of the same instance of the resultative Expressions involving BA.

3.1.5 Differences between Expressions involving BA and the transitive expressions

In this section I show differences between Expressions involving BA and the transitive constructions in terms of syntax, semantics, and pragmatics. Due to these differences, these two types of expressions are not interchangeable. Compare the following Expression involving BA as in (3.42) and the transitive construction as in (3.43):

(3.42) 张材把这个人带走了

\[
\begin{array}{cccc}
\text{Name} & \text{BA} & \text{Obj marker} & \text{Dem-CL person} \\
\text{Zhang Cai} & \text{zhe-ge ren} & \text{dai zou le} \\
\end{array}
\]

‘Zhang Cai took away this person’ (Li Zi-cheng, 1957)

(3.43) 我带走了一个人

\[
\begin{array}{cccc}
\text{1SG} & \text{take away} & \text{ASP one-CL person} \\
\text{wo} & \text{dai zou le yi-ge ren} \\
\end{array}
\]

‘I took away a person’ (Qiao-jia da-yuan, 2006)

Let us firstly compare the syntactic differences between Expressions involving BA and the transitive constructions. In (3.42), the Expression involving BA features an object in a preverbal position and represents a SOV order\(^\text{18}\), i.e. zhe-ge ren (‘this person’). In contrast, the object yi-ge ren (‘a person’) follows the main verb in the transitive expression, as in (3.43). Accordingly, the syntactic argument structures in two types of expressions are different. In the transitive expression (3.42), yi-ge ren (‘a person’) is only the object of the predicate dai (‘take’). In (3.43), however, the

\(^{18}\) In this sense, Chinese is an atypical SVO language (Xu 2006).
BA NP, zhe-ge ren (‘this person’) is a shared object of both BA and the main verb
dai (‘take’).

Let us move on to the semantic differences between Expressions involving
BA and the transitive constructions, in terms of the properties of the object, and the
constructional meaning: First, the object in an Expression involving BA is definite
and highly accessible (see §3.1.3.3), which is not required by the transitive
expression. For example, in (3.42), the object zhe-ge ren (‘this person’) acquires
definiteness in the form of [DEM CL N] (see §3.1.3.3 for the [Activated] type of
referents). By comparison, in the transitive (3.43), the object is a non-definite NP, i.e.
yi-ge ren (‘a person’).

Second, an Expression involving BA has the resultative constructional
meaning, including the implications of cause-to-change and total affectedness, which
are not found in the semantics of the transitive expression (see §3.1.3.2 for
differences between total affectedness and partial affectedness). In an Expression
involving BA (3.42), the Object/THEME zhe-ge ren (‘this person’) appears in a pre-
verbal position and is subject to change of the location. The action-result relation is a
characteristic of an Expression involving BA, and the resultative is expressed by zou
(‘be away’) in (3.42). Regarding the cause-to-change, an Expression involving BA
usually (but not always, see §3.4 on more event types of Expressions involving BA
in which mental verbs may be allowed) requires a dynamic action leading to a
resultative. Therefore, most non-actional verbs are not permitted in Expressions
involving BA. As shown in (3.44) and (3.45), the copula shi (‘be’) and the mental
verb xiangxin (‘believe’) are not appropriate in Expressions involving BA. In
contrast, shi and xiangxin can appear in the copula construction as in (3.46) and the
transitive expressions as in (3.47), respectively:

(3.44) * 我把学生是
          wo  BA  xuesheng  shi
1SG  BA  student  BE
?? ‘I am a student’
The pragmatic difference mainly lies in the topic marking. Topic is the given theme which is being talked about in the information structure, in relation to comment (Tsao 1987) which is the new information/comment. Topic in Chinese is by default realized by the first NP (e.g. Chafe 1976), as in the transitive construction as in (3.48).

Note that the topic discussed here refers to the linguistic topic rather than discourse topic (e.g. McNally 1998). For instance, more than one part in (3.48) can be the discourse topic of the sentence, which can be evidenced by topic-hood tests. One test is the intonation test. As in (3.49), if the speaker intends to topicalize the VP dai zou le, there can be a short pause (represented here by a comma) between dai zou le and
yi-ge ren, and also dai zou le as the discourse topic can be phonologically stressed. Similarly, yi-ge beizi could also be stressed as the topic if required in discourse.

(3.49) 我带走了，一个杯子
wo dai zou le, yi-ge beizi
1SG take away ASP one-CL mug
‘I took away a mug’

The other topic-hood test is the felicity of WH-questions and answers. That is, any designated part as the discourse topic can be questioned and answered as the focus-hood. In (3.51), yi-ge beizi is topicalized, while wo is the discourse topic in (3.50).

(3.50) 我带走了什么？
Wo dai zou le shenme?
1SG take away ASP what
‘WHAT did I take away?’

(3.51) 谁带走了一个杯子？
Shei dai zou le yi-ge beizi?
Who take away ASP one-CL mug
‘WHO took away a mug?’

As far as an Expression involving BA is concerned, BA is a linguistic topic operator. As shown in §3.1.3.3, the NP following BA is definite (or, highly accessible). The use of definite devices such as a demonstrative marks the BA NP as

---

19 Meanwhile, the BA Object in Expressions involving BA can also be the discourse topic, as zhe-ge zhuzhang (‘this proposal’) in the following instance. There is a short pause (represented in writing by a comma) between the object zhe-ge zhuzhang (‘this proposal’) and the main predicate xie (‘write’):

他还把这个主张，写进了他的遗嘱
Ta hai zhe-ge zhuzhang, xie jin le ta-de yizhu
3SG even OBJ marker DEM-CL proposal write into ASP 3rd POSS testament
‘He even wrote this proposal into his testament’

(Renmin Daily, 1996)
a known and easily accessible entity/person to the hearer. This feature of the BA object accords with the definition of a topic as the known information in the information structure. Compared with the object in the SVO transitive construction, the BA object in the pre-verbal position achieves “cognitive salience” (Jing-Schmidt 2005: 117) and conveys “high discourse dramaticity” (p128). By using an Expression involving BA, the speaker draws the hearer’s attention. The topic-hood of the BA object can be proved from another perspective. As shown in (3.52), the indefinite form \([\text{NUM CL NP}]\) (i.e. yi-ge beizi ‘a mug’) conveys the unknown information (non-topic). In order to see whether the BA object can be detopicalized, I use the indefinite form yi-ge beizi (‘a mug’) as the BA object as in (3.53). However, the BA object cannot take the indefinite form leading to the ungrammatical (3.53), which shows that the BA object cannot be detopicalized. This test suggests that the BA object can only take the definite form (as in (3.54)) and conveys the known information as the topic. In a word, the BA object is highlighted as a salient theme due to dramatizing effect.

(3.52) 我带走了一个杯子

\[
\text{wo dai zou le yi-ge beizi} \\
1SG \text{ take away \ ASP \ one-CL \ mug}
\]

‘I took away a mug’

(3.53) *我把一个杯子带走了

\[
\text{wo ba yi-ge beizi zai zou le} \\
1SG \text{ OBJ marker \ one-CL \ mug \ take away \ ASP}
\]

(3.54) 我把这个杯子带走了。

\[
\text{Wo ba zhe-ge beizi dai zou le} \\
1SG \text{ OBJ marker \ DEM-CL \ mug \ take away \ ASP}
\]

‘I took away this mug’

Now I summarize all the differences between Expressions involving BA and the transitive expressions in the following Table 3-1:
As shown in Table 3-1, the BA resultatives have the above properties. As mentioned earlier in this section, definite marking in Chinese is commonly achieved with demonstratives such as zhe (‘this’), na (‘that’) and their plural forms zhexie (‘these’), naxie (‘those’) in the SVO patterns without BA (e.g. Chen 2004; Zhang and Fang 1996; Fang 2002; Huang 1999; Tao 1999), considering the following instance (3.55) in which na ge xiao haizi (‘that kid’) is a definite referent:

(3.55) 他就给那个小孩子三个芭乐。

Ta jiu gei na ge xiaohaizi san-ge bale
3SG then give that CL kid three-CL pear
‘Then he gave that kid three pears.’ (Chen 2004: 1152)

Besides BA, theme marking in Chinese SVO expressions without BA (e.g. Chafe 1976; Tsao 1987; see also earlier discussion in this section, e.g. the instance (3.48)) is usually realized by preposing the theme element to the beginning of a sentence.

In addition, apart from the BA resultatives, the most common devices used to achieve the SOV patterns in Chinese are object movement/ bare object preposing
(e.g. Gao 1994; Li 1996; Ernst and Wang 1995; Zhang 2000) (as in (3.56)) and lian-focalization with [+Focus] feature (e.g. Shyu 1995) (as in (3.57)):

(3.56) 张三鱼吃了。
   Zhang San yu chi le.
   NAME fish eat ASP
   ‘Zhang San ate the fish.’ (cited from Shyu 2001: 94)

(3.57) 张三连鱼都吃了。
   Zhang San lian yu dou chi le.
   NAME lian fish even eat ASP
   ‘Zhang San even ate the fish.’ (cited from Shyu 2001: 96)

To summarize, in this part I have compared Expressions involving BA with the transitive expressions in a couple of respects. In the following section I summarize what have been discussed in §3.1.

3.1.6 Section Summary

This section has provided an overview of the syntactic and semantic properties of the resultative Expressions involving BA in Contemporary Chinese. In the following section, I further examine the semantics of the Expressions involving BA as the resultative constructions.

3.2 Further investigation into the semantics of the resultative Expressions involving BA

In this section, I discuss the semantics of the resultative Expressions involving BA in more detail. I firstly propose in §3.2.1 that the resultative (rather than “disposal” as has been claimed in literature) is the core semantics of Expressions involving BA. Then, I show in §3.2.2 that two types of resultatives (strong/weak) are both seen in Expressions involving BA. In §3.2.3, I discuss more semantic properties of the
resultative Expressions involving BA from a constructional perspective. In §3.2.4, I look at the aspectual constraints.

### 3.2.1 Semantics of the BA expressions: “disposal” or the resultative

As mentioned in Chapter 1 (§1.1.1), previous research has not offered a better account of describing the semantics of the BA expressions. For example, an Expression involving BA has been understood as a “disposal” pattern in literature (as described in Chapter 1: §1.1): “The *disposal* form states how a person is handled, manipulated, or dealt with; how something is disposed of; or how an affair is conducted” (Li 1974: 200; cf. Wang 1947). Li and Thompson (1981: 468) also claim that “disposal” refers to “what happens to the direct object”. As mentioned in Chapter 1, “disposal” is not always true for the semantics of an Expression involving BA. I am in favour of Li and Thompson (1981) holding that the resultative is in the heart of the semantics of Expressions involving BA, considering the definition of the resultative: “The *resultative* expresses both a state and the preceding action it has resulted from” (Nedjalkov and Jaxontov 1988: 6). As exemplified in §3.1, an Expression involving BA features the action-result relation and thus satisfies the criterion of the resultative construction.

### 3.2.2 Two types (strong/weak) of the resultative Expressions involving BA

In this section, I discuss a distinction between the strong resultative and the weak resultative attested in Expressions involving BA. I firstly have a general discussion of the strong/weak resultatives in a cross-linguistic context, and then I focus on how the strong/weak resultatives are represented in Expressions involving BA.

With respect to the resultative category, Wunderlich (2000: 257) makes a fine-grained distinction between the “strong resultative” and the “weak resultative”:
The strong resultative refers to “some result state predicating of one of the involved participants of a process is added”. The weak resultative refers to “a result state already implied by the verb is specified more narrowly”. Washio (1997b: 7; see also 1997a, 1999, 2002) provides a clearer definition: The strong resultative refers to the resultative in which “the meaning of the verb and the meaning of the adjective are completely independent of each other”. By comparison, those which are not “strong” are viewed as the weak resultatives. Compare the following instances for the distinction between the strong (as in (3.58)) and the weak resultatives (as in (3.59)):

(3.58) The horses dragged the logs smooth.
(3.59) I froze the ice cream solid.

(Cited from Li 2008: 102)

Typological research\(^{20}\) on the “strong resultative” and the “weak resultative” based on a range of languages can be summarized in the following Table 3-2:

<table>
<thead>
<tr>
<th>Types</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Languages which have both strong and weak resultatives</td>
<td>Dutch, English, German, Japanese, Mandarin, Norwegian, Swedish</td>
</tr>
<tr>
<td>Languages which have neither strong nor weak resultatives</td>
<td>Lingala, Javanese</td>
</tr>
<tr>
<td>Languages which only have weak resultatives</td>
<td>French (restricted), Korean, Romanian (restricted), Turkish</td>
</tr>
<tr>
<td>Languages which only have strong resultatives</td>
<td>Unattested</td>
</tr>
</tbody>
</table>

Table 3-2: Typology of languages with respect to resultatives (Li 2008: 109; cf. Washio 1999: 686)

As shown above, Mandarin Chinese has both the strong and the weak resultatives. In the following discussion, I show that both types exist in the resultative Expressions involving BA. The chief distinction between two types lies in how the main verb relates to the resultative element. The following (3.60) and (3.61) are instances of the strong resultative Expressions involving BA:

---

(3.60) 一个家伙把我推下去
yi-ge jiahuo ba wo tui xiaqu
one-CL guy OBJ marker 1SG push down
‘A guy pushed me down’  (Babai-mi shenchu, 1982)

(3.61) 我把他拖回码头了
wo BA ta tuo hui matou le.
1SG OBJ marker 3SG drag back to dock ASP
‘I dragged him back to the dock’

The resultative element in either (3.60) or (3.61) is independent of the main verb: the resultative state cannot be predicated from the lexical meaning of the verb. In (3.60), for example, the result of the verb tui (‘push’) could be the object (i.e. wo ‘me’) being pushed upwards, downwards, inwards, or outwards. In (3.61), the verb tuo (‘drag’) could also entail a variety of resultatives, and hui matou (‘back to the dock’) is only one of them. The following (3.62) and (3.63) are instances of the weak resultative Expressions involving BA, in which the resultative can be predicted from the lexical meaning of the main verb:

(3.62) 我把我的匙子擦干净了
wo ba wo-de chizi ca ganjing le
1SG OBJ marker 1st POSS spoon wipe clean ASP
‘I wiped my spoon clean’  (Fu-chu haimian, 1985)

(3.63) 他把盘子里的肉切碎了
ta ba panzi-li de rou qie sui le
3SG OBJ marker plate-inside REL meat chop mashed ASP
‘He mashed the meat in the plate by chopping’  (Weilai shijie, 2008)

In (3.62), the resultative element ganjing (‘clean’) has been entailed in the semantics of the main verb ca (‘wipe’). That is, the verb has already indicated “a potential
‘directed change’” (Washio 1997b: 16): *ca* (‘wipe’) typically describes an activity in which the object is affected in such a way that, if the object is caused to change its state, then it changes in a certain fixed direction to reach the final stage where the object is free of dirt, liquid (Washio 1997b: 16; cf. Li 2008: 103). Therefore, the instance (3.62) represents the weak resultative Expressions involving BA. Likewise, in (3.63), the resultative *sui* (‘mashed’) can be predicated from the verb *qie* (‘chop’), and thus (3.63) is also an instance of the weak resultative.

### 3.2.3 More semantic properties of the resultative Expressions involving BA

As will be shown in §3.4.2, an instance of Expressions involving BA is treated as a symbolic form-meaning pairing in a constructional analysis. In this section, I examine the semantic properties of the resultative construction involving BA. This section covers the following topics pertaining to Expressions involving BA: the instigator, constraints on idiosyncratic collocations, end of scale, the unique path constraint, change of state, windowing and gapping, and subjectivity.

#### 3.2.3.1 (Non-) Volitional instigator

The resultative construction requires “an animate instigator argument” (Goldberg 1991: 80; 1995), but there could also be non-volitional instigators in some English resultatives. The same applies to Chinese Expressions involving BA. The subject in an Expression involving BA is generally animate or volitional, as in (3.60)-(3.63). However, the subject in an Expression involving BA could also be a non-volitional instigator that causes an event to occur (see §3.4 for four event types of Expressions involving BA involving different types of instigator). In (3.64), *dong-nan feng* (‘south-east wind’) is a non-volitional instigator in the resultative event in which the brume is blown inwards.
In the following section, I turn to another characteristic of the resultative Expressions involving BA with respect to constraints on idiosyncratic collocations.

### 3.2.3.2 Collocational constraints

There are few constraints on the resultative elements in collocation with the verbs in Expressions involving BA, as compared with the English resultative counterparts (Goldberg and Jackendoff 2004). Let us first look at the English resultatives as in (3.65):

(3.65) He ate himself sick.

* He ate himself ill/nauseous/full.

(Goldberg 1995: 192)

In the English resultatives, more constraints are imposed on the categories of the resultative predicates, and “the type of adjectives that occurs as a resultative is fairly limited” (Goldberg 1995: 195; cf. Boas, 2003). In other words, certain resultatives tend to follow certain verbs in idiosyncratic collocations. By comparison, a broader range of adjectives can appear in the resultative position in Chinese Expressions involving BA, such as *ganjing* (‘clean’) as in (3.62), and *sui* (‘mashed’) as in (3.63). Also, the resultative Expression involving BA allows for diverse collocations of the main verb and the resultative: As long as a predicate states the outcome of an action denoted by the verb, it would have an entry into the resultative position.

To summarize, the main verbs in the resultative Expressions involving BA do not exhibit particular lexical specifications for certain resultatives, which leads to
more freedom in collocations. In the next section, I show how the “end of scale” can be applied to Chinese Expressions involving BA.

3.2.3.3 End of scale

Goldberg (1995: 194) argues that “the change of state must occur simultaneously with the endpoint of the action denoted by the verb”. The same applies to the Chinese Expressions involving BA. In the resultative Expressions involving BA, the resultative part is “non-gradable” (Sapir, 1944: 93-116), with an “end of scale” (Goldberg, 1991: 82; 1995). For example, in (3.66), a gradable resultative you-diain ganjing (‘a little/slightly clean’) leads to an ungrammatical Expression involving BA:

(3.66) *我把车擦得有点干净  
\text{Wo } BA \text{ che ca de you-dian ganjing}  
1SG BA car wipe DE a little/slightly clean  
?? ‘I wiped the car a little/slightly clean’

In contrast, in an earlier instance (3.62), the Expression involving BA involves a non-gradable resultative ganjing (‘clean’) is grammatical. This suggests that the resultative is required to be non-gradable in the resultative Expression involving BA. The following section deals with the Unique Path Constraint in the case of the resultative Expressions involving BA.

3.2.3.4 The Unique Path Constraint (UPC) (Goldberg 1991: 85)

The Unique Path Constraint rules out those resultative expressions involving more than one delimiter (cf. Tenny 1987, 1994 for the “Single Delimiting Constraint (SDC)”), as exemplified below:

(3.67) *Sam kicked Billi black and bluei out of the roomi. (Goldberg 1991: 368)

(3.68) *She kicked himi bloodyi deadi. (Goldberg 1991:370)
This principle also applies to the Chinese resultative Expressions involving BA: two or more resultatives cannot co-occur; otherwise, more than one delimiter in an Expression involving BA would lead to ungrammaticality:

(3.69) * 我把他拖回码头 i 昏迷 i 在地 i

I have shown that the instance of an Expression involving BA which violates the UPC would be ungrammatical. Next I will turn to the semantic essence, i.e. change of state, in the resultative Expressions involving BA.

3.2.3.5 Change of state: BECOME operation

Goldberg (1995: 188) maintains that the “resultatives can only be applied to arguments which potentially undergo a change of state as a result of the action denoted by the verbs”. Goldberg (1991: 84) further suggests that there are “old state” and “new state” before and after the change. Likewise, Von Wright (1963; 1968) claims that “any event can be defined as a change of state where the two states are of a particular form. Namely, one of the states is the negation of the other”. Similarly, Verspoor (1997: 448) argues that an “image-schematic BECOME” element relates to CAUSE via metonymy in the conceptualization. To repeat the same instance (3.70) here:

(3.70) 我把他拖回码头了

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(3.70) 我把他拖回码头了
In (3.70), there is an old state, i.e. ‘he was not at the dock’. The old state of the object is negated (Givón 1972) by a change of state predicate, i.e. tuo (‘drag’). Therefore, the event ends with a new state, i.e. ‘(he is) back to the dock’ as denoted by the resultative prepositional phrase. In the next section, I show the effect of windowing and gapping in the resultative Expressions involving BA.

3.2.3.6 Windowing and gapping

In the “event frame” (Talmy, 1996: 237) evoked by a sentence, some portions of conceptualization (i.e. the “gapped” part) could be invisible from the linguistic expression but can be inferred from the “windowed/ foregrounded” part (Talmy, 1996: 285). The combination of windowing and gapping is termed by Talmy (1996: 286) as “cognitive splicing”. Therefore, windowing of attention is a cognitive process with the foreground explicitly expressed and the background omitted. In the following (3.71), the agent wo (1SG) and the factive-theme yi-dong fangzi (‘a house’) are explicitly expressed as the foreground/windowed parts. However, there might be a number of intermediary procedures which occur before the desired result (i.e. ‘a house’ is built up) is achieved. The agent might not transfer his physical energy directly or instantly onto the factive-theme, and the house is surely not immediately built up. Likewise, there might be more than one agent (apart from wo, 1SG) who got involved in a coherent event of building up a house.

(3.71) 我盖起来一栋房子。
    Wo   gai   qilai yi-dong    fangzi.
    1SG    build  up     one-CL house
    ‘I built up a house’

The same phenomenon can be seen in the resultative Expressions involving BA and can be explained in terms of the theory of windowing of attention. As will be discussed in §3.2.4.1, the resultative Expression involving BA has an aspectual constraint of non-homogeneity: Any part of the event is not the same with the whole
event which depicts a measurable change from the old state to the new state. Only
the initial and the final point of change are observable and can be explicitly
expressed by Expressions involving BA. For example, in (3.72), a new state of the
object wo-de chizi (‘my spoon’) is expressed/windowed by the resultative adjective
ganjing (‘clean’), and the initial state (i.e. dirtiness of my spoon) is presupposed. In
contrast, the process about how my spoon is washed in a coherent washing and
drying event is not specified, as the gapped parts. For another instance, as
exemplified in (3.73), the result, i.e. her eyes were swollen as two peaches, are
windowed as the foreground; however, there might be a gradual process in which her
eyes became swollen before being like two peaches. The process is gapped as well.

(3.72) 我把我的匙子擦干净了

\[
\text{wo ba wo-de chizi ca ganjine le}
\]

1SG OBJ marker 1st POSS spoon wipe clean ASP

‘I wiped my spoon clean’ (Fu-chu haimian, 1985)

(3.73) 胡柳把两只眼睛哭得和桃子一样

\[
\text{Hu Liu BA liang-zhi yanjing ku de he taozi yiyang}
\]

NAME OBJ marker two-CL eyes cry DE alike peach same

‘Hu Liu cried (so sadly that) her two eyes were (swollen) like two peaches.’

(Ku Dou, 1959)

As shown in Figure 3-6, the before-change-state and the after-change-state are
windowed (or, foregrounded) (Talmy, 1996: 237, 255). However, the intervening
process from the starting point to the endpoint, i.e. the “causal distance” (Talmy,
1996: 255) is gapped or backgrounded (Talmy, 1996: 285). The gapped parts can
only be inferred from the windowed parts.
In the following section, I discuss how subjectivity is involved in the semantic interpretation of the resultative Expressions involving BA.

### 3.2.3.7 Subjectivity

Subjectivity is a synchronic term which means the speaker’s (or writer’s) belief, attitude and comments get involved in the interpretation (Traugott 2003b; cf. De Smet and Verstraete 2006 for a typology of sub-categories of ‘subjectivity’ which involves Traugott’s definition as the pragmatic type). To take the Indirect AFFECT (see §3.3.1) event type (with a non-intentional result) as an example:

(3.74) 这个狱卒把他的犯人跑了

\[
\text{Zhe-ge yuzu BA ta-de fanren pao le}
\]

DEM-CL prison-policeman OBJ marker 3rd POSS prisoner escape ASP

‘This prison-policeman let his prisoner escape.’

---

21. Note that another term ‘subjectification’ is a diachronic process of semantic change from non-subjective meaning to subjective meaning (Traugott 2003b; Traugott 1989, 1995, 1997, 1999a):

Subjectification is the mechanism whereby meanings come over time to encode or externalise the SP/W’s perspectives and attitudes as constrained by the communicative world of the speech event, rather than by the so-called ‘real-world’ characteristics of the event or situation referred to.

Traugott (2003b: 126)

Here I focus on how subjectivity is construed in Expressions involving BA on the synchronic dimension.
The subject *zhe-ge yuzu* (‘this prison-policeman’) did not intentionally bring about the result, and he did not expect the escape of a prisoner who he watched over on duty. It could possibly be an accident that the prisoner sneaked off. However, the speaker attributes the prisoner’s escape completely to the policeman (e.g. due to his negligence) whatever the fact could be. In short, an Expression involving BA does not necessarily mirror what a fact is, but what the conceptualizer subjectively believes an event should be. For another example (with a non-dynamic action verb):

(3.75) 她把桂枝盼来了

<table>
<thead>
<tr>
<th>Ta</th>
<th>BA</th>
<th>Guizhi</th>
<th>pan</th>
<th>lai</th>
<th>le.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3SG (feminine)</td>
<td>OBJ marker</td>
<td>NAME</td>
<td>wait</td>
<td>back</td>
<td>ASP</td>
</tr>
</tbody>
</table>

‘She had been waiting for Guizhi until Guizhi was back.’

*(Tui, 1938)*

In (3.75), *pan* (‘wait’) seems not like an action that causes the result *lai* (‘back’). So, how is there any sense of cause-to-change in this case? By using the Expression involving BA (3.75), the speaker intends to convey such a meaning: ‘She waited Guizhi so eagerly that Guizhi was back’. That is, (3.75) has a subjective construal: the conceptualizer believes ‘her’ eager waiting yields the result of Guizhi’s return. Hence, a causative link is still established between an action and a result by way of subjectivity.

As shown above, both instances (3.74) and (3.75) involve recruitment of the speaker’s subjective belief and attitudes towards the proposition. Using BA triggers the speaker’s assessment of the event encoded by an Expression involving BA: the speaker attributes the resultative to the subject-instigator although this might not be the real situation. In other words, the event is not described objectively. From another perspective, upon reading or hearing an Expression involving BA, the reader or audience expect that the instigator denoted by the subject (regardless of volitionality or intentionality) is responsible for the resultative event in the speaker’s (or writer’s) view. In this sense, subjectivity is one of the features that distinguish Expressions involving BA from those transitive expressions which do not focus on the SP/W’s attitudes.
In this section, I have shown how subjectivity relates to resultative Expressions involving BA and I focus on the aspectual properties in the following section.

3.2.4 Aspectual constraints on the resultative Expressions involving BA

In this section, I discuss the aspectual constraints of the resultative Expressions involving BA, in terms of telicity and perfective viewpoint.

3.2.4.1 Telicity

I argue that an Expression involving BA is telic by using two criteria, i.e. “endpoint” and “non=homogeneity” (Hacohen, 2006: 2). The notion of “endpoint” (Hacohen, 2006: 2) has been seen in a great deal of literature (e.g. Verkuyl, 1972, 1993; Comrie, 1976; Dowty, 1979; Tenny, 1994; Depraetere, 1995; Krifka, 1998; Rothstein, 2004). A telic event is “viewed as a whole” with “the beginning” and “the end” (Comrie, 1976: 18). For example, the instance (3.7) expresses an event which involves the completion of the action chui (‘blow’): the object zhe-zhi xiao-deng (‘this small candle’) ends in stopping working.

(3.7) 我把这只小灯骤然地吹熄了

Wo ba zhe-zhi xiao-deng zhouran-de chui xi
1SG BA DEM-CL small-candle suddenly blow out
‘I suddenly blew this small candle out.’

It could be questioned whether the telicity in (3.7) merely comes from the aspect marker le. However, the Chinese aspect marker le does not necessarily indicate completion (cf. Chu 1976; Tai 1984; Smith 1991, 1994; Sybesma 1997, 1999; Klein et al. 2000), which leads to “the imperfective paradox” (Dowty, 1979: 133). As in (3.77), le conjoins the predicate, but the whole event is not completed as indicated by the clause (in italics) keshi mei xie-wan (‘but not write-finish (it)’).
(3.77) 我昨天写了一封信，可是没写完。
Wǒ zuòtiān xiě 了一封信， keshì méi xiě-wàn.
1SG yesterday write  LE one-CL letter,  but  not write-finish
‘I wrote a letter yesterday, but I didn’t finish it.’  (Tai 1984)

Hence, the telicity in (3.76) is to a large extent contributed by the [+telic] feature of the resultative Expression involving BA per se, rather than (or, at least, not only due to) the aspect marker le. The contrast between the [+telic] Expression involving BA and the [-telic] transitive expression can be seen from the following examples:

(3.78) *我把他拖回码头了，又拖到廊桥。
Wǒ bā ta tuo huí  matou le,  you   tuo dao langqiao.
1SG BA 3SG drag  back to  dock ASP  further  drag  to  bridge
‘I dragged him back to the dock, and I dragged (him) further to the bridge.’

(3.79) 我拖他回码头了，又拖到廊桥。
Wǒ tuo ta hui  matou le,  you tuo dao langqiao.
1SG drag 3SG back to dock ASP further drag to bridge
‘I dragged him back to the dock, and I dragged (him) further to the bridge.’

As shown in (3.78), an Expression involving BA depicts a telic event with an inherent entailment of completion: there is a culmination point at which the action designated by the main verb tuo (‘drag’) comes to an end and cannot continue further. That is, the 3SG object is dragged by the 1SG subject back to the dock, and thus ‘his’ location has been changed. That is the end. Therefore, the resultative Expression involving BA (3.78) cannot conjoin with another clause as in italics, i.e. ‘I dragged him further to the bridge’. In contrast, the transitive instance (3.79) could describe an event which is not finished and thus the state of the object is subject to new change, i.e. ‘I dragged him further to the bridge’.

As mentioned in the beginning of this section, telicity is defined also by non-homogeneity which means one part is not the same with the whole event
The resultative expression involving BA is non-homogeneous (or, non-cumulative) (Krifka 1992: 29; 1998: 214): The main predicate in an Expression involving BA always has a heterogeneous (see §3.2.3.6 on the windowing and gapping effect in the heterogeneous process) feature involving a natural endpoint which characterizes telicity, such as tuo (‘drag’) in (3.78). In an activity of ‘dragging’, any part of the event is not the same with the whole event, with an implied endpoint. As argued by Vendler (1967: 101), the telic event “proceed(s) to a terminus which is logically necessary to their being what they are”, as opposed to the non-telic which “goes on in time in a homogeneous way” and thus “any part of the process is of the same nature as the whole”. To put this differently, the telic predicate features “[+ADD TO]” (Verkuyl 1993: 14; Krifka 1998: 197) creating a path along which the event is unfolded towards a termination. This feature is not found in these non-telic verbs, such as a mental verb ai (‘love’) in (3.80):

(3.80) * 我把他 爱上了
    Wo BA ta ai shang le
    1SG BA 3SG love up ASP
    ?? ‘I fell in love with him/her/it.’

As shown in (3.80), the non-telic verb ai (‘love’) (in the subcategory of “stative verbs”, Hoekstra 1987: 101-139) is not appropriate in an Expression involving BA: it does not depict a non-homogeneous event in which the object can be totally affected in an ongoing and measurable process.

While discussing the telicity in Expressions involving BA, it is necessary to consider the role of the resultative element. On the one hand, the resultative generally suggests a boundary/endpoint for a telic event, such as hui matou (‘back to the dock’) in (3.78). On the other, the resultative features “[+SQA]” 22 (Krifka 1998: 197; Verkuyl 1993: 14) providing a “measuring out” (Tenny 1987, 1994) for the main verb. Still in (3.78), for example, hui matou (‘back to the dock’) indicates the

22 [+SQA] represents “specific quantity of A” (Verkuyl 1993: 16)
measurable progress of the action "tuo" (‘drag’), i.e. to which stage the event "tuo" has reached.

3.2.4.2 Perfective viewpoint

Smith (1991: 127) introduces three “view points” including Perfective, Imperfective, and Neutral. The perfective viewpoint refers to a “situation as a whole with initial and final points”. Comrie (1976: 16) also defines “perfectivity” as “the view of a situation as a single whole, without distinction of the various separate phases that make up that situation”. “Perfectivity denotes a complete situation, with beginning, middle, and end”. There is another aspectual constraint, no “time delay” (Goldberg 1991: 81; 1995): “The change of state must occur simultaneously with the endpoint of the action denoted by the verb” and thus there cannot be “any time delay between the action denoted by the verb and the subsequent change of state.”

In the resultative Expressions involving BA, the change into a new state (i.e. the result), cannot be seen until the event reaches the endpoint. Although the perfective per se does not necessarily entail the termination (Comrie 1976: 18), it generally implies the success of a situation when “all parts of a situation are presented as a single whole” (Comrie 1976: 20). In an instance (3.73) of an Expression involving BA, the resultative "mie" (‘be out’) immediately occurs after the action "chui" (‘blow’) finishes, without time delay. The following Figure 3-7 represents the perfective viewpoint of the resultative Expressions involving BA:

---

23 The perfective can even indicate the beginning of a situation (for ingressive meaning) (Comrie, 1976).
Now I explain how Figure 3-7 represents the event encoded by an Expression involving BA relative to perfectivity. Temporal parameters are not considered here but will be taken into account in Figure 3-8 and 3-9. As shown above, there is a starting point (SP) and a finishing point (FP) and an intervening process of cause-to-change. The starting and the finishing points are illustrated by two blank squares on two sides. The object marker BA marks the theme-topic and elicits a total affectedness reading from the starting point, which is attributed to the prominent object in a pre-verbal position.

As illustrated by two dashed boxes in the bottom, there are ‘Before-change Old State’ and ‘After-change New State’ which occur at the starting point and the finishing point, respectively. The Before-change Old State literally coincides with the state of the object before change, which can be presupposed by the main predicate. By comparison, the After-change New State cannot be seen until the finishing point. The new state is syntactically expressed by the resultative element in a post-verbal position. The operation in the middle of the diagram represents the change-action designated by the main predicate in an Expression involving BA. Recall §3.2.3.6, the before-change state and the after-change state are the windowed parts.

As far as the gapped part is concerned, the intervening cause-to-change process is accompanied with mechanisms such as Persist and Resource/Effort. Such mechanisms are involved in a dynamic circle consistently acting upon the target-object: resources/efforts are provided to drive the circle running, which results in the
object in a changing mode. Only when the event arrives at the finishing point (FP), the ‘After-change New State’ can be observed.

The aspsectual analysis in Figure 3-7 can be further combined with a sequence of three distinct time points including “Event Time (E)”, “Speech Time (S)”, and “Reference Time (R)” (Reichenbach, 1947: 289). The event time (E) refers to the time when a described event occurs. The speech time (S) is the time of utterance. The reference time (R) is “the time for which, on some occasion, a claim is made” (Klein 1992: 535). That is, R is the time which can be identified by both the speaker and the hearer in an established scene/situation. As in Figure 3-8 and Figure 3-9, the event of the resultative Expression involving BA is projected on the time scale of the past and the future, leading to the past perfect and the future perfect. Although Chinese does not have tense, a past reference and a future reference can be marked by temporal adjuncts such as zuotian (‘yesterday’) and mingtian (‘tomorrow’). I firstly illustrate an instance of an Expression involving BA (3.81) which encodes a past event as in Figure 3-8:

(3.81) 昨天，我把他拖回码头了。

\[
\text{Zuotian, wo BA ta tuo hui matou le.} \\
\text{Yesterday 1SG OBJ marker 3SG drag back to dock ASP} \\
\text{‘I dragged him back to the dock yesterday.’}
\]

In the following Figure 3-8, the representation of the perfective aspect of an Expression involving BA is the same with Figure 3-7, but here the perfectivity is projected onto the time scale. Due to the existence of zuotian (‘yesterday’), the event denoted by the sentence occurred in the past relative to the speech time (S). The event time (E) precedes both the speech time (S) and the reference time (R) in the temporal sequence. The event time (E) precedes the speech time (S) because the past event occurred obviously before the speaker uttered. The event time (E) also precedes the reference time (R) which is a past-time reference that can be identified by both the speaker and the hearer in the scenario. The duration of the event (intervening between the starting point and the finishing point) is highlighted in black shade. The result of the event is not seen until the finishing point (FP), and thus
the end of the event time (E) coincides with the finishing point. In contrast, the starting point is not observable, as represented in broken square and projection line.

![Diagram of temporal relations](image)

Figure 3-8: Temporal reading of the past perfect of the Resultative Expressions involving BA

The resultative Expression involving BA can also encode a future event by involving a temporal adjunct *mingtian* (‘tomorrow’), as in (3.82):

(3.82) 明天, 我把他拖回码头。

*Mingtian, wo BA ta tuo hui matou.*

*Tomorrow 1SG OBJ marker 3SG drag back to dock*

‘I will drag him back to the dock tomorrow.’

The illustration of the future perfect is identical with Figure 3-7 or Figure 3-8. However, since the event occurs in the future, the temporal sequence of three time points is different: The event time (E) is to the right hand of the speech time (S) on the time scale, while the reference time (R) follows the event time as the future-time reference.
I have discussed the perfective aspect of Expressions involving BA, as well as the representation of the past perfect and the future perfect.

### 3.2.5 Section summary

In this section, I further investigated the semantic properties of the resultative Expressions involving BA in Contemporary Chinese. In the following section, I turn to the event types of Expressions involving BA which are inherently connected on the cognitive basis, i.e. the Compulsive Force Schema, as will be discussed in §3.3.

### 3.3 Event types of the BA resultative Expressions and the Compulsive Force Schema

In the present section, I firstly propose four event types encoded by the resultative Expressions involving BA. There are a couple of issues to clarify in the beginning of this section:

First, the same set of parameters for classifying event types of BA resultatives in this section will also be used in my diachronic study (see Chapter 6), leading to a unified categorization for both synchrony and diachrony in this thesis. Second, I clarify how the terminology “event type” is used in this thesis. The
typological work on “event type” is often based on aspectual properties: events are basically classified into four types including states, activities, accomplishments, and achievements (Vendler 1957, 1967; Dowty 1979; Ryle 1949; Kenny 1963; Andersen 1990; Smith 1991; VanValin and LaPolla 1997). More precisely, therefore, event types refer to aspectual event types. Studies on Chinese linguistics also typically use the same term “event types” to discuss verbal categories in terms of aspectual attributes (e.g. Shi 1988: 59; Cheng and Huang 1994; Chu 1976; Tai 1984; Tai and Chou 1975). In this thesis, however, I define event types differently: they do not relate to aspectual properties; instead, they are used to depict different semantic templates encoded by different BA resultatives. To be specific, terms such as HANDLE, AFFECT, DESIRE, and TRIGGER, as will be discussed in this section, are my own and were not derived from previous studies on the BA resultatives. These terms are generalized from semantics of different types of BA resultatives for convenience of discussion, since there were not appropriate terms of relevance in previous studies.

Furthermore, I will argue in this section that the four event types as mentioned above are connected by the same “Compulsive Force Schema” (Johnson, 1987). Essentially, the idea of the Compulsive Force Schema is that the object is moved by the force, or compulsion (see §3.3.2 for detailed discussion).

This section is organized as follows: In §3.3.1, I show four event types of Expressions involving BA. In §3.3.2, I discuss the Compulsive Force Schema and how it is associated with the event types of Expressions involving BA.

### 3.3.1 Four event types of the resultative Expressions involving BA

Since there were no terms available for generalizing semantic distinctions among different types of BA resultative expressions, I propose four parameters which form a correlated set of constraints/criteria by which four types of Expressions involving BA are characterized and classified: the first one is [+/-volitional instigator]. As mentioned in §3.2.3.1, the instigator in the resultative Expressions involving BA could be volitional or non-volitional, as in English (see e.g. Dixon 2000). The second parameter is [+/-direct causation] which refers in this thesis to whether the instigator contacts the object to perform a direct action or not. With regard to
“directness” (e.g. Fodor 1970; Fillmore 1972; Wierzbicka 1975; Cristofaro 2003), Hollmann (2006: 206-208) summarizes three parameters including “unity of time” (see also Fodor 1970; Wierzbicka 1975), “unity of space” (see e.g. Fillmore 1972), and “the absence or presence of another causal participant in between the causer and the causee” (see e.g. Jackendoff 1972; Dixon 2000). Here, although I am aware that directness concerns another two parameters, I mainly consider the third parameter of directness (i.e. “the absence or presence of another causal participant in between the causer and the causee”) for distinguishing direct causation from indirect causation. Essentially, the difference lies in whether someone or something directly transfers the force and makes an event occur. The third parameter for defining the event types is [+-intentional result], which concerns whether the (volitional) instigator intentionally brings about a certain result to the object. The fourth parameter is [+-visible change] which concerns whether a visible change occurs to the object in the real world. Interactions of these parameters constitute the semantic complexity, leading to four event types of the resultative Expressions involving BA, including HANDLE, ACTIVATE, DRIVE and LEAD TO. In the following discussion, I analyze each type with examples and constructional representations.

The first event type is HANDLE: an object is in the control of a volitional subject and changes in a certain direction as the subject intends; it is like that the object is subject to manipulation. The values of the four parameters of this type are all positive: [+Volitional Instigator], [+ Direct Causation], [+ Intentional Result], [+ Visible Change], and the HANDLE type is the canonical member. In (3.83), the animate and volitional subject wo (1SG) consciously and directly acts upon the object wo de chizi (‘my spoon’) with an intention. As a consequence, the object wo de chizi is entirely under the control of the subject and then undergoes a visible change. The resultative ganjing (‘clean’) expresses the new state of the object (as opposed to a presupposed dirty state), as desired by the subject.

(3.83) 我把我的匙子擦干净了

wo ba wo-de chizi ca ganjine le
1SG OBJ marker 1st POSS spoon wipe clean ASP
‘I wiped my spoon clean.’
Compared with HANDLE, the other three event types have the values of at least one parameter negative. They are less canonical members. The constructional representation of all the event types (including HANDLE) will be given in section §3.4.

The second event type is AFFECT which features a non-intentional result caused by a volitional instigator. This type can be further divided into two subtypes including Direct AFFECT and Indirect AFFECT. The following (3.4) is an instance of Direct AFFECT, the parameters of which are [+Volitional Instigator], [+ Direct Causation], [- Intentional Result], [+ Visible Change]. In (3.4), the subject refers to a volitional instigator who directly caused her two eyes to be swollen as big as two peaches. Obviously, this result is not intentional but produced by the effect of the action ku (‘cry’) (denoted by an intransitive verb). In addition, the result is visible.

(3.4) 胡柳把两只眼睛哭得和桃子一样

Hu Liu BA liang-zhi yanjing ku de he taozi yiyang
NAME OBJ marker two-CL eyes cry DE alike peach same
‘Hu Liu cried (so sadly that) her two eyes were (swollen) like two peaches.’

(Ku Dou, 1959)

The other subtype is Indirect AFFECT the parameters of which are [+Volitional Instigator], [- Direct Causation], [- Intentional Result], [+ Visible Change]. In (3.85), the instigator zhe-ge yuzu (‘this prison-policeman’) is volitional. According to the general knowledge, it should be not the policeman’s intention to let his prisoner escape. In line with this understanding, the prisoner’s escape is not directly caused by the policeman. Obviously, a visible change is witnessed. In an instance of the Indirect AFFECT subtype, the action is designated by an intransitive verb such as pao (‘run/escape’):

(3.85) 这个狱卒把他的犯人跑了。

Zhe-ge yuzu BA ta-de fanren pao le
DEM-CL prison-policeman OBJ marker 3rd POSS prisoner escape ASP
‘This prison-policeman let his prisoner escape.’
This seems to be an exception to the general Expressions involving BA as discussed previously: there is not a separate resultative element, but only an intransitive verb pao (‘escape’). Ta-de fanren (‘his prisoner’) is not a direct patient object of transitive verb, “exceptional to the semantic constraint of patient- hood24” (Goldberg 1991: 67).

So, how should we interpret this kind of instance? As will be represented in Figure 3-17, pao has two polysemies: the intransitive verb pao (‘escape’) is coerced to be a causative verb (‘to non-intentionally let sb escape’). According to Talmy (1988), there are distinctions between the strong and the weak causatives. For example, English cause and prevent are instances of the strong causative, while let and hinder are the weak causatives. The coerced pao is such a weak causative verb meaning ‘let’. Accordingly, ta-de fanren (‘his prisoner’) is coerced to fit into the obligatory constructional argument role of theme: “the resultative can only apply to arguments which bear the thematic role of patient” (Goldberg 1991: 66). Based on the above arguments, a constructional analysis of this sub-type will be given in §3.4.2 in some detail.

Let us move on to the third event type DESIRE, which differs from the previous two types HANDLE and AFFECT, in terms of values of parameters: [+Volitional Instigator], [- Direct Causation], [+ Intentional Result], [- Visible Change]. In (3.87), for instance, the instigator is still volitional. However, this event type features indirect causation and invisible change. As in (3.86), the object, a text, is not directly caused by the instigator wo (1SG) to be changed (e.g. in terms of properties); in other words, the event is not accompanied by transfer of force. The instigator desires to memorize (designated by the main verb bei) the text in order to be familiar (designated by the resultative adjective shu) with it, which is an intentional result (goal).

---

24 This kind of constituents is sometimes known as “fake object” (Goldberg, 1991: 63).
(3.86) 他把《八扇屏》背熟了

Ta  BA  *Ba-shan-ping*\(^{25}\) bei shu le

3SG  OBJ marker  TEXT NAME  memorize familiar  ASP

‘He got familiar with (the texts of) *Ba-shan-ping* by memorizing.’

(*Hou Yaowen chushan Ji*, 1995)

The fourth event type of Expressions involving BA is **TRIGGER**: [-Volitional Instigator], [+ Direct Causation], [- Intentional Result], [+ Visible Change]. As in (3.87), the natural force *dong-nan feng* (‘south-east wind’) is a non-volitional instigator, which distinguishes this type with the other three event types. Accordingly, the result *jinlai* (‘inwards’) is non-intentional which is attributed to an inanimate instigator. In addition, the causation is direct involving the causer *dong-nan feng* (‘south-east wind’) and the causee *haishang-de shuiqi* (‘brume on the sea’), towards a visible change (‘inwards’). Considering the values of these parameters, this event type is termed as TRIGGER: a non-volitional instigator **triggers** (by way of “personification”, Lakoff and Johnson, 1980: 7) a direct causation in a non-intentional manner leading to a visible change.

(3.87) 东南风把海上的水气吹进来了

*Dong-nan feng* ba hai-shang de shuiqi chui jinlai le

South-east wind OBJ marker on the sea REL brume blow inwards ASP

‘The south-east wind blew the brume on the sea inwards (towards the land).’

Now I summarize four event types of the resultative Expressions involving BA based on the discussion in this section. These distinct event types are characterized by different combinatorial patterns of parameters, as in Table 3-3:

---

\(^{25}\) This is the name of a prose in Old Chinese.
The current section has discussed four event types of Expressions involving BA. In the following section, I will show how these four event types are based on the same conceptual model, i.e. the Compulsive Force Schema.

### 3.3.2 The resultative Expressions involving BA based on the Compulsive Force Schema

As mentioned in §3.2.3.5, the resultative Expression involving BA expresses change-of-state. Here I further investigate the foundation of this constructional semantics, i.e. “Compulsive Force Schema” (Johnson, 1987: 2).

Before discussing the Compulsive Force Schema, I firstly introduce the motion schema. Lakoff and Johnson (1980) propose that *change-of-state* is a metaphorical extension of *change-of-location*, particularly by means of the “Location Event-Structure” metaphor\(^\text{26}\) (Lakoff and Johnson, 1999: 179). To be specific, the “Location Event-Structure” suggests four points: (1) states are locations; (2) changes are movements; (3) actions are self-propelled movements; (4) causation is forced movement (Lakoff and Johnson, 1999: 179\(^\text{27}\)). In a word, causation is “forced movement” (Lakoff and Johnson, 1999: 184). Furthermore, Goldberg (1995: 84, 152) reveals how the resultative construction metaphorically links to the caused-motion construction, as represented in Figure 3-10:

\(^{26}\)The other “basic event-structure metaphor” is the “Object event-structure” (Lakoff and Johnson 1999: 178, 198).

\(^{27}\)They propose sub-mappings for “Location event-structure metaphor” from the source domain of motion to the target domain of events, including “forces-causes”, “destinations-purposes”, and “paths-means”.

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Parameters value</th>
<th>Volitional Instigator</th>
<th>Direct Causation</th>
<th>Intentional Result</th>
<th>Visible Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>HANDLE</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>AFFECT</td>
<td>Direct AFFECT</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Indirect AFFECT</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>DESIRE</td>
<td></td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>TRIGGER</td>
<td></td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 3-3: Parameters values in four Event Types of the Resultative Expressions involving BA

26. The other “basic event-structure metaphor” is the “Object event-structure” (Lakoff and Johnson 1999: 178, 198).
27. They propose sub-mappings for “Location event-structure metaphor” from the source domain of motion to the target domain of events, including “forces-causes”, “destinations-purposes”, and “paths-means”.
As shown above, the resultative construction is the extension of the caused-motion construction via metaphorical link (Im). In the caused-motion construction, the object is caused to change its location. By comparison, the object in the resultative construction is caused to change its state. As a consequence, there is a metaphorical extension from the source domain (location) to the target domain (state).

As far as the resultative Expression involving BA is concerned, the four event types all pertain to the change of state. Therefore, they are all related to the motion schema via inheritance links as diagrammed in Figure 3-10. Goldberg (1995: 74-81) proposes a variety of inheritance links including “Ip (polysemy link)”, “Im (metaphorical extension link)”, “Ii (instance link)”, and “Is (subpart link)”). The subpart links will be mentioned in Figure 3-17 (§3.4.2) while illustrating the constructional representation of the Indirect AFFECT event type. Here I concentrate on other three types of inheritance links which will be used in the following Figure 3-11:
As in Figure 3-11, a metaphorical mapping can be established between the caused-motion construction and the resultative construction by a metaphorical link. In other words, the resultative Expression involving BA is a metaphorical extension of the caused-motion schema. With respect to a polysemy link (Ip), the canonical HANDLE and other three event types (AFFECT, DESIRE, and TRIGGER) constitute the polysemes of the resultative Expression involving BA (cf. “scene-encoding hypothesis”, Goldberg 1998: 205, and “conceptual archetypes”, Langacker 1991b: 294). These event types are syntactically unified in terms of identical syntactic specifications, but
vary in semantic specifications. Regarding an instance link (I), it is used “when a particular construction is a special case of another construction” (Goldberg 1995: 79). For example, the framed constructional representation is a lexically filled and fully specified version of the HANDLE event type of Expressions involving BA.

I have shown that the resultative Expression involving BA is a metaphorical extension of MOTION. Next I explain how the event structure of the resultative Expression involving BA can be thought of from the perspective of the theory of the Compulsive Force Schema, in which FORCE plays a role in COMPULSION (Johnson 1987: 42-43):

(1) FORCE always involves “interaction”.
(2) FORCE has a “vector quality” and is always manifested in some direction.
(3) There is always a “path” for FORCE in association with a directional movement.
(4) FORCE has “origin” or “source” and is directed toward a “target” or “goal”.
(5) FORCE has “degree of power or intensity” and thus can be measured quantitatively.
(6) There is always a “structure or sequence of causality” involved.

Regarding the importance of FORCE, Johnson (1987) further proposes the “Compulsive Force Schema” as diagrammed in Figure 3-12. The object is moved by force, more precisely, COMPULSION (Johnson, 1987: 45).

![Figure 3-12: Compulsive Force Schema (Johnson, 1987)](image)

To be specific, Figure 3-12 symbolizes the indispensable elements in the Compulsive Force Schema, including FORCE (F), object, origin, direction, path and goal. Based on Figure 3-12, I present the event schema of the resultative Expression involving BA, as in Figure 3-13:
As represented above, there is a force that metaphorically pushes the object from the origin ("A") to the goal ("B"). Accordingly, the object changes its old state towards a new state which is the focus. Syntactically, the origin is associated with the object (see §3.1.3.3 on definiteness and high accessibility of the object), while the goal is projected to the resultative element. And, the main verb (V) expresses the path through which the change of state occurs. The whole event is viewed from the perspective of the speaker who subjectively construes the subject to be the source of force (see §3.2.3.7 on a subjective construal of an Expression involving BA). As in an earlier instance (3.85), the Instigator-Subject in the Indirect-AFFECT event type is construed to be responsible even for the non-intentional result. Also, in (3.87), the non-volitional subject is treated as the instigator because it provides a (natural) FORCE for triggering a result.

### 3.3.3 Section summary

This section has presented four event types of the resultative Expressions involving BA, including HANDLE, AFFECT, DESIRE, and TRIGGER. Moreover, the resultative Expressions involving BA of all event types involve metaphorical extensions of FORCE relative to COMPULSION. In the following §3.4, I present constructional analyses of four event types of the resultative Expressions involving BA.
3.4 A constructional analysis of the resultative Expressions involving BA

In this section, I analyze the resultative Expressions involving BA in a constructional model. I start with a constructional analysis of an instance for example, and then I propose constructional analyses of four event types of Expressions involving BA based on the proses introduced in §3.3.

3.4.1 A constructional analysis of an instance of the resultative Expressions involving BA

To take a constructional approach, the repeated instance (3.85) can be viewed as a form-meaning pairing as represented in Figure 3-14:

(3.88) 我把他拖回码头了

\[
\begin{array}{cccccc}
1SG & BA & ta & tuo & hui & matou le \\
1SG & OBJ marker & 3SG & drag & back to & dock & ASP \\
\end{array}
\]

‘I dragged him back to the dock’
**Tuo (‘drag’):**

<table>
<thead>
<tr>
<th>Sem</th>
<th>THEME marking</th>
<th>ARG</th>
<th>CAUSE TO CHANGE</th>
<th>&lt;causer</th>
<th>result-goal</th>
<th>theme&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Total Affectedness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R: instance,

- means
- OBJ marker <arg>
- PRED

<table>
<thead>
<tr>
<th>BA</th>
<th>ta</th>
<th>TUO (‘drag’)</th>
<th>wo</th>
<th>hui matou</th>
<th>ta</th>
</tr>
</thead>
</table>

Syn

- Coverb
- OBJ1
- V
- SUBJ
- OBL PP
- OBJ1

Figure 3-14: Construction Grammar representation of an instance\(^{28}\) of the resultative Expressions involving BA in Contemporary Chinese\(^{29}\)

Based on what has been discussed so far, I further illustrate some points shown above. As in Figure 3-14, the instance of the resultative Expression involving BA is such a “form-meaning pair” (Goldberg 1995: 7) which has its own “argument structure configuration, independently of verbs which instantiate it” (p.88). For example, the whole expression has its own constructional argument roles, some of which fuse with the lexical participant roles. To be specific, the entire construction involving BA has three profiled argument roles, i.e. <causer, result-goal, theme>. The main verb *tuo* (‘carry’) has two profiled participant roles, i.e. <tuo-er, tuo-ee>. Two of the constructional roles, ‘causer’ and ‘theme’ fuse with the lexical participants of ‘tuo-er’ and ‘tuo-ee’, respectively. With respect to the third constructional role, i.e. result-goal, it fuses with the resultative *hui matou* which is not a lexical participant. Hence, there is a mismatch in the number of constructional arguments roles and the lexical participant roles.

---

\(^{28}\) Note that the word order of the example does not match the syntactic order since I intend to propose the argument structure of BA and the main verb separately in this style: BA < >, V < >.

\(^{29}\) Here, Causer can be similarly termed as Instigator.
Moreover, BA functions obligatorily to mark the object as well as highlighting one of the constructional roles, i.e. theme. Note that the object of BA (as represented as <arg> in Figure 3-14) is also the object of the main predicate tuo, i.e. ta, and therefore they are marked by the same subscript OBJ. Also, the object in a pre-verbal position (different from the SVO transitive construction) is prominent and subject to total affectedness. This non-compositional implication is largely contributed by BA, and thus makes an Expression involving BA distinct from the transitive constructions.

The constructional semantics of an Expression involving BA can thus be summarised as: (a) cause to change (change-of-state, see Lakoff, 1963; cf. McCawley, 1976: 126 for “causal proposition”30) which features an action-result relation, (b) total affectedness of the object. Regarding CHANGE-OF-STATE, an Expression involving BA highlights the new state after the change “focusing on the result” (Goldsmith, 1984: 121; McCawley 1976: 118-126). This feature accords with some existing findings in literature. For instance, McCawley (1976) claims that the proposition one (S1) causes proposition two (S2) in the causativity, i.e. S1 causes S2 (p.123), it is the second proposition S2 that is of primary focus (p.124).

Construction Grammar representations of more event type of Expressions involving BA will be shown in § 3.4.2. Also, as will be shown in Chapter 6, Expressions involving BA of various event types can be associated with micro-constructions involving BA in the diachronic development.

3.4.2 Constructional representations of four event types

Recall §3.3, there are four event type of Expressions involving BA. Now let us look at the constructional representation of these event types:

The first event type is HANDLE. I repeat the previous example here as in (3.89):

---

30 S1 (proposition one) cause S2 (proposition two)
(3.89) 我把我的匙子擦干净了

wo ba wo-de chizi ca ganjine le
1SG OBJ marker 1st POSS spoon wipe clean ASP

‘I wiped my spoon clean.’

Figure 3-15: Construction Grammar representation of the HANDLE event type of Expressions involving BA

As in Figure 3-15, the CAUSE-to-CHANGE is specified to be HANDLE. Accordingly, the constructional argument roles of CAUSER and THEME are specified as HANDLER and HANDLEE respectively. HANDLER is the volitional instigator, while HANDLEE is the undergoer subject to a change intentionally caused by the HANDLE-action (i.e. ca ‘wipe’).

The second event type is AFFECT. As mentioned in §3.3.1, there are two sub-types of the event type of AFFECT, i.e. Direct AFFECT, and Indirect AFFECT. The following (3.90) is a repeated instance of the Direct AFFECT type, and it can be represented in Figure 3-16 from the constructional perspective.
(3.90) 胡柳把两只眼睛哭得和桃子一样

Hu Liu BA liang-zhi yanjing ku de he taozi yiyang
NAME OBJ marker two-CL eyes cry DE alike peach same

‘Hu Liu cried (so sadly that) her two eyes were (swollen) like two peaches.’

(Ku Dou, 1959)

Figure 3-16: Construction Grammar representation of the Direct AFFECT type of Expressions involving BA

As in Figure 3-16, the constructional roles are AFFECTER, NON-INTENTIONAL RESULT, and AFFECTEE. The AFFECTER is a volitional instigator who directly caused her two eyes to be swollen. The result is not intentionally produced by the action ku (‘cry’), and the result is visible. Now I repeat the following instance (3.91) which represents the other subtype of AFFECT, i.e. Indirect AFFECT.

(3.91) 这个狱卒把他的犯人跑了。

Zhe-ge yuzu BA ta-de fanren pao le
DEM-CL prison-policeman OBJ marker 3rd POSS prisoner escape ASP

‘This prison-policeman let his prisoner escape.’
Based on the arguments in §3.3.1, I give a constructional representation of Indirect AFFECT here. The following Figure 3-17 represents the composite structure of the resultative Expression involving BA and an intransitive verb pao (‘escape’):

**Sem**  THEME marking  ARG  CAUSE TO CHANGE  < causer  result  theme>

- Total Affectedness

| Trigger | R |

R: instance,

means  OBJ marker  <arg>  Intr.PRED.  <  pao-er  >

| BA  | ta-de fanren  | PAO (‘escape’ )  | zhe-ge yuzu  | ta-de fanren |

Syn  Coverb  OBJ  V  SUBJ  OBJ

**Is (subpart link)**

**Coercion:** Causative Pao (‘intentionally cause to escape’)

**Sem**  THEME marking  ARG  CAUSE TO CHANGE  < causer  result  causee>

- Total Affectedness

| Trigger | R |

R: instance,

means  OBJ marker  <arg>  Caus. PRED. PAO  <  pao-er  pao-ee  >

| BA  | ta-de fanren  | [non-intentional result]  | zhe-ge yuzu  | ta-de fanren |

Syn  Coverb  OBJ  V  SUBJ  OBJ

Figure 3-17: Construction Grammar representation of the Indirect Affect of Expressions involving BA
As shown in Figure 3-17, before coercion, intransitive verb *pao* (‘escape’) subcategorizes for only one participant, i.e. the Agent-Subject *pao-er* which is represented as the BA object *ta-de fanren* (‘his prisoner’). However, the construction involving BA requires three argument roles including CAUSER, THEME, and RESULT. As a consequence, there arises a mismatch between the constructional argument roles and the lexical participants, as below:

Lexical participants of **intransitive** *pao* (‘escape’):

<**pao-er**>

Constructional argument roles:

<CAUSER, THEME, RESULT>

As in the second framed-box, *pao* in the Expression involving BA is coerced to be a causative verb (‘to intentionally cause to escape’). The causative *pao* subcategorizes for two lexical participants, i.e. *pao-er* (**causer**) and *pao-ee* (**causee**), which respectively correspond to syntactic arguments of *zhe-ge yuzu* (‘this prison policeman’) and *ta-de fanren* (‘his prisoner’). Moreover, two lexical participants of the causative *pao* fuse with the constructional argument roles of CAUSER and THEME. As for the third constructional role of RESULT, it has been implied in the causative meaning of *pao*, i.e. ‘to non-intentionally cause to escape’. As a consequence, two out of three constructional argument roles fully fuse with two lexical participants (as profiled in boldface), while the RESULT role is implied in the causative meaning of *pao*, as below:

Lexical participants of **causative** *pao* (‘cause to escape’):

<**pao-er, pao-ee**>

Constructional argument roles:

<CAUSER, THEME, RESULT>

Implied in the causative meaning of *pao*
As mentioned above, the coerced causative *pao* subcategorizes for a participant pao-ee (causee), i.e. *ta-de fanren*, which bears the constructional argument role of THEME. The patient-hood of *ta-de fanren* (‘his prisoner’) can be tested by a traditional frame postulated by Lakoff (1963) (cf. Goldberg 1995):

a. What X did to <patient> was……

b. What happened to <patient> was……

Here, *ta-de fanren* satisfies the criterion (b) because an escape event happened to him. Meanwhile, it satisfies criterion (a): the subject *zhe-ge yuzu* (‘this prison-policeman’) is responsible for the caused-event, although the cause is non-intentional. In this sense, the subject *zhe-ge yuzu* (‘this prisoner’) is not only a causer, but also an experiencer who suffers from what has happened. In addition, the subtype of Indirect emerges via coercion, which is to some extent attributed to the particularity of the intransitive verb *pao* (‘escape’): the coerced item *pao* (‘escape’) implies a result ‘be gone’ apart from the action ‘run’, and therefore the construction has a chance to coerce meaning on the intransitive verb *pao*. In Figure 3-17, there is a subpart link (Is) which is used “when one construction is a proper subpart of another construction and exists independently” (Goldberg 1995: 78). Here, the construction involving an intransitive *pao* is related to the other construction involving a causative *pao* by a subpart link, since the syntactic and semantic specifications of the latter can be understood as a subpart of the former.

The third event type is DESIRE. The following instance (3.92) is repeated and represented from a constructional perspective in Figure 3-18.

(3.92) 他把《八扇屏》背熟了

*Ta* BA *Ba-shan-ping*31 bei shu le

3SG OBJ marker TEXT NAME memorize familiar ASP

‘He got familiar with (the texts of) *Ba-shan-ping* by memorizing.’

*(Hou Yaowen chushan Ji, 1995)*

---

31 This is the name of a prose in Old Chinese.
As in Figure 3-18, there are three constructional roles, i.e. DESIRE-ER, RESULT-GOAL, and DESIRE-EE. These constructional roles map into three lexical roles of the verb *bei* (‘memorize’). The object, a text, is not directly caused by the instigator *wo* (1SG) to be changed (e.g. in terms of properties). The instigator desires to memorize (designated by the main verb *bei*) the text in order to be familiar (designated by the resultative adjective *shu*) with it, which is an intentional result (goal).

The last type of Expressions involving BA, **TRIGGER**, can be represented in Figure 3-19:

(3.93) 东南风把海上的水气吹进来了

*Dong-nan feng ba hai-shang de shuiqi chui jinlai le*
South-east wind OBJ marker on the sea REL brume blow inwards ASP
‘The south-east wind blew the brume on the sea inwards (towards the land).’
As in Figure 3-19, three constructional roles (i.e. TRIGGER-ER, NON-INTENTIONAL RESULT, and TRIGGER-EE) map into three lexical roles (i.e. chui-er, resultative, and chui-ee) of the verb chui (‘blow’) and are syntactically represented (SUBJ, OBL ADV, and OBJ). The natural force dong-nan feng (‘south-east wind’) is a non-volitional instigator which brings about a non-intentional result jinlai (‘inwards’). The causation is direct involving the causer dong-nan feng (‘south-east wind’) and the causee haishang-de shuiqi (‘brume on the sea’), towards a visible change.

To conclude, this chapter analyzed the resultative Expressions involving BA in Contemporary Chinese. In §3.1, I examined the syntax and semantics of the resultative Expression involving BA, in terms of the main predicate, syntactic arguments of the main predicate, the coverb BA, definiteness and high accessibility of the BA object in the light of the Giveness Hierarchy, the adjunct-resultative, and the difference between Expressions involving BA and the transitive expressions in terms of syntax, semantics and pragmatics. In §3.2, I further investigated the semantics of the resultative Expressions involving BA. In this part, I identified two types of the resultative Expressions involving BA, including the strong resultatives and the weak resultatives. The resultative Expression involving BA is treated as a
form-meaning pairing, and I discussed more semantic properties such as: (Non-) volitional Instigator, few constraints on idiosyncratic collocations, end of scale, the Unique Path Constraint, Change-of-State involving the BECOME operation, windowing and gapping, and the subjective construal. In addition, I analyzed the aspectual properties of the resultative Expressions involving BA, including telicity and perfective viewpoint. In §3.3, I proposed four event types of the resultative Expressions involving BA including HANDLE, AFFECT, DESIRE, and TRIGGER. All these event types of Expressions involving BA are based on the Compulsive Force Schema. Four event types were represented in a constructional style in §3.4.
CHAPTER 4: A REVIEW OF DIACHRONIC ACCOUNTS OF BA
AND RELATED TYPOLOGICAL WORK

In this chapter, I provide a review of diachronic work on BA and relevant typological work in order to contextualize the current research which attempts to fill in the existing gap. I provide a review of previous scholarship including reference to work on the grammaticalization of BA. I lay out some issues which have arisen in previous research on the grammaticalization of BA, and discuss the reasons why I think it is necessary to go beyond the existing literature and propose a constructional account in Chapter 6. This chapter also incorporates typological work of relevance to my diachronic discussion of BA, i.e. Chinese transitivity, serial verbs, instrument markers, causatives, object markers and resultatives which have been established in earlier research. This chapter sets the stage for a transparent discussion of the new and extensive corpus data of Chinese BA as will be presented in Chapter 5 and 6.

4.1 A general introduction to previous accounts of Expressions involving BA

In this section, I offer a general review of previous accounts of Expressions involving BA in order to show why and how my current constructional analysis is different from the existing literature. Let us firstly review how the term “construction” is differently used in my thesis compared with previous scholarship from the synchronic and diachronic perspective. In previous accounts of the BA expressions, the term “construction” is an alternative term to the syntactic environment where BA is found. In what follows, I will briefly introduce previous accounts and how my views are original.

In synchrony, for example, an expression involving BA has been analyzed as a base-generated expression involving NP-movement from a postverbal position to a preverbal position, which is attributed to word order variation (e.g. A. Li 1991; Chao 1968; Cheung 1973; Huang 1974; Huang 1982; Hsueh 1987;
In previous accounts of the BA expressions, the term “construction” was also used but it did not have the theoretical sense that the term “construction” has in Cognitive Construction Grammar (Goldberg 1995, 2006; see e.g. Langacker 2005; Fried and Östman 2004; Croft 2001, 2005; Croft and Cruse 2004; Boas 2007 for different constructional approaches to language). While discussing the aspects (e.g. the resultative, James Huang 1991; a definite object, Sun 1996: 58) in an expression involving BA, previous scholars (e.g. Li 1991: 86) use the BA construction to refer to the whole syntagmatic pattern rather than a form-meaning pairing as defined in Construction Grammar. Previous research presents potential problems in that there has been a tendency to discuss the syntax and semantics of an Expression involving BA as largely separate and independent. In Chapter 3, by comparison, I have shown why the whole expression involving BA exists as an independent construction in the spirit of Construction Grammar (e.g. Goldberg 1995) and that an Expression involving BA should not be regarded as a product of movement but an idiosyncratic construction. A construction involving BA is understood as a symbolic form-meaning pairing in the sense of the constructionalist literature (see Chapter 2 for an overview). A fundamental difference in a constructional approach is that a construction involving BA is accessed holistically (Croft 2001): it is therefore not appropriate to dissociate the meaning from the form of an Expression involving BA.

In Chapter 3 (see also §1.1), I have outlined my positions on the following topics which have also been debated by other researchers, such as the word category of BA in Contemporary Chinese (Hashimoto 1971; Li and Thompson 1974b on Coverbs, 1981; see also e.g. Wang 1947; Bennett 1981; A. Li 1991), the properties of the preverbal noun (NP) (e.g. Chao 1968; Hashimoto 1971; Li 1974; Li and Thompson 1975, 1981; Sun and Givón 1985; Tsao 1987; Ho 1993; Chapter 3 in this thesis on the referential properties of the noun after BA in the light of the “Givenness Hierarchy” model, Gundel, Hedberg, and Zacharski 1993), the semantics of
Expressions involving BA (e.g. Li and Thompson 1981: 482-490; Wang 1947; Chao 1968; Thompson 1973; Ying-che Li 1974; Sun 1996; compared with Chapter 3 in this thesis which provides a “resultative” account in contrast with the “disposal” account and the transitivity account).

In Chapter 3 I have also discussed some topics which have not been mentioned in previous work but align with my core ideas in the framework of Construction Grammar in this thesis, such as representation of various event types of Expressions involving BA from the constructional perspective based on the Compulsive Force Schema (Johnson 1987). I have shown above how fundamentally differently I establish my synchronic analysis of BA in this thesis. As follows, I discuss other aspects of previous research.

From a diachronic perspective, previous work on Expressions involving BA was lexicon-based and focused on the grammaticalization of BA (e.g. Mei 1978; Sun 1996; Xing 2006; I will provide a general introduction to grammaticalization of BA in literature in the remaining parts of this section §4.1, and I will further offer a more detailed review in the following sections from §4.2 to §4.6 in this chapter). For such researchers the issue was primarily how to account for categorial change of BA from a full verb to a function word. In the previous accounts, the term “construction” was used as an alternative to the syntagmatic environment which accommodates BA (e.g. Sun 1996: 59). This contrasts with how “construction” is used in my thesis.

In my work, “construction” is differently used. An expression involving BA is taken as a whole unit, i.e. a “construction” which undergoes change as a kind of sign. To be more specific, diachronic analyses of Expressions involving BA are based on recent work on interfaces between diachronic construction grammar and grammaticalization (e.g. Traugott 2003, 2006, 2007, 2008a, 2008b; Trousdale 2006, 2007, 2008a, 2008b, 2010; Traugott and Trousdale 2010, forthcoming; Noël 2007; Diewald 2006; Fischer 2007, 2008; Hilpert 2007; Patten 2010; Gisborne and Patten 2011; see Chapter 2 on theoretical framework for further references). Furthermore, as will be shown in Chapter 6, I propose that there is a process of constructionalization in which BA is incorporated into higher-level constructions with increased schematicity.
Now I offer a general introduction to literature review of the grammaticalization of BA before I provide a more detailed review in the following sections from §4.2 to §4.6. With respect to diachronic research of BA, there has been extensive research into the grammaticalization of BA. Nevertheless, while discussing the grammaticalization of BA, previous accounts merely address the categorial change. In general, historical change of BA involves categorial changes (e.g. Sun 1996; Xing 2006) from a contentful verb to a grammatical marker. For convenience, I summarize five categories of BA in Old Chinese based on the literature followed by relevant typological discussion in the subsequent sections from §4.2 to §4.6.

While discussing the issues regarding the historical background of BA, the widely accepted idea in previous literature is that BA was an original verb ‘grasp; hold’. The main verb BA occurred in the transitive clauses (Wang 1958: 539; Zhu 1957; Peyraube 1996: 168; Sun 1996; see also §4.2 in this chapter). Sun (1996: 59-61) claims that the full verb BA (‘grasp; hold’) emerged in the Zhou Period (around 770 B.C.) and took a NP object as its complement. Sun (1996: 62; cf. Zhu 1957; Peyraube 1989) argues that BA behaved as a serial verb (‘hold’) in the Tang Dynasty (see example (4.23) and the detailed discussion in §4.3). Unlike the main verb BA, the serial verb BA obviously only appeared in the serial verb construction. Also in §4.3, I will present my views on some related issues (e.g. to debate the time when serial verb BA emerged) which arise from previous scholarship, according to the historical data I have. Xing (2006) also claims that BA became a serial verb in Middle Chinese. According to Xing (2006: 464), BA had undergone a semantic change when it became a serial verb. That is, the serial verb BA means ‘take’ which differs from the original use of BA as a verb ‘grasp; hold’ in the earlier stage. In her view, the meaning of BA became increasingly abstract. More importantly, in accordance with this change, BA underwent semantic bleaching. Furthermore, Xing (2006: 464) argues that semantic reduction of BA pertains to the process of metonymization (cf. Barcelona 2000; Traugott and Dasher 2002) in which a hand action ‘hold’ extends to a body action ‘take’.

Concerning the grammaticalization of BA, Sun (2008: 68) has summarized the categorial shift of BA: BA underwent change from a full verb to a serial verb,
and then from a serial verb to an object marker (or, a recipient marker, see Ziegeler 2000: 829). Sun (2008) suggests that a serial verb BA was grammaticalized to an object marker directly. With respect to time, Sun (1996: 59-62; cf. Peyraube 1988; Li and Thompson 1974b on word order change; Her 1990; Xing 1994) argues that object marker BA was attested in the Tang Period, as will be exemplified in (4.71) in §4.6. Sun (1996) (see also Norman 1988) further argues that BA was grammaticalized to an object marker due to a replacement for similar constructions including YI and JIANG. From his perspective, when BA serves the function of object marking, BA no longer has the verbal properties, according to some verb-hood tests (Sun 2008). For example, co-occurrence of a co-referential reflexive pronoun with the BA DP yields an ungrammatical sentence (Sun 2008: 70; Zou 1995).

Some linguists (e.g. Li and Thompson 1974) suggest that a serial verb BA was not grammaticalized to an object marker directly. Li and Thompson (1974) claim that when BA occurred in the serial verb construction, a serial verb BA underwent reanalysis to be a preposition first; the serial verb construction was the source structure in which BA underwent categorial shift to be a preposition. Her (1990; cf. Sun 1990: 180-182) mentions that BA underwent a stage where it became an instrumental marker in the Tang Dynasty (7th-10th century; or see §4.4 of this thesis). The emergence of instrumental usage of BA was accompanied with increase in the degree of event integration (Her 1990). Using Zen dialogues, Her (1990) argues that BA replaced JIANG’s instrumental function as well as object marking function. This opinion is against the view that BA was grammaticalized directly from a serial verb to an object marker in the disposal construction (Huang 1986; Bennett 1981). Xing (2006) makes a similar claim that verbs with the source meaning ‘hold/take’ tend to develop into prepositions/object markers (see §3.1.3.1 on typological development of ‘take’ verbs). The idea that BA had been a preposition was also supported by Chao (1968), Travis (1984), Li (1990), Huang (1982), and Peyraube (1996).

Regarding the relationship between the serial verb construction and the grammaticalization of BA, Whitman and Paul (2005) use a VP complementation analysis to represent the structure with an object marker BA and show that V > P reanalysis has occurred in the serial verb construction. A verb BA underwent
relabelling to a preposition which had functional status while going through semantic bleaching. Under their analysis, Whitman and Paul (2005) argue that a control relation held between the object of the VP1 and the object of VP2 in the serial verb construction. According to Whitman (2000), BA underwent categorial relabelling from a verb in the serial verb construction to a preposition; reanalysis of BA in the serial verb construction moved BA to the position of a functional head while c-command relations are retained in the structure involving BA before and after change, according to his feature-based analysis.

In addition, Li and Thompson (1974) argue that the grammaticalization of BA pertains to word order change in Chinese, from VO to OV order. According to Li and Thompson (1974), object marker BA indicates the emergence of structural change in Old Chinese; BA moves objects from the post-verbal position in the canonical clause to the preverbal position.

I will offer a more detailed discussion of previous accounts of the grammaticalization of BA as well as a review of some typological work in the remainder of this chapter, from §4.2 to §4.6. In order to illustrate my opinions towards some existing arguments, I will also add some instances (e.g. instance (4.72) in §4.6) from my own BA Corpus to my following discussion and debate. Suffice it to briefly summarize here that as shown in literature, conventional approaches involve categorial change and take this as the basis of an approach to the diachronic study of BA.

However, some problems have already arisen from the literature on the grammaticalization of BA: First, in the literature I find evidence that BA has at one time or another been a member of the following categories: full verb, serial verb, preposition, and object marker. However, the related changes have not been discussed in a systematic manner, let alone the correlations among these variants of BA. However, I think that there is a network relationship which can be established among constructions involving BA, just as Goldberg and Jackendoff (2004) do on the English resultatives. Second, as mentioned above, the development of BA in Old Chinese was considered to be the grammaticalization of BA. In other words, the traditional approach only focused on diachronic change of the single item BA. Nevertheless, the grammaticalization of BA could not arise out of context, and it is
not a single item BA that has undergone change in Old Chinese. The constructional model asks questions not only about the grammaticalization of BA but also changes of the entire Expression involving BA in form and meaning. To take a constructional approach, it is the whole Expression involving BA that is subject to grammatical change. This motivates me to provide a constructional account of the diachronic change in Expressions involving BA. In Chapter 6, I will show how new constructions involving BA emerge. Third, the traditional approach tended to keep form and meaning apart. The previous research can be divided into two separate branches which deal with either decategorization of BA from a verb to an object marker, or the semantic bleaching of BA. However, I believe that this approach could be misleading and needs to be rethought from a constructional perspective. To take a holistic view, change occurs to both form and meaning, and there has not been such constructional research on the interplay between form and meaning in an Expression involving BA.

Considering the issues above, I take a constructional approach to rethink Expressions involving BA in historical change on a holistic level, in order to solve these problems that have arisen in prior work on the grammaticalization of BA. In Chapter 6, I will show a constructionalization story involving BA, and a set of constructions are implicated to form a constructional network. In Chapter 6, I will show how formal clines and semantic change of BA are combined in each small step of diachronic change. This is also a fundamental difference between the constructional approach in this thesis and the traditional grammaticalization ones. I will elaborate on this issue in some detail in the remainder of this thesis.

4.2 A review of lexical verb BA (BA-1) and typological work on Chinese transitivity

The first category of BA that has been mentioned in literature is the lexical verb BA. Full verb BA (‘grasp; hold’) is the earliest category that was seen in Early Chinese (e.g. Sun 1996: 59), as exemplified in (4.1):
The lexical verb BA in my BA Corpus emerged in the Zhou Period (around 770 B.C.) in the Early Stage. Obviously, BA as in the following example (4.2) is a transitive verb taking an NP object ‘dou (beans)’.

(4.2) 猕猴把豆
mihou  ba  dou
monkey  hold  bean
‘The monkey held the beans.’

(Bai Yu Jing, 492)

I label the full verb BA in (4.1) and (4.2) as BA-1 (see also §5.3.1). In Chapter 6 (§6.1.1), I will provide more instances involving more variants of a lexical verb BA pertaining to a scale of transitivity. Suffice it here to introduce the categorization of BA in the thesis. There are five categories of BA identified for convenience of analysis: BA-1, BA-2, BA-3, BA-4, and BA-5 (see Table 5-2 in §5.3.1). These categories were marked for data involving BA while creating the BA Corpus. Here is an overview of the categorization of BA. BA-1 is a single verb meaning ‘hold/grasp’. BA-2 is a serial verb and it means to ‘hold/grasp’ an object in serial actions/events. BA-3 is an instrument marker. The first attested instances of BA-1, BA-2 and BA-3 were all recorded in the Early Stage. Causative verb BA-4 and object marker BA were firstly seen in the Middle Stage.

Now let us review some typological work on Chinese transitivity. In spite of using the same term “transitive” (Teng 1975; Cikoski 1978; Wang 1958; Li and Thompson 1976), the Chinese transitive construction (or, two-NP construction) is not fully aligned with the English transitive construction. In Chinese, as long as two NPs

32 In my analysis, I have identified the BA-2/3 as well.
syntactically stand in the pre-verbal and post-verbal positions, the expression involving these two NPs (not co-referential) can be termed as the transitive construction. Hence, it may be not appropriate in many Chinese two-NP expressions to label these two NPs as the subject and the object as defined typologically (e.g. Van Valin and LaPolla 1997; LaPolla 1990, 1993, 2009). Instead, topic and comment are more appropriate terms to label two NPs in the pre-verbal and the post-verbal positions. In fact, Chinese is generally considered to be a “topic-comment” language (e.g. LaPolla 1993, 2009; Tsao 1987). To firstly take some cases in Contemporary Chinese as examples:

(4.3) 他们吃食堂。
Ta-men chi shitang
3PL. eat canteen
‘They ate the canteen. (They ate in the canteen.)’

(Da Yu Nv, 2000)

(4.4) 老王吃大碗。
Lao Wang chi da-wan
NAME eat big-bowl
‘Lao Wang ate the big bowl. (Lao Wang ate a big bowl of food.)’

(Bao-kan jing-xuan, 1994)

In (4.3), although ta-men (‘they’) and shitang (‘canteen’) appear in the canonical positions of the subject and the object, they can hardly be associated with the subject and the object in the typological sense. Since the locative shitang (‘canteen’) obviously cannot be eaten, (4.3) cannot be transitive as defined conventionally. In (4.4), the container da-wan (‘big bowl’) is not a canonical object that can be eaten; it is used in a metonymic style since da-wan (‘big bowl’) represents ‘a big bowl of food’. Subject to passivization, the underlying object in the transitive clause becomes the subject of the intransitive passive clause (e.g. Dixon 1994: 146; Dixon and Aikhenvald 2000: 9; Aarts 2011). However, in a passive version of instance (4.4), da-wan (‘big-bowl’) cannot be the subject of the following clause involving a
Chinese passive marker *bei*: *da-wan bei Lao Wang chi le* (*the big bowl was eaten by Lao Wang*); *da-wan* (‘big-bowl’) is not a canonical object that can be passivized. Also, *da-wan* (‘big-bowl’) cannot be topicalized to the beginning of a sentence as a canonical object can, i.e. *da-wan, Lao Wang chi le* (*the big bowl, Lao Wang ate*). In addition, *da-wan* (‘big-bowl’) shows a low value in the parameter of Affectedness of object as relevant to transitivity (Hopper and Thompson 1980: 252) (see also Figure 4-1 in this section); it is the contained food in the big bowl rather than the big bowl itself that is affected. According to the above diagnostics, *da-wan* (‘big bowl’) is not a canonical object. There are more types of the Chinese two-NP expressions in which two NPs are not the conventional subject and the object, as exemplified below:

(4.5) 一锅饭吃十个人。

Yi-guo fan chi shi-ge ren.

One-CL food eat ten-CL people

‘One pot of food ate ten people. (Ten people ate one pot of food.)’

*(Dangdai Yilunwen, 1994)*

Here, the pre-verbal NP *yi-guo fan* (‘one pot of food’) is the patient, and *shi-ge ren* (‘ten people’) is the agent. In other words, the patient NP and the agent NP are reversed, as opposed to the general agent-patient order. Although the word order change may not necessarily mean that the grammatical function of the constituent is changed. At least, however, the word order change does not map onto the grammatical function of constituents in instance (4.5). Therefore, *yi-guo fan* is not a standard subject, either.

(4.6) 大屋子住仨人。

Da-wuzi zhu sa-ren

Big-room live three-people

‘A big room lives three people. (Three people live in a big room.)’

*(Beijinghua kouyu diaocha, 1982)*
In (4.6), the pre-verbal and the post-verbal NPs are respectively the locative and the theme (or, agent). Again, it is inappropriate to interpret the first NP da-wuzi (‘big room’) as the subject. Similar cases are also attested in Old Chinese as follows. Different types of relations are held between two participants denoted by two NPs (Teng 1975; Tai 1984) in these instances:

(4.7) (内前) 吃光禄寺。
    Neiqian  chi  Guanglu-Si
    Servant  eat  Guanglu-Temple
    ‘A servant ate the Guanglu Temple.’
    (A servant ate in the Guanglu Temple.)
    (Da-Song Xuanhe Yishi, the Yuan period, Late Chinese)

(4.8) 好酒吃大碗。
    Hao  jiu  chi  da  wan
    Good  wine  drink  big  bowl
    ‘The good wine needs to be drunk with the big bowl.’
    (Quan Yuan Qu, the Yuan period, Late Chinese)

(4.9) 炉子生了火。
    Luzi  sheng  le  huo
    Stove  make  ASP  fire
    ‘The stove made fire. ((Someone) made fire with the stove.)’
    (Xing-shi Yinyuan Zhuan, 1721, the Ming period, Late Chinese)

For all the above instances in Contemporary and Old Chinese, topic and comment are more appropriate terms to label two NPs in the pre-verbal and the post-verbal positions. In fact, Chinese is generally considered to be a “topic-comment” language (e.g. LaPolla 1993, 2009; Tsao 1987). Compared with the grammatical categories of the subject and the object, the topic-comment pair seems more functional (for debate on the dichotomy between topic-prominent languages and subject-prominent languages, information structure and syntactic structure, as well as further remarks
on the topic-comment constructions in Chinese, see Comrie 1981; Chao 1968; Li and Thompson 1976, 1981; LaPolla 1990, 1993; Shi 2000; Huang 1982; Tsao 1990). In (4.7), for example, neiqian (‘servant’) and Guanglu-Si (‘Guganglu Temple’) are seemingly subject and object according to their syntactic positions: neiqian is the first noun we come across in this sentence, and Guanglu-Si is the noun that follows the main verb; however, they can hardly be associated with subject and object according to their function: semantically neiqian denotes a person that performs an action, but Guanglu-Si denotes the place where the action happens rather than the patient in the action. Therefore, neiqian (‘servant’) and Guanglu-Si (‘Guanglu Temple’) are more appropriately the topic and the comment.

The above discussion further relates to an issue on whether Chinese has the categories of subject and object (cf. LaPolla 1993, 2009). As mentioned above, the terms of topic and comment can be semantically/pragmatically used to label two NPs (which could bear a range of thematic roles) in the Chinese two-NP expressions in many cases. The reason is that the notions of subject and object are often used in Chinese linguistics differently from how they are identified cross-linguistically (LaPolla 1993, 2009; Li and Thompson 1976 on subject and topic; Van Valin and LaPolla 1997). It is proposed that “the subject is not a structurally definable notion” in Mandarin (Li and Thompson 1989: 19). LaPolla (1993) argues more radically that there is no syntactic evidence for defining a subject or an object in Chinese33, after his unsuccessful attempt to recognize a subject in Chinese by syntactic diagnostics such as raising to subject, indispensability, reflexives and pseudo-passives (p.783). For example, both agent role NP and patient role NP can be raised before haoxiang (‘seem’) in Chinese; raising of the semantic role of participant is not restricted to the passive clause. Structural criteria often do not apply to Chinese in terms of identification of a subject or an object. This is the reason why topic and comment are more appropriate terms for labelling two NPs in the above instances from (4.1) to (4.9). Still to take (4.7) for example; strictly, neiqian (‘servant’) and Guanglu-Si (‘Guganglu Temple’) in (4.7) are not respectively the subject and the object as

33 LaPolla (1993: 789) claims that “Chinese has not grammaticalized either an accusative or an ergative pattern, and so the syntactic categories ‘subject’ and ‘direct object’ simply do not exist in Chinese” because he failed in finding out “any restricted neutralizations of semantic roles that would point to a grammatically viable category of either ‘subject’ or ‘direct object’ in that language.”
structurally defined in European languages. For instance, the control of reflexives is often regarded as a property of subject (LaPolla 1993: 778; Tan 1988; Tang 1989); however, it is not always true in Chinese that “the antecedent of a reflexive must be a subject” (Tang 1989: 99). See the following example:

(4.7a) 内前告诉我自己吃光禄寺。

Neiqian gaosu wo ziji chi Guanglu-Si
Servant tell 1SG. REFL eat Guanglu-Temple
‘A servant told me that (he) himself ate the Guanglu Temple.’

Here, ziji (‘self’) refers to neiqian (‘servant’) rather than wo (‘1SG’) which is in a preceding subject slot of the reflexive ziji (‘self’). Hence, neiqian (‘servant’) is not a canonical subject; it is a topic which is not structurally but semantically controlled. Moreover, referentiality of the participant of ziji (‘self’) usually depends on the discourse/ the whole utterance (see Sun 1989, Li and Zubin 1990 for more discussions). Compare the following two instances:

(4.7b) 内前告诉我自己吃光禄寺，

Neiqian gaosu wo ziji chi Guanglu-Si,
Servant tell 1SG. REFL eat Guanglu-Temple
‘A servant told me that (I) myself ate the Guanglu Temple,’

应该早点儿求助他。
yinggai zaodian’r qiuzhu ta.
should early seek help from 3SG.
“(I) should have sought help from him earlier.’

‘A servant told me that I should have sought help from him earlier, (considering the fact that) I myself ate the Guanglu Temple.’

(4.7c) 内前告诉我自己吃光禄寺，

Neiqian gaosu wo ziji chi Guanglu-Si,
Servant tell 1SG. REFL eat Guanglu-Temple

‘A servant told me that (he) himself ate the Guanglu Temple,’

因为他没有收入。
yinwei ta mei you shouru.
because 3SG NEG have income
‘because he did not have income.’

‘A servant told me that he himself ate the Guanglu Temple, because he did not have income.’

As shown above, the antecedent of ziji (‘self’) in (4.7b) and (4.7c) is different, which is influenced by the context. In (4.7b), ziji (‘self’) refers to wo (‘1SG’) and it is understood to be ‘myself’. In (4.7c), ziji (‘self’) refers to neiqian (‘servant’) and it is understood to be ‘himself’. Reflexives do not provide us with accurate evidence for defining subject in Chinese. As in (4.7b) and (4.7c), reflexives are semantically/pragmatically controlled in Chinese. To summarize, it is the semantics/pragmatics rather than the syntactic position of the control of the reflexives that determines the subject.

Considering the subject-object structure in relation to the topic-comment structure, I assume that there are three situations in Chinese: The first situation is: subject and object overlap with topic and comment, respectively. Two NPs are not only the topic and the comment but also the canonical subject and the object according to their position and function, as in (4.10) (and (4.11)). As will be discussed further, this is the only type of Chinese two-NP transitive construction on which I focus in this thesis:

(4.10) 武是揍了老徐丈夫一顿。

Wu Shi zou le Lao-Xu zhangfu yi-dun
NAME beat ASP Ms Xu’s husband once
‘Wu Shi beat Ms Xu’s husband once.’

(Bu qu wo ni houhui yi-beizi, 1999)
In (4.10), the first noun Wu Shi is the topic. Meanwhile, Wu Shi is positioned outside the verbal phrase, i.e. the subject. The other NP Lao-Xu zhangfu (‘Ms Xu’s husband’) is not only the comment, but also the object (or the complement of the transitive verb zou ‘beat’). The second situation is: two NPs are not subject and object but merely relate to topic and comment, as in (4.7), (4.8) and (4.9). The third situation is: either subject or object is not syntactically realized. As in the slogan (4.11), the subject is not necessarily encoded. The omissibility (or, syntactic gap) of subject accords with the absence of topic: the whole sentence is a comment-clause; and the free omissibility makes Chinese different from western European languages.

(4.11) 欢迎新同学！
Huanying xin-tongxue!
Welcome new-students
‘Welcome new students!’

Among the above three situations, only the first type is the Chinese two-NP transitive construction: (a) both subject and object must be syntactically realized, and there cannot be a syntactic gap; (b) subject and object equate with topic and comment, respectively. In this thesis, I focus on the canonical transitive constructions only. Here is another instance that represents the Chinese two-NP transitive construction. Despite the controversy that whether the subject and the object as canonically defined exist in Chinese (as mentioned in this section; cf. LaPolla 1993), I will explain the reason why the following example involves transitivity according to Hopper and Thompson’s (1980) parameters of transitivity (see Figure 4-1).

(4.12) 猕猴把豆
mihou ba dou
monkey grasp bean
‘The monkey grasped beans.’

34 Also, in the remainder of this thesis, “the two-NP construction” or “the transitive construction” only refers to this type, if there is not any additional explanation.
The first NP mihou (‘monkey’) we come across is not only the topic but also the subject, while the second NP dou (‘beans’) is not only the comment but also the object. Two NPs formally stand in the canonical positions of the subject and the object. More importantly, they fulfil the functions of the subject and the object as well, and they are assigned the roles of agent and patient. Mihou (‘monkey’) and dou (‘beans’) denote two participants which interact in a typical activity designated by transitive verb ba ‘grasp’. To be specific, in terms of semantics, this sentence satisfies Hopper and Thompson’s (1980: 252; see Figure 4-1: “parameters of transitivity”) criteria for defining a transitive construction. This sentence typically expresses a physical action (denoted by the action verb ba ‘grasp’) involving two participants. One participant (mihou ‘monkey’) with volition and consciousness transfers the force to the other (dou ‘beans’) which is affected. There is a telic, volitional and punctual action denoted by the transitive verb ba ‘grasp’. Instance (4.12) is a semantically transitive since mihou (‘monkey’) and dou (‘beans’) are respectively the agent and patient (while their discourse functions are topic and comment).

Transitivity is not only determined by semantics. I focus on these semantic criteria for transitivity, since Chinese is a language which is established mainly on semantics (less on syntax). However, I am aware that there are also syntactic criteria for transitivity in typology, e.g. the transitivity of a syntactic configuration refers to a clause which involves a transitive head verb and two distinct predicate arguments: one is the transitive subject, the other is the transitive object (e.g. Dixon 1994; Dixon and Aikhenvald 2000). In fact, instance (4.12) is a canonical transitive clause which is not only determined by semantics: (4.12) is also a syntactic transitive clause in which the subject and the direct object are linked to the agent and patient. In the passive voice of (4.12), dou (‘beans’) becomes the subject. It is most often the patient in the underlying deep structure that appears in the subject position in the surface structure of a passive clause. Thus, dou (‘beans’) is the direct object with a grammatical role of patient in the active clause (4.12). The same diagnostics proves the subjecthood of mihou (‘monkey’). Thus, the grammatical functions of mihou
(‘monkey’) and dou (‘beans’) are the agent-subject and patient-object (direct object), for which (4.12) is a transitive construction. Therefore, instance (4.12) is a canonical transitive construction. Since the two-NP constructions involving BA are of the canonical type, I still use the terms subject and object to label two NPs in the transitive constructions in this thesis.

Since I focus on the first type, the canonical transitive construction in Chinese such as (4.12), and Chinese transitivity is defined according to semantics rather than syntax (as discussed above), I briefly review the semantics of transitivity as follows. The transitive construction features the interaction between two participants (cf. Hopper and Thompson 1980: 251), and transfer of force is central to transitivity (Hopper and Thompson 1980: 251; cf. Huddleston 1984; Rice 1987a, b; Slobin 1982; Taylor 1995, 1998 for work on transitivity). Moreover, what matters to transitivity is the “effectiveness” of an action (Hopper and Thompson 1980: 251), i.e. how effectively the transfer of force occurs. Apart from “the presence of an object of the verb”, the transitive construction pertains to parameters such as the punctuality and telicity of the verb, degrees of consciousness of the agent, and degrees of affectedness of the object (Hopper and Thompson 1980: 251; see Figure 6-2). Note that there are distinctions between syntactic and semantic transitivity, and I focus on the latter (see my footnote 36).

Note that transitivity is not a discrete concept but a continuum. The family of transitive construction includes canonical and non-canonical members (see Langacker 1987: 49 for “the prototype model”). Distinctions between the canonical and the non-canonical transitive constructions are based on a set of “parameters of transitivity”35 (Hopper and Thompson 1980: 252) as in Figure 4-1:

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35 These are mainly semantic criteria for transitivity. There are also syntactic criteria for transitivity, e.g. the transitivity of a syntactic configuration refers to a clause which involves a transitive head verb and two distinct predicate arguments—one is the transitive subject, the other is the transitive object (e.g. Dixon 1994; Dixon and Aikhenvald 2000).
Figure 4-1: Parameters of Transitivity (Hopper and Thompson 1980: 252)

Note that the above parameters are mainly semantic criteria for transitivity. There are also syntactic criteria for transitivity, e.g. the transitivity of a syntactic configuration refers to a clause which involves a transitive head verb and two distinct predicate arguments: one is the transitive subject, the other is the transitive object (e.g. Dixon 1994; Dixon and Aikhenvald 2000). A canonical transitive construction typically expresses a physical action (denoted by an action verb) involving two proto-participants: a proto-agent (Dowty 1991: 574) with the most volition and consciousness, and a proto-patient which is totally affected. In contrast, a less canonical transitive construction tends to involve a non-proto-agent which carries low degrees of volitionality; on the part of the patient-object, a non-proto-patient is not totally affected. Let us first look at some examples of the canonical and non-canonical transitive constructions in English.

(4.13) John moved the table.

(Taylor 1995: 206)

The above instance (4.13) is a canonical transitive construction as it has all the typical properties of the transitive expressions according to Figure 4-1 (Hopper and Thompson 1980; cf. Taylor 1995: 206-207, 1998; Lakoff 1977: 244). For example, the subject John is a volitional and conscious agent who takes an action move on the direct object; the patient-object the table is totally affected. The action denoted by verb move (a telic and punctual action) instantly affects the object and changes its
state. In addition, the action move involves high potency which explicitly entails the transfer of force from the agent to the patient (the Agent affects the Patient cf. Slobin 1982). Compared with (4.13), the following instance (of Experiencer-Source type) is non-canonical:

(4.14) *Jerry likes beer.*

(Hopper and Thompson 1980: 253)

In (4.14), the subject and the object are assigned the theta-roles of Experiencer and Source, respectively. The Object beer is not affected. The mental verb like does not express a telic or punctual action, but a non-telic and non-punctual emotion. In addition, this instance is low in potency as the transfer of force is not obvious or visible. Considering the low values in these parameters, the instance (4.14) carries less transitivity. I repeat a previous instance as in (4.15) to represent the canonical transitive construction in Contemporary Chinese:

(4.15) 武是揍了老徐丈夫一顿。

Wu Shi zou le Lao-Xu zhangfu yi-dun
NAME beat ASP Ms Lao’s husband once
‘Wu Shi beat Ms Xu’s husband once.’

(Bu qu wo ni houhui yi-beizi, 1999)

The following (4.16) is an instance of the canonical transitive constructions in Old Chinese. Two participants, i.e. CaoRen and GuanYu denote the proto-agent and the proto-patient who interact with each other in the transitive action ji (‘beat’).

(4.16) 曹仁关关羽

CaoRen ji GuanYu
NAME beat NAME
‘Cao Ren beat Guan Yu.’

(San Guo Zhi, the Qin-Han and Six Dynasties, Early Period)
By comparison, the following instances from (4.17) to (4.22) represent non-canonical transitive constructions in Contemporary Chinese (4.17-4.19) and Old Chinese (4.20-4.22). Two NPs in these instances bear an array of theta-roles other than agent-patient, including experiencer-source (4.17, 4.20), source-experiencer (4.18), source-theme (4.19), agent-theme (4.21), and agent-factive theme (4.22):

(4.17) 人们依旧热爱生活。

Ren-men yijiu re’ai shenghuo
People still love life
‘People still love life.’
(News from Xinhua-she, 2004)

(4.18) 狗叫声打搅了我。

Goujiaosheng dajiao le wo
Bark bother ASP 1SG
‘The dog’s bark bothered me.’

(4.19) 地震毁灭了他的家乡。

Dizhen huimie le ta-de jiaxiang
Earthquake destroy ASP 3rd POSS hometown
‘An earthquake destroyed his hometown.’

(4.20) 朝廷思其忠

Chaoting si qi zhong
Royal government miss 3rd POSS loyalty
‘The royal government missed his loyalty.’
(Hou Han Shu, the Qin-Han and Six Dynasties, Early Chinese)

(4.21) (齐君)自追晏子。

Qi-jun zi zhui Yanzi
COURTRY-Lord oneself chase NAME
‘The Lord of the Country Qi chased Yanzi by himself.’
In (4.21), Yanzi is not a proto-patient but a theme. For one thing, the verb zhui (‘chase’) narrates a dynamic process instead of a punctual action. For another thing, Yanzi is not necessarily reached by Qi-jun (‘the Lord of Qi’) although the agent attempted to do so. Therefore, Yanzi could be not directly affected.

(4.22) 他生了火。
Ta sheng le huo.
3SG make ASP fire
‘He made fire.’

(Ru-lin Wai-shi, 1750, the Ching period, Late Chinese)

In the above discussion, I have reviewed transitive verb BA and typological work on Chinese transitivity based on which the transitive construction is defined and understood in this thesis.

4.3 A review of serial verb BA (BA-2) and typological work on the Chinese serial verb construction

The second category of BA that has been mentioned in literature is the serial verb. First of all, I review the periodization of the serial verb BA-2. In the previous accounts, Sun (1996: 62; cf. Zhu 1957; Peyraube 1989) claims that BA was used as a serial verb in the Tang Dynasty (Middle Chinese), as in (4.23). Sun’s (1996) arguments about the time when the serial verb BA (‘hold’) appeared might not be correct. At least according to the historical data I have, Expressions involving BA were recorded earlier. For example, the following instance (4.24) and instance (6.9) from my own corpus illustrate the earlier use of BA as a serial verb in Early Chinese before Middle Chinese. In this regard of periodization of the serial verb BA, the previous claims made by Sun are questionable.
Another problem in the instance (4.23) used by Sun (1996) is that BA here is not necessarily a serial verb. In my opinion, it is more likely that BA here is an object marker, i.e. ‘Drunk, I look at the flower, broken-hearted’. As in (4.23), *hua* (‘flower’) appears only once: it is after BA while there is not an object NP after *kan* (‘watch’). Sun (1996) suggests that *hua* (‘flower’) is the object of serial verb BA in (4.23), and *hua* (‘flower’) is also the omitted object of *kan* (‘watch’) according to his translation of the above sentence. In my view, *ba hua kan* is an object marking expression; object marker BA marks the object *hua* (‘flower’) in the position prior to the main verb *kan* (‘watch’). This is more likely considering the object of *kan* (‘watch’), i.e. *hua* (‘flower’), in a preverbal position.

In (4.24) from my own BA corpus, we can see that a serial verb co-occurs with the other verb to constitute a complex predicate denoting a serial event. As will be discussed and diagnosed later in this section, the serial verb construction features the shared subject, non-existence of connective markers, unchangeable positions, and the head-dependent relation between the serial verbs (not always: merely in the “circumstances” type).

36 The gloss and translation here is completely cited from Sun (1996). Thus, some of the abbreviations used by Sun (1996) are not the same with the abbreviations used in this thesis (link to preface “Abbreviations and typographical conventions” in this thesis).
With respect to the category of serial verb, Xing (2006) also claims that BA became a serial verb in Middle Chinese. However, according to Xing (2006: 464), BA had undergone a semantic change when it became a serial verb. That is, the serial verb BA means ‘take’ rather than ‘hold’. The following instance (4.25) cited from Xing (2006: 463) contrasts with the full verb use of BA ‘grasp’ or ‘hold’ as in (4.24) in Early Chinese:

(4.25) 把那封书来
   ba  na  feng  shu  lai
   take  DEM  CL  letter  come
   ‘Get that letter and come’

(Bianwen, 9th century, the Five Dynasties; cited from Xing 2006: 463)

This is an imperative sentence. To my understanding, Xing (2006) considers BA in this instance to be a serial verb meaning ‘take’ because someone does not necessarily hold the letter in his hands, but could ‘take’ the letter somewhere on his body. The above instance has shown the tendency that BA is undergoing the semantic reduction as ‘hold’ (a concrete object) > ‘take (a general action)’ anything in general. See Xing’s (2006) comments on semantic reduction of BA pertaining to metonymization on this issue:

(It is a) process of metonymization. …… the activity ‘hold’ is a hand action, different from the activity ‘take’ — a body action. Such an extension from part to whole demonstrates the traditional characteristic of metonymization (cf. Barcelona 2000, Traugott and Dasher 2002). Xing (2006: 464)

BA extends its conceptual domain from a concrete hand action to a more general body action. The extention from part to the whole reflects the effect of “metonymization” (Xing 2006: 474; cf. Barcelona 2000; Traugott and Dasher 2002). We can see a tendency in the emergence of polysemy of BA: Verb BA originally means ‘grasp/hold’ and then develops more variants such as ‘carry’, ‘control’ and ‘know’ (see §6.1.1). Also, BA develops from a transitive verb to a serial verb. This

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37 I prefer translating the serial verb BA as a general action ‘carry’, see Chapter 6.
process unfolds in such a direction, not vice versa. Therefore, there is a conjecture that the concrete action meaning of BA primes the abstract (or, metaphoric) use of BA. In other words, BA with a concrete and specific meaning is more likely to recur. From another perspective, cognition factors such as implicit learning contribute to the speakers’ repeating an expression in use (e.g. Jäger and Rosenbach 2008; Bock and Griffin 2000; Chang et al. 2006; Hartsuiker and Kolk 1998). On the basis of repetition, the need of expressive richness facilitates BA to develop more variants in new contexts. BA does not only undergo a directional semantic change from a concrete meaning to an abstract meaning, but also develops from a transitive verb to a serial verb. The serial verbal phrases involving ‘take’ verbs mean preparing for a subsequent action (see §6.1.1 for variants of BA on the scale of transitivity with respect to semantic bleaching; also see §4.3 for evidence from other languages with verb-serialization patterns; see further Givón 2005: 69-89 for metaphorical extension to abstract CARRY, CONTROL).

Furthermore, the tendency of change of BA from a concrete action to a more general action motivates BA to be further bleached to be an object marker later in Old Chinese. During the process, the concrete action has changed to abstract affectedness. I argue that this semantic change of BA facilitates BA to appear in the serial verb construction: this is the potential relationship held between the transitive construction and the serial verb construction involving BA.

In the following discussion, I offer an overview of the Chinese serial verb construction. This part intends to review previous accounts; however, some instances (without BA) here are collected by me from the PKU-CCL corpus rather than existing data in literature.

The serial verb construction has been extensively researched across languages in a great deal of literature (e.g. Bisang 1992; Stewart 2001; Baker and Stewart 2002; Lehmann 2002 [1982]; Dixon 2006; Foley and Olson 1985; Sebba 1987; Durie 1997; Andrews and Manning 1999). Typologically, the serial verb construction is associated with terms such as “serialization” (e.g. Kachru 1979, 1993; Larson 1991; Steever 1989; Lord 1993), “conjunctive participal”/“converb” construction (Bisang 1995), and “clause chain” (Delancey 1991). Besides the Chinese language, the verb-serializing pattern is found in West African languages
(e.g. Lahu, Akan) and Southeast Asian languages (e.g. Thai) (see Byrne 1990; Schiller 1990; Givon 1975; Lord 1993; Collins 1997; Stewart 2001; Sebba 1987 for case studies). Let us look at the syntactic and semantic properties of the Chinese serial verb construction (e.g. Baker 1989; Bisang 1995; Li and Thompson 1981; Noonan 1985). Consider the following examples (4.26) and (4.27) before we discuss the form and meaning of the serial verb construction in Old Chinese.

(4.26) 邻国将师保之

```
Lin-guo jiang shi bao zhi
Neighbouring country lead troops support 3rd PRON (a small country)
‘The neighbouring country lead (assemble) troops and supported it (a small country).’
``` (Guo Yu, the Zhou Period, Early Chinese)

(4.27) 诸侯之大夫从晋侯伐秦

```
Zhu hou zhi Dafu cong Jin-hou fa Qin
Many country REL minister follow NAME conquer COUNTRY NAME
‘The ministers from many countries followed Jin-hou and conquered the country Qin.’
``` (Zuo Zhuan, the Zhou Period, Early Chinese)

The above instances (4.26) and (4.27) display the following syntactic properties of the serial verb construction:

1. **Non-existence of connective markers**: There is not any overt marker between two serial verbs in the surface structure, as exemplified in both examples. In Rose’s (2009: 747) view, the absence of an overt connective marker occurs to a

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38 Note that this part merely discusses the syntactic properties of the prototypical serial verb constructions in Old Chinese in general. Exceptions could be seen in some other serial verb constructions such as “pivotal constructions” (Li and Thompson 1981) where the subject could not be shared by all verbs.

39 One of the major shortcomings in previous research is that previous scholars did not show the existence of ambiguous instances involving serial verb BA/instrument marker BA (which will be labeled as BA-2/BA-3). These were not mentioned in earlier research on BA and thus they are my own novel findings from the BA corpus. As will be discussed in detail in §6.1.3, I suggest that the ambiguous BA-2/BA-3 instances are bridging instances for the emergence of BA-3, the instrumental use. One of my contributions in this thesis is to show that some BA constructions are ambiguous between BA2 and BA3.
clause linkage parameter, i.e. “explicitness of linking”. Li and Thompson (1981: 594) also argue that there is not any marker intervening between serial verbs.

(2) **Argument sharing**: Lehmann (2002: 30) defines the serial verb construction as “the combination of two or more asyndetically juxtaposed verbs with at least one shared argument in order to express a complex, but unitary situation”. The “shared argument” primarily refers to the subject which is shared by a string of conjoined verbs. This relates to one of the most “prototypical properties” of the serial verb construction (e.g. Seuren 1990). The subject in the Chinese serial verb construction is shared by both/all serialized verbs (Li and Thompson 1981). The referents of the subject of both serial verbs are identical, so that the subject appears only once. For instance, in (4.27), *zhu hou zhi dafu* (‘the ministers from many countries’) is the subject shared by both serial predicates *cong* (‘follow’) and *fa* (‘conquer’). However, the serial verbs could take different objects (cf. Edwards 2004), if both serial verbs are transitive. The serialized verbs in Chinese also tend to have different object (only in some cases, the object can be shared by both predicates as well) (Li and Thompson 1981). In (4.26), for instance, *shi* (‘troops’) and *zhi* (it, a small country) are different objects of two serial verbs.

(3) **Unchangeable positions of serial verbs**: The positions of two serial predicates in (4.26) and (4.27) cannot be changed (unlike the case of VP coordination where positional inversion is possible). This syntactic behaviour accords with the semantics of the serial verb construction. That is, the relation between two serial verbs tends to be conventionalized. For example, (4.26) encodes a consecutive event in which *lin-guo* (‘the neighbouring country’) ‘lead (assemble) the troops’ occurs before ‘supporting it (a small country)’, and thus two serial VPs cannot be inverted. In (4.27), the first verbal phrase *cong Jin-hou* (‘follow Jin-hou’) expresses the circumstance under which the main event (denoted by the second serial verbal phrase *fa Qin* ‘conquer Qin’) takes place. Therefore, positions of two serial verbs in this instance cannot be changed, either.

(4) **Head-dependent relationship**: Head-dependent relationship can be held between the serial verbs in some cases, but not always. This depends on what type of the serial verb construction it is. As will be shown in Table 4-2, when the first serial verb denotes the “purpose” (will be known as subtype 4 and discussed below, see
Table 4-2 or “circumstances” (will be known as subtype 3, see also Table 4-2) and the other serial verb encodes the main event, the first serial verb is the dependent while the other is the head.

The semantic properties of the Chinese serial verb construction are as follows: The serial verb construction expresses “two activities as sub-events of a complex event” (Rose 2009: 647). Li and Thompson (1981: 594) argue that the Chinese serial verb construction also indicates an overall event (or, state of affairs) which contains several “parts” (or, sub-events) expressed by a series of verbs. To be more specific, these sub-events could relate to each other in various ways and tend to occur in temporal/logical sequence. The particular relationship between the serial predicates include CONSECUTIVE, PURPOSE, ALTERNATING and CIRCUMSTANCES (Li and Thompson 1981: 595; see Table 4-2). For instance, the above sentence (4.26) encodes a consecutive event in which lin-guo lead (assembled) troops and then supported the small country. The action jiang shi (‘lead troops’) and bao zhi (‘support it’) can be viewed as step one and step two for fulfilling a serial action. In comparison, (4.27) expresses that the second sub-event ‘conquer the country Qin’ takes place under the CIRCUMSTANCE (Li and Thompson 1981: 594) indicated by the first verbal phrase cong Jin-hou (‘follow Jin-hou’). More interestingly, this instance can possibly be interpreted as the serial verb construction of PURPOSE subtype as well: ‘The neighbouring country lead troops (to) support it.’ I will argue in §6.1.3 that BA in the serial verb constructions may indeed sometimes be interpreted as an instrumental marker as well; such examples, I will suggest, are bridging instances for the emergence of BA-3, the instrumental use.

The syntactic evidence for the particular semantic relations is that all the serial verbs must be present as a part of the serial predication: each serial verb is in a core-position, and these serial verbs are in unchangeable positions. Moreover, these two sub-events (denoted by two serial verbs) are tightly connected, due to the absence of the overt linkage. Here, I use the “interlacing” parameter of clause linkage (Rose 2009) to describe this phenomenon; the term “interlacing” is from the following quote:
In a very iconic manner with this key difference in the *interlacing* parameter of clause linkage, serialization links the two activities as sub-events of a complex event taking place in a single spatio-temporal frame. (Rose 2009: 647)

For example, in (4.26), *jiang shi* (‘lead troops’) and *bao zhi* (‘support it’) denote two sub-events which constitute a single complex event. These two sub-events occur successively without time delay. Also, these sub-events occur at the same spatial location, i.e. the battle field.

As will be shown in §6.1.2, there are different types of micro-constructions involving serial verb BA such as [consecutive events], [simultaneous events] and [circumstances-main events] (and [purpose] as will be shown in § 6.1.2). Also as mentioned above, the Chinese serial verb construction of different types could vary in the head-dependent relationship. So now let us look at the types of the Chinese serial verb construction in general.

Above all, I need to clarify how types and subtypes of the Chinese serial verb construction are used in this thesis and how my research is original. As will be shown in detail below, Li and Thompson’s (1981) propose four classifications of the general serial verb construction in Chinese, among which only one (Group 1) is relevant for BA according to my findings. There are four subtypes (consecutive, alternating, circumstances, purpose) of this Group 1. I will use these terms by Li and Thompson (1981) as semantic labels in order to describe various types of the serial verb construction involving BA in this thesis, but the BA data and relevant analysis based on the BA data are mine. Also, Li and Thompson’s (1981) “alternating” subtype (see Figure 4-2) has not been attested in the BA data; however, as I will discuss and exemplify in §6.1.2, a new subtype of the serial verb construction (“simultaneous”) is found in the BA data.

Now let us review these types and subtypes of the Chinese serial verb construction in general as suggested by Li and Thompson (1981). Li and Thompson (1981: 594) claim that the Chinese serial verb constructions “convey different types of messages” as classified into four groups:
<table>
<thead>
<tr>
<th>Group 1</th>
<th>Two or more separate events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2</td>
<td>One verb phrase or clause serving as the subject or direct object of another verb</td>
</tr>
<tr>
<td>Group 3</td>
<td>Pivotal constructions[^40]</td>
</tr>
<tr>
<td>Group 4</td>
<td>Descriptive clauses[^41]</td>
</tr>
</tbody>
</table>

Table 4-1: Four groups of the Chinese serial verb construction (based on Li and Thompson 1981: 594)

As will be shown in Figure 6-5, BA only appeared in the serial verb construction of Group 1 (the other three groups as mentioned by Li and Thompson (1981) are not found in my BA data), i.e. the serial verb construction which contains “two (or more) separate events” in series (Li and Thompson 1981: 595). Therefore, in this section, I only focus on Group 1 of the Chinese serial verb construction. According to Li and Thompson (1981: 595), Group 1 can be further divided into four sub-types (as below in Table 4-2), based on specific semantic relations held between two sub-events.

Note that these subtypes in Table 4-2 are used in this thesis as terms to label various micro-constructions involving serial verb BA. Also note that an instance of [purpose] subtype will be shown in (4.31) and I will further show how this subtype occurs in my data later in §6.1.2 (e.g. (6.17)).

<table>
<thead>
<tr>
<th>Subtype 1</th>
<th>Consecutive</th>
<th>One event occurs after the other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtype 2</td>
<td>Alternating</td>
<td>The subject alternates between two actions</td>
</tr>
<tr>
<td>Subtype 3</td>
<td>Circumstances</td>
<td>The first verb phrase describes the circumstances under which the event in the second verb phrase or clause occurs</td>
</tr>
<tr>
<td>Subtype 4</td>
<td>Purpose</td>
<td>The first event is done for the purpose of achieving the second</td>
</tr>
</tbody>
</table>

Table 4-2: Four subtypes of the Group 1 Chinese serial verb construction (cf. Table 6-2, Li and Thompson 1981: 595)

[^40]: Pivotal construction: “It contains a noun phrase that is simultaneously the subject of the second verb and the direct object of the first verb” (Li and Thompson 1981: 607; cf. Chao 1968; Simon 1958). The term “pivotal construction” has alternatives such as “switch construction” (Aikhenvald 2006: 14), or “conjoined construction” (Ding 1979: 118).

[^41]: Descriptive clause: “(It) involves a transitive verb whose direct object is ‘described’ by a following clause”. (Li and Thompson 1981: 611)
In order to exemplify each subtype as defined in Table 4-2, I show some instances cited from Li and Thompson (1981):

**Example of subtype 1: consecutive**

(4.28) wo mai piao jinqu

1SG buy ticket enter

‘I bought a ticket (and) went in’

(Li and Thompson 1981: 595; my gloss)

In (4.28), *mai piao* (‘buy a ticket’) and *jinqu* (‘enter’) denote two actions that occur successively.

**Example of subtype 2: alternating**

(4.29) ta tian-tian chang-ge xie-xin

3SG every day sing-song write-letter

‘he sings songs (and) writes letters every day’

(Li and Thompson 1981: 596; my gloss)

In (4.29), the subject *ta* shifts between taking two actions *chang-ge* (‘sing songs’) and *xie-xin* (‘write letters’).

**Example of subtype 3: circumstances**

(4.30) wo zhu zai zher gen tamen da-jiaodao

1SG live at here with 3PL interact

‘I live here (and) interact with them’

(Li and Thompson 1981: 596; my gloss)

Here, *zhu zai zher* (‘live here’) expresses the circumstance under which the other action takes place, i.e. ‘I interact with them’.
Example of subtype 4: purpose

(4.31) ta shang lou shuijiao
3SG ascend stairs sleep
‘he went upstairs (to) sleep’

(Li and Thompson 1981: 596; my gloss)

Here, *shuijiao* (‘sleep’) implies the purpose of the other action *shang lou* (‘go upstairs’).

We have discussed different types of the Chinese serial verb construction, and now let us have a general review of the serial verb construction in Old Chinese since this relates to how its synchronic structure comes into being. With respect to the history of the Chinese serial verb construction, it is observable cross-linguistically that the serial verb construction is associated with the sequential constructions (clause chaining) (e.g. Foley 1986; DeLancey 1991). In the Papuan languages of New Guinea, for example, clause chaining and the verb serialization are in a similar coordinated structure as in (4.32) and (4.33). The only superficial difference between them is: that the verb-serializing pattern (4.33) does not have an explicit connective marker, i.e. *jah* (‘and then’), where as the juxtaposition (4.32) does:

(4.32) ndam-o-ka-kiparud jah ma-n-man
FUT-2SG-first-tie and then FUT-1SG-come
‘you tie first and then I will come’

(Non-serialization in the Marina language; Foley 1986: 198; cf. Boelaars 1950)

(4.33) irisina auto omidai tewo g-itai
fish away take-SG cooked fish IMP-boil
‘to take the fish away (and) boil it’

(Serialization in the Kiwai language; Foley 1986: 198; cf. Ray 1933)
The above pair of instances again suggests that the main difference between the serial verb construction and the clause chaining is the presence or absence of an overt connective marker. According to Shi (2002), the Chinese serial verb construction results from the loss of a connective marker er (‘and’) in clause chaining. In other words, two conjoined verbal phrases connected by er are brought together more closely and give rise to the serial verb construction. Let us firstly see what the connective marker er (‘and’) is. As an overt clause linking element (Lehmann 1989: 217-218), er was used to conjoin two serial clauses or verbal phrases largely on the equal basis, as in (4.34) and (4.35):

(4.34) (某人) 剌人而杀之

(Mouren) ci ren er sha zhi
Someone stab person and kill 3SG
‘Someone stabbed a person and killed him.’
(Mengzi, 375 B.C., the Zhou period, Early Chinese)
(Adapted from Shi 2002: 55; my gloss)

(4.35) 秦攻周而得之。

Qin gong Zhou er de zhi.
COUNTRY attack COUNTRY and attain 3SG
‘The country Qin attacked the country Zhou and attained/conquered it (Zhou).’
(Zhanguo Ce, 10 B.C., the Qin-Han and Six Dynasties, Early Chinese)

How did the serial verb construction derive from the clause chaining? In Shi’s (2002) view, the decline of the clause connective marker er (during the period around 9 A.D ~ 10 B.C) led to the formation of the serial verb construction, such as (4.36):

(4.36) 项氏攻城得财。

Xiang-shi gong cheng de lu.
SURNAME attack city attain money
‘Mr. Xiang attacked the city and attained money.’
(Xin Xu, 9 A.D, the Qin-Han and Six Dynasties, Early Chinese)
Recall the definition of the Chinese serial verb construction by Li and Thompson (1981); the above (4.36) displays the properties of a typical serial verb construction: above all, there is not any coordination marker or subordination marker (e.g. Aikhenvald and Dixon 2006; Bril 2004; Durie 2000; Pawley and Lane 1998; Schiller 1990). Moreover, due to the absence of er, the serial/chained verbs are relatively compressed into a single complex predicate (gong-de, ‘attack-attain’). Also, the initial noun Xiang-shi is a shared subject of both predicates.

More crucially from the above analyses, the contrast between the clause chaining (e.g. (4.34) and (4.35)) and the serial verb construction (e.g. (4.36)) is not simply the presence or absence of the connective marker er. The clause chaining and the verb serializing also differ in terms of independence of the verbs. As mentioned above, er is a clause connector. As a consequence, two verbal phrases separated by the marker er in a chain are viewed as two independent clauses. To take (4.35) for example, it actually comprises of two clauses, i.e. Qin gong Zhou (‘Qin attacked Zhou’) and Qin\(^{42}\) de zhi (‘Qin attained it’). In these two clauses, gong (‘attack’) and de (‘attain’) constitute two independent predicates, respectively. By comparison, due to the absence of a clause connector er in (4.36), gong cheng (‘attack the city’) and de lu (‘attain money’) are no longer two clauses but merely two verbal phrases. Accordingly, gong (‘attack’) and de (‘attain’) in (4.36) are not two autonomous predicates but unite as a single complex predicate.

I have shown how the Chinese serial verb construction has arisen in the preceding discussion, and now let us look at what pattern the Chinese serial verb construction develops into. This is relevant to how an Expression involving a serial verb BA has developed.

It has been suggested that the serial verb construction cross-linguistically provides an important source for deriving other patterns (e.g. Lord 1993; Foley and Olson 1985; Givón 1975, 2009). According to Mathieu-Reeves’s research (2009; see also Foley 1991) into Yimas (an endangered language in Oceania), the serial verb construction involving a verb tmi (‘say, tell’) was reanalyzed into the causative construction. To be specific, the verbal instruction expressed by tmi (‘say/tell’)

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\(^{42}\) In this instance of juxtaposition, the initial noun Qin is also a shared Subject for two clauses.
developed into a kind of causing force, i.e. ‘to order someone to do something’ (Mathieu-Reeves 2009: 39; cf. Foley 1991: 461). In her analysis, Mathieu-Reeves (2009: 47) points out that this reanalysis is attributed to the “cause-effect” relation between the serial predicates in the Yimas language. Here, note that the semantic relation between the serial predicates might vary in different languages with verb-serialization. That is, the same “cause-effect” relation between the serialized verbs might not exist in the serial verb constructions in other languages. As suggested by Bril (2004: 31), “[the serial predicates could also] specify the circumstances of the main action (manner, instrumental, concomitance, locative) … [despite] a similar scale of desententialization”. As a consequence, different constructions might be derived from the serial verb construction in a particular language, as also suggested by Kroeger (2004: 234): in the serial verb constructions, it appears that different languages impose different restrictions as to which specific combinations of verbs are permissible. That is, the relation between the serial verbs could be different in different languages with the verb-serialization patterns. As a result, the serial verb construction in a particular environment tends to derive particular constructions in the evolution of a specific language.

However, we might ask: what can be generalized from the development of the serial verb construction into various constructions? Givón (1975: 49) has observed a “verb-serializing to a non-serializing typology” based on his diachronic research of Niger-Congo data. To be specific, Givón (1975: 80) finds that the serial verb construction tends to be reanalyzed into a non-serializing pattern whereby we see “gradual syntactic-lexical change from SVO verb-serializing syntax towards a non-serializing verb phrase”. Lehmann (2002: 30) further details this “from verb-serializing to non-serializing typology” as: given there are two serial verbs in the complex predicate in the verb-serialization, one serial verb becomes the “grammatical formative” providing the grammatical information, while the other one remains “virtually unaffected” providing the lexical information. Therefore, the “unaffected” full verb becomes the core (the main predicate) after reanalysis while the grammatical one tends to be subordinated to the main predicate. For example, in Akan (Kwa) (Lehmann 2002: 30; see also Sasse 1977 [G]: 113-117 on Mba), the origin of bá was a verb ‘come’ in the first position in a serial verb construction and
bá developed to be a future marker (Welmers 1973: 353f). In Efik (Benue-Kongo), mà was originally a verb ‘fulfill, accomplish’, and it has become a past marker (Lehmann 2002: 30; Welmers 1973: 371; see also Mosel 1980 for similar examples in Creole languages).

The Chinese serial verb construction nicely fits into the above typology by developing into non-serializing patterns: particularly, the first serial verb (V1) in the serial verb construction tends to be subordinated to the second serial verb (V2) via reanalysis. As will be shown in §4.4, the serial verb constructions involving Chinese JIANG (Zhu 1957; Wang 1958; Sun 1996; Schmidt and Tao 2009; Peyraube 1996) and YI (Sun 1996: 18; Ohta 1958) developed into the prepositional instrument constructions in which JIANG and YI grammaticalized into instrument markers. In this account, an expression involving the first serial verb JIANG/YI is reanalyzed to be a prepositional modifier (i.e. instrument expression), and it is subordinated to the main predicate. For another example, I found that Chinese expressions involving the serial verb CONG43 (‘follow’) (as shown in instance (4.37)) also developed into an adverbial adjunct in which CONG became a preposition (as shown in instance (4.38)). This is my idea based on the following data from the PKU-CCL corpus.

(4.37) (范无恤) 从秦师于河曲

Fan Wuxu cong Qin shi yu Hequ

NAME follow ARMY settle at PLACE

‘Fan Wuxu followed Qin’s army and settled at Hequ.’

(Zuo Zhuan, the Zhou Period, Early Chinese)

(4.38) (兄) 从礼部调吏部

Xiong cong Li-Bu diao Li-Bu

Brother from Culture-Office transfer Personnel-Office

‘Brother transferred from the Culture Office to the Personnel Office.’

---

43 This is superficially comparable to a transitive verb CONG in the transitive construction as below: e.g. 臣从师

Chen cong shi

1SG follow teacher

‘I follow my teacher.’

(Guo Yu, the earliest text found in the Zhou Dynasty, Early Chinese)
(Wan-li Ye-huo Bian, the Ching period, Late Chinese)

In (4.37), CONG is a serial verb ‘follow’ and appears in the serial verb construction. In (4.38), [CONG N] is a prepositional adverbial (‘origin’) attached to the main predicate diao (‘transfer’), and thus becomes a subordinated structure.

The development in Chinese of three expressions involving serial verbs JIANG, YI and CONG can be summarized as the following Table 4-3. We see that the Chinese serial verb constructions tend to develop into the prepositional constructions which are subordinated to the main predicate:

<table>
<thead>
<tr>
<th>Patterns</th>
<th>Source: the serial verb construction</th>
<th>Development: prepositional adverbial (adjunct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressions involving CONG</td>
<td>✓</td>
<td>✓ The ‘origin’ adverbial (‘from N/NP’)</td>
</tr>
<tr>
<td>Expressions involving JIANG</td>
<td>✓</td>
<td>✓ The prepositional instrument construction (‘with N/NP’)</td>
</tr>
<tr>
<td>Expressions involving YI</td>
<td>✓</td>
<td>✓ The prepositional instrument construction (‘with N/NP’)</td>
</tr>
</tbody>
</table>

Table 4-3: The Chinese prepositional constructions (involving CONG, JIANG and YI) derived from the serial verb construction

According to the above review of literature on JIANG and YI together with my findings of CONG based on my own data collection, I propose the above Table 4-3 to summarize how the Chinese prepositional constructions are generally derived from the serial verb construction.

As shown in Table 4-3, the serial verb constructions involving CONG, JIANG and YI all become the prepositional modifiers of the main predicate in history. This trend will be shown to accord with the same path that the Expression involving BA has developed (see §6.1.4).
4.4 A review of instrument marker BA (BA-3) and typological work on the Chinese prepositional instrument construction

A third category of BA is the instrument marker: Sun (1996: 180-182; cf. Her 1990) argues that before developing into an object marker, BA underwent a stage of “instrumental marker” in the Tang Dynasty (7th-10th century). Xing (2006) makes a similar claim that verbs with the source meaning ‘hold/take’ tend to develop into prepositions/object markers (see §3.1.3.1 on typological development of ‘take’ verbs). Here, I select an instance from the BA corpus to illustrate the use of BA as an instrument marker:

(4.39) 自家把许多精神智巧对副他。
    zijia ba xuduo jingshen-zhiqiao duifu ta
    someone with lots of skills-schemes tackle 3SG
    ‘Someone tackled him with lots of skills and schemes.’
    (Zhu-zí Yu-lei, 1263, the Song period, Middle Chinese)

In (4.39), BA cannot be construed as a lexical verb, but only as a preposition-like instrument marker (‘with’). To be specific, BA in (4.39) cannot be a verb meaning ‘grasp/held’ since jingshen-qiaozhi (‘skills and schemes’) is an inherent capacity and it cannot be grasped/held/carried or used physically.

I further discuss the prepositional instrument construction in Chinese from the typological perspective. The Chinese prepositional instrument construction relates to the development of verbs into prepositional instrument markers. In order to argue this, I also discuss the general path in which ‘take’ verbs in particular grammaticalize cross-linguistically. This provides the background for my subsequent analysis about why BA grammaticalizes from a verb (‘grasp/hold’) into a preposition/instrument marker. This pertains to the historical origin and development of BA, on which I have a general discussion first in this section.

It has been observed that a verb is subject to reanalysis into a preposition, leading to “decategorization” (Hopper and Traugott 1993: 103). In the Akan language, for example, the transitive verb bán (‘come’) obtained a grammatical
function to be a future marker after reanalysis (Lehmann 2002: 30). A similar fate occurs to mà (‘fulfil’) in Efik (Benue-Kongo) which takes an aspectual function (Lehmann 2002: 30; Welmers 1973: 371). In Chinese, Whitman and Paul (2005) claim that a preposition tends to be derived from a verb in an instrument adjunct structure. This suggests that a verb is more likely to be reanalyzed as a preposition when it appears in a particular expression in which it combines with an instrument object. Once a verb is reanalyzed into a preposition, the whole expression can take a function of modification as an adjunct. Lehmann (2002: 30) articulates that the serial verb has particular potential to develop into a coverb. I agree with Lehmann’s claim considering the characteristics of grammaticalization (including the semantic shift) of BA which is originally a ‘take’ verb. I turn to the grammaticalization of ‘take’ verbs as follows.

Transitive verbs (or, serial verbs) with the meaning ‘take’ could be reanalyzed into multiple grammatical markers including CAUSATIVE, INSTRUMENT, COMPLEMENT, FUTURE and PATIENT (Heine and Kuteva 2002: 286-290; see Lord 1989; Claudi 1993; Matisoff 1991; Sun 1996 for complete accounts based on a range of languages cross-linguistically, including Akan, Ebrie, Chinese, and Bantu languages).

As for the forms as mentioned above (in capitals), some are beyond the scope of my current study. I focus on the development of ‘take’ verbs into instrument marker, causative, and object marker here since these three are the most relevant to the development of BA: (i) To instrument marker: Whitman (2000: 229) proposes “V>P reanalysis” by way of which “serial verbs such as ‘take’ or ‘hold’ in the V1 position often introduce an instrument argument”. For example, a ‘take’ verb in the Akan language, i.e. de went through a series of reanalyses from a full verb to an instrument marker (Lord 1982); (ii) To causative marker: For example, Chinese BA goes through a process of reanalysis from a verb to a causative marker (Heine and Kuteva 2002: 286; see also §4.5 for more information); (iii) To object marker: For example, according to Lord (1982: 279), a ‘take’ verb in the Akan language, de went through a series of reanalyses from full verb, to instrument marker, causative, and object marker. With respect to the path into object marker, Lord (1982: 297) further claims that “objects can occur in preverbal position in addition to the established
post-verbal position in these languages”. This, to some extent, accounts for the motivation behind the pre-verbal object in some patterns involving a grammaticalized object marker (in languages such as Beneu-kwa languages, and Chinese).

With respect to BA, it is originally a full verb ‘grasp/hold’ belonging to the category of ‘take’ verbs. According to the typological findings as above, BA could be subject to any of the reanalyses such as instrument marker, causative marker and object marker. As mentioned above, there have been pieces of research which demonstrate that BA develops into an instrument marker (Matisoff 1991: 434), a causative marker (Heine and Kuteva 2002: 286) and an object marker (e.g. Li and Thompson 1981: 463-491; cf. Peyraube 1996; Sun 1996). Since the ‘take’ verb de in the Akan language went through a series of reanalyses from a full verb, to an instrument marker, a causative marker, and an object marker (Lord 1982), there might be a similar pathway through which the diachronic innovation of Chinese BA occurs.

I now briefly discuss semantic change in relation to the development of BA. The lexical meaning ‘grasp/hold’ facilitates the original verb BA to develop into other categories. For example, a full verb BA provides the source for an instrument marker BA: the instrument marker BA inherits the physical holding meaning from the full verb BA and develops it into ‘use an instrument’. For another example, a full verb BA is also likely to develop into the causative BA based on the metaphorical extension, i.e. from someone’s grasping something in hand, to the causer’s taking effect on the causee. To be more specific, verb BA ‘grasp/hold’ means to concretely take an object in one’s hands. Accordingly, the causative verb (cf. Dixon, 1991: 194; Goldsmith 1984: 116; Shibatani, 1976: 28-31; Comrie 1981; Kemmer and Verhagen, 1994: 117; Wierzbicka 1998: 121 regarding causative verbs) BA means to make someone do something/ to make something occur. The verbal meaning of ‘hold’ associates with the causative (cf. Shibatani 1976), which further increases the possibility of derivation from a full verb BA to a causative BA.

Let us see further how BA is metaphorically extended from a concrete domain to an abstract one. Recall the grammaticalization of de (Lord 1982) from a verb to a preposition; verbs are likely to undergo grammaticalization with a
concomitant semantic shift from concrete domain to abstract domain. Semantic change might occur via “metaphorical connections between semantic fields” (Sweetser 1990: 18). BA originally means ‘grasp’, providing an ideal source for semantic abstraction into “conceptualization of the event” (Croft 1990: 67; Lakoff 1987). In particular, it is not unusual for a verb meaning ‘hold’ to be abstracted into a coverb in the resultative expression (e.g. Maslov 1988: 73). In terms of the “Idealized Cognitive Model (ICM)” (Croft 1990: 50), ‘hold’ is under the group of ‘manipulation’ verbs. Therefore, it is easy to understand how the concrete meaning of BA metaphorically extends into the abstract domain in which an event is manipulated: “there is strong evidence that mental activity is seen as manipulation and holding of objects: we ‘grasp’ a new idea” (Sweetser 1990: 20). In other words, ‘grasp/hold’ could be generalized as the metaphorical manipulation of an object in a broader sense (see §4.2 for discussion on why and how the transitive construction involving BA ‘grasp/hold’ facilitates an Expression involving BA to participate in the serial verb construction involving BA ‘carry’). Then, this ‘manipulation’ further develops into ‘take control of /totally affect a given object’, so that BA joins in an object marking expression in the resultative construction where action-result occurs to a given object.

I have offered a review of the origin and evolving paths of BA. In the following discussion, I focus on a review of the development of ‘take’ verbs into INSTRUMENT markers, considering the theme of this section (later in this thesis, I will discuss another two forms, i.e. causative marker, and object marker into which BA was reanalyzed).

As mentioned above, Whitman (2000: 229) proposed a “V>P reanalysis” by way of which “serial verbs such as ‘take’ or ‘hold’ in the V1 position often introduces an instrument argument”. Note that Whitman’s (2000) claim suggests two points crucial for grammaticalization of verbs into instrument markers: First, ‘take/hold’ verbs are particularly favoured to develop into instrument markers. One possible explanation might rest on the lexical meaning of such verbs. That is, physically ‘grasp/hold/take’ facilitates this type of verbs to develop into an instrument marker which expresses taking an instrument for use in an underspecified way. Second, such a tendency could be strengthened when a ‘take’ verb used to
appear in the V1 position in a serial verb construction. A verb meaning ‘take’ in the serial verb construction could be subject to reanalysis as “a preposition marking nouns filling semantic roles of instrument and patient” (Lord 1982: 297). This is particularly applicable to Chinese in which a prepositional instrument expression appears in a pre-verbal position. This is largely attributed to the temporal sequence in relation to Chinese word order (Tai 1985): the order of words tends to match the order of actions they denote. Since the action of taking an instrument occurs prior to the main action, a ‘take’ verb precedes the main verb according to the principle of iconicity. As a consequence, a ‘take’ V1 in the serial verb construction is more likely to be reanalyzed into a prepositional instrument expression which also precedes the main verb, while the remaining V2 in the serial verb construction becomes the main predicate in the reanalyzed pattern.

Grammaticalization of verbs into adpositions can be further illustrated by the following Figure 4-2 in the evolution of adverbial relators:

*Evolution of adverbial relators*

<table>
<thead>
<tr>
<th>Source</th>
<th>relational noun</th>
<th>transitive verb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direction</td>
<td>noun-bound</td>
<td>verb-bound</td>
</tr>
<tr>
<td>Product</td>
<td>adposition</td>
<td>part of verb</td>
</tr>
</tbody>
</table>

Figure 4-2: Evolution of adverbial relators (Lehmann 2002: 94)

To summarize this section, a similar change is expected to have occurred to Chinese BA, i.e. BA grammaticalizes into a prepositional instrument marker (Matisoff 1991: 434), considering similar changes in other languages of the world under the following conditions: First, BA is originally a full verb ‘grasp/hold’ which locates it within the category of ‘take’ verbs. Accordingly, BA is subject to a multiple reanalysis including a pathway towards an instrument marker. Second, BA used to appear in the V1 position in the serial verb construction. As a consequence, BA as the first serial verb in sequence is a likely candidate to develop into a prepositional
instrument marker, and the instrument expression [BA N/NP] precedes the main predicate as a modifying adjunct.

In addition, it is not unusual from a typological perspective that prepositions still retain verbal properties to some extent. This phenomenon is widespread in many languages. Kortmann and König (1992) examine the categorial reanalysis of the verbs in Germanic and Romance Languages into the “deverbal prepositions” which do not completely lose verbal contents (e.g. English considering). Likewise, recategorization of verbs as prepositions often generates “prepositional verbs” in Oceanic languages (Durie 1988: 1), or “verbal prepositions” in Norwegian (Tungseth 2008), both of which are generally classified as prepositions but retain verbal properties to some extent. For BA in categorial shift, prepositional instrument marker is only an intermediary stage between verb stage and object marker stage. That is, the preposition BA continued to grammaticalize to become a more grammatical object marker (e.g. Li and Thompson 1981: 463-491; cf. Peyraube 1996; Sun 1996). Accordingly, the preposition BA is not fully grammaticalized and thus tends to retain verbal contents to some extent.

There is a close link in the network between verbs in the transitive construction, prepositions, and object markers (e.g. in the resultative constructions). This can be shown not only by BA, but also by a number of other forms, in the history of Chinese (JIANG and YI), and in Contemporary Chinese (NA and YONG). Next, I briefly outline the similar development of four instrument markers (JIANG, YI, NA, and YONG) in Old and Contemporary Chinese, in order to exemplify how the Chinese instrument markers derive from verbs and possibly develop into object markers.

To firstly take development of JIANG as an example (cf. Schmidt and Tao 2009; Wang 1958; Peyraube 1996; Zhu 1957): In Early Chinese, JIANG is a full verb (‘seize’) in the transitive construction which involves two participants, as in example (4.40):
4.40 襄子将食

Xiangzi  jiang  shi
NAME  seize  food

‘Xiangzi seized the food.’

(Guo Yu, 476 B.C, the Zhou period, Early Chinese)

Here, JIANG is a transitive verb involving two participants, i.e. the agent Xiangzi and the patient shi (‘food’).

In the same period, the verb JIANG also appeared in the serial verb construction. In example (4.41), JIANG collocates with the other serial verb jiu (‘rescue’), and expresses one part of the serial action:

4.41 淝齿将兵救齐

Naochi  jiang  bing  jiu  Qi
NAME  lead  soldier  rescue  COUNTRY

‘Naochi lead soldiers (and/to) rescue the country Qi.’

(Xin Xu, the Qin-Han and Six Dynasties, Early Chinese)

The use of JIANG as a preposition is much later. (4.42) is an example which includes JIANG functioning as an instrument marker.

4.42 将欲观贞

Jiang  yu  guan  zhen
With  greediness  learn about  faith

‘to learn about faith with greediness (as the reference)’

(Tang-wen shi-yi, 1814, the Ching Period, Late Chinese)

In this case, JIANG is an instrument marker rather than a verb, since yu denotes abstract ‘greediness’ which cannot be physically seized. Instead, yu (‘greediness’) is taken as an abstract instrument in this intance for guan zhen (‘learn about faith’).
In the Ming Period, JIANG takes a function of object marking. The resultative construction (4.43) is one of the cases in which JIANG appears as an object marker (Zhu 1957, Wang 1958; Sun 1996).

(4.43) 我将棍头提高

\[ \text{Wo jiang guntou ti gao.} \]

\[ 1SG \text{ OBJ marker stick lift high} \]

‘I lift the stick high.’

\[(Ji-xiao Xin-shu, \text{ the Ming Period, Late Chinese)}\]

Here, we can see the main properties that distinguish the objecting marking construction as in (4.43) from the prepositional instrument construction as in (4.42):

\( \text{(a) Semantic extension of post-JIANG N/NP:} \)

As opposed to (4.42) in stage (iii), the post-JIANG noun \textit{guntou} (‘stick’) in (4.43) does not denote an instrument used for the main action. Instead, it denotes a general entity which is the object of the main verb, due to host-class expansion (Himmelmann 2004).

\( \text{(b) The function of the post-JIANG N/NP:} \)

In (4.42), NP \textit{yu} (‘greediness’) is the object of JIANG, not the object of the main verb \textit{guan} (‘learn about’). In other words, JIANG and \textit{guan} have different objects. In (4.43), NP \textit{guntou} (‘stick’) is the object of JIANG, and it is also the object of the main verb \textit{ti} (‘lift’). That is, JIANG and \textit{ti} have the same object.

\( \text{(c) The Action-Result relation:} \)

The instance (4.43) involves an action component and a result component which are realized by the main verb and the resultative adjective \textit{gao} (‘high’), respectively. The resultative element is not seen in (4.42).

Now I take development of \textit{YI} in Old Chinese as another example. Like JIANG, the original content verb \textit{YI} (以) (‘carry’) became an instrument marker (Sun 1996: 18; Ohta 1958) in the early period. In Early Chinese, \textit{YI} is a prepositional instrument marker, as in (4.44) which is adapted from Sun (1996:18):
(4.44) 吾以羊易之

Wu yi yang yi\textsuperscript{44} zhi

1SG with sheep exchange 3SG

‘I exchanged him for a sheep.’

(Mengzi, 300 B.C, the Zhou Period, Early Chinese)

(Adapted from Sun 1996: 18; my gloss)

In the above instance, yi yang (‘for/with a sheep’) is a prepositional instrument expression (of the METHOD type) indicating how the main event yi zhi (‘exchange him (a person)’) is achieved. Here is another example in which Yi is more clearly an instrument marker:

(4.45) 君子以恐惧修省

Junzi yi kongju xiuxing

A good man with fear improve oneself

‘A good man improved himself with (facing) fear.’

(Zhou-yi, the Zhou Period, Early Chinese)

In (4.45), kongju (‘fear’) is also taken as an abstract instrument for xiuxing, a kind of practice. Note that the above instance (4.45) and the following instances without citation are from my own search from the PKU-CCL corpus and the analyses are also mine; they are used to support my review of grammaticalization of Chinese instrument markers.

Also in the early period, Yi further grammaticalized into an object marker, as in the following instances:

\footnote{44 Note that in this sentence there are two different words “以” and “易” with the same pronunciation “Yi”.

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In (4.46), the final pronoun zhi (3\textsuperscript{rd} PRON) is a pronoun referring back to qi xiong zhi zi (‘his brother’s child (daughter)’). This is a kind of common expression where two nominal elements are co-referential to each other in Old Chinese (Yue 1998). However, the object (qi xiong zhi zi) of the main predicate qi (‘marry’) is already marked by object marker Yi in the pre-verbal position. The following (4.47) is a more typical instance in which Yi is an object marker:

(4.47) 太伯三以天下让

Taibo san yi tianxia rang

NAME for three times OBJ marker country give to others

‘Taibo has given the country away to others for three times.’

(Shi-jì, the Qin-Han and Six Dynasties, Early Chinese)

Here, tianxia (‘country’) is the direct object of rang (‘give to others’), and Yi is an object marker.

Let us now review the ongoing development of NA and YONG in Contemporary Chinese. In Contemporary Chinese, NA and YONG undergo a similar process from a full verb to become an instrument marker. As exemplified below, verb NA/YI and preposition NA/YI coexist in the Present-day Chinese:

(4.48) 小护士拿着病历进了诊室。

Xiao hushi na zhe bingli jin le zhenshi.

Little nurse carry (v) ASP medical record enter ASP consulting room

‘A little nurse carried a medical record and entered a consulting room.’

(Guo ba yin jiu si, 1989)
(4.49) 你拿这话臊我
Ni na zhe hua sao wo
2SG with (prep) DEM words embarrass 1SG
‘You embarrassed me with these words.’
(Ni bu-shi yi-ge su-ren, 1992)

(4.50) 我只好用“痛苦”这个词。
Wo zhihao yong ‘tongku’ zhe ge ci.
1SG have to use (v) pain DEM CL word
‘I had to use the term of ‘pain’.’
(Kong-zhong Xiaojie, 1984)

(4.51) 我用筷子搅着（剩菜）。
Wo yong kuaizi jiao zhe sheng cai.
1SG with (prep) chopsticks stir ASP remaining dishes
‘I stir the remaining dishes with chopsticks.’
(Yong Shi Wo Ai, 1989)

To conclude, instrument markers JIANG and YI in Old Chinese derived from verbs, and further developed into object markers. However, neither JIANG nor YI survives in the Present-day Chinese. By comparison, NA and YONG are emerging instrument markers which co-exist with their verb origins in Contemporary Chinese. The origin and development of these four instrument markers can be summarized in the following Table 4-4:
In sum, a number of words including BA, JIANG, YI, NA and YONG have shown a similar evolutionary path from transitive verbs to prepositions towards object markers.

### 4.5 A review of causative marker BA (BA-4) and typological work on the Chinese causative construction

Li (2003) argues that BA in Contemporary Mandarin is a causative marker. However, the use of BA as a causative marker in Old Chinese has not been reported.

(4.52) (吾) 把魏公做右相

\[
\text{Wu BA Wei gong zuo you-xiang} \\
1SG make SURNAME sir serve as assistant minister
\]

‘I made Mr Wei serve as the Assistant Minister.’

\((Zhu-zi Yu-lei, \text{ the Song period, Middle Chinese})\)

(4.53) 他却把一个病人睡在廊下

\[
\text{ta que BA yi-ge bingren shui zai lang-xia} \\
3SG only make one-CL patient sleep at corridor-underside
\]

‘he only made a patient sleep in the corridor’

\((Shuo-Tang Quan-zhuan, \text{ the Ching Period, Late Chinese})\)

---

Occasionally, JIANG is still used as an object marker in very formal text types. Moreover, this is only possible in Cantonese, not in Mandarin Chinese.
From the instances found in the BA Corpus as exemplified above, BA appeared as a causative marker in Middle Chinese.

I proceed with a review of typological work on the causatives and existing literature on the Chinese causative construction. As claimed by Shibatani (2002: 17), causation is “a basic category in human conceptualization”. The term “causative” could be concerned with a causative continuum including the lexical causatives, the morphological causatives and the syntactic causatives (Shibatani and Pardeshi 2002). Examples of the “lexical causatives” in English include the verbs like kill, teach, and raise, in contrast with die, learn and rise. The morphological causatives take on suffixes to distinguish the causatives from the others, such as weaken in English.

My focus in this thesis is the syntactic causatives which are most relevant to Chinese involving causative verb BA (BA-4) expressions. A great deal of work has been done on the typology of the causative construction (such as Shibatani 1975; Givón 1980; Syeed 1985; Comrie 1981). The syntactic (or, analytic) causatives in English include expressions involving causative verbs like make, cause, have, force, allow and enable (Radford 1988; Baron 1977; Shibatani 1976; Wolff 2003; Trask 1993; Bussmann 1996). The analytic causative typically expresses a causation event consisting of a causing sub-event and a caused sub-event (See Wolff et al. 2005 for review of English causation; cf. Talmy 1988; Croft 1991; Gisborne 2010). For example:

(4.54) The horse makes the camel run.

(Cited from Ammon and Slobin 1979: 3)

The above example is a syntactic causative involving a causative verb make. There is a causal relation held between the causer horse and the causee camel which is made to run.

In terms of structure, the syntactic causative is a bi-clausal sentence consisting of a matrix clause and an embedded clause (Radford 1988). The object of the causative verb in the matrix clause is simultaneously the subject of the embedded clause. Alternatively, the subject of the embedded clause is empty (cf. Radford 1988; 1997; Jackendoff and Culicover 2003; Polinsky and Potsdam 2003), which is known
as object control (Polinsky and Postdam 2003; Jackendoff and Culicover 2003). The above example (4.54) can be marked as in (4.55): The object of the causative verb *make* is co-referential with the subject of the embedded verb *run*.

(4.55) The horse makes the camel; [\(\Delta^{46}\) run].

With respect to the semantics of an analytic causative, it expresses direct or indirect causation (Levin and Rappaport Hovav 1995; Shibatani 1976; Pinker 1989; Wierzbicka 1988; Fodor 1970; Cruse 1972; Comrie 1985; Wolff 2008; Dixon 2000) which differentiate from each other in terms of whether the causer directly or indirectly prompts the cause to do something, “whether the causer acts directly or indirectly to bring about the caused event” (Dixon 2000: 67). I do not use directness as the main parameter for categorization of causatives in this thesis.

With regard to categorization of causatives (which will be particularly important for labelling types and subtypes of BA causatives, see §4.5), I adopt Talmy's (1976, 1985, 1988, 2000a, 2000b; Croft 1991: 167; Verhagen and Kemmer 1997; see also Hollmann 2003) four-way classification of causatives which uses physical/mental interaction as criterial attributes. Animacy of two participants (causer and causee) in the causal relation serves as the main parameter to categorize causatives. There are four causative types, i.e. inducive (causer [+animate], causee [+animate]), volitional (causer [+animate], causee [-animate]), affective (causer [-animate], causee [+animate]), and physical (causer [-animate], causee [-animate]).

Furthermore, distinctions can be made between implicative causatives and non-implicative causatives (Shibatani 1976; Givón 1980; see also Hollmann 2003). This distinction will be used for sub-categorizing the BA causatives (see §6.1.5). Implicative causatives (e.g. English *force*) indicate that the caused event can be entailed by the causing event. By comparison, non-implicative causatives (e.g. English *ask, request, and allow*) indicate that the causing event does not entail the caused event. I am aware of the fact that not all scholars take non-implicatives into consideration of causatives, but some do shed light on the distinction between implicatives and non-implicatives and take them as a parameter for subtypes (e.g. 46 The mark \(\Delta\) symbolizes the empty external argument of *run* in the embedded clause.
Song 1996; Mittwoch 1990; see also Hollmann 2003). In this thesis, I am concerned with both implicative causatives and non-implicative causatives and will take this distinction as a parameter for subcategorization, since instances of both subtypes exist in the Chinese BA data.

The Chinese causatives are generally the syntactic causatives involving causative verbs\(^{47}\) such as SHI, JIAO, and RANG (Shibatani and Pardeshi 2002). Here, I briefly mention the use of these non-BA causative constructions in Chinese as the background for illustrating how macro-constructions emerge (see §6.1.5). Let us first look at the following instance in Contemporary Chinese:

(4.56) 我让她走了

\begin{align*}
\text{Wo } & \text{ rang } \text{ ta } \text{ zou } \text{ le.} \\
1SG & \text{ let } 3SG \text{ leave ASP} \\
\end{align*}

‘I let her leave.’

\textit{(Guo ba yin jiu si, 1989)}

In line with the typological properties, the above instances feature a causative head, i.e. RANG. The other predicate \textit{zou} (‘leave’) following the causative head in the head-dependent clause carries over the force (cf. on accounts for the causation from the perspective of Force Dynamics, see Talmy 1988, 2000) of causation to bring about the caused event. Therefore, the structure of the analytic causative in Chinese could be presented as below (following the typological pattern):

\begin{align*}
\text{NP} & \quad \text{V}_{\text{caus}} \quad \text{NP} \quad \text{V} \\
\end{align*}

The syntactic causative is a pattern in which the second NP is not only the object of the causative verb (\(V_{\text{caus}}\)), but the subject of \(V\) in the caused event. This results from a syntactic conflation process.

In addition, the subject (external argument) of the matrix clause is not restricted to a volitional or animate agent, but could be less agentive (see Comrie

\(^{47}\) These causative verbs can all be interpreted as ‘make’, but they have slight differences under scrutiny: SHI is similar to the English counterpart \textit{enable}, JIAO is like English \textit{cause}, and RANG equals English \textit{let}.
1989; Craig 1977; DeLancey 1984; Hawkins 1985 for various types of causers). For example, the causer could be a natural force (Fillmore 1968; Alexiadou and Schäfer 2006; Cruse 1973; Grimm 2007), as in (4.57):

(4.57)  狂风使他发疯
Kuang-feng shi ta fa-feng
Wild-wind make 3SG go mad
‘Wild wind made him go mad.’

(Ba-shi tian huan-you diqu, 2008)

In the above instance (4.57), the causer kuang-feng (‘wild wind’) is an inanimate natural force. However, it is a causer subject as it serves as a source of force in a causal chain leading to the result that ta fa-feng (‘he went mad’).

Now let us move on to the syntactic causatives involving JIAO, RANG and SHI in Old Chinese. Let us firstly look at two examples of the syntactic causatives involving JIAO and RANG in Old Chinese as in (4.58) and (4.59). As will be shown in (6.26), expressions involving causative BA-4 arose in the Song period in the Middle Chinese. The following instances (4.58) and (4.59) show that periphrastic causatives involving JIAO and RANG were already in use around the Song Period as well. This suggests that there could be influence from JIAO and RANG periphrastic causatives onto the BA causatives in the Middle Chinese48. In (4.58) and (4.59), RANG and JIAO are the causative verbs similar to the English causative make.

(4.58)  陈思让进军南行
Chen Si rang jin-jun nan xing.
NAME let marching-troop south go
‘Chen Si let the marching troop go to the south.’

(Ce-fu Yuan-gui, 1005, the Song Period, Middle Chinese)

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48 However, the following discussion is mainly for an overview of the Chinese causative constructions rather than exploring the chronology of different specific Chinese causative patterns, due to my current shortage of first-hand data of other periphrastic causatives (apart from the BA causatives) in Old Chinese. But this would certainly become another topic in my further research (see Hollmann 2003 for what could be done on the similar topic in English).
(4.59) 拴弓 叫 弓圆。

(Zhuai gong) jiao (gong) yuan
(Drag bow) cause bow become round
‘(to drag the bow) to cause the bow become round’

(Dunhuang Bianwen, 800, the Tang Period, Middle Chinese)
(Adapted from Shi 2002: 48)

Apart from (4.58) and (4.59), there are instances from existing literature on Chinese periphrastic causatives. These instances also suggest the chronology that the periphrastic causatives involving SHI/JIAO/RANG were indeed around Middle Chinese when causative BA-4 emerged diachronically. Let us firstly have a brief review of the historical development of Chinese periphrastic causatives involving JIAO, RANG and SHI, according to Wei (1998). Before these words got involved in periphrastic causatives (in the pattern of [SHI/JIAO/RANG CAUS V+NP+V CAUSED]), they were seen in the causative compounds ([CAUS V JIAO/RANG/SHI+V CAUSED]) in which JIAO/RANG/SHI was already a causative verb (‘cause/let/make’), as in (4.60), (4.61) and (4.62) in Early Chinese (or the earlier period of Middle Chinese, e.g. Five Dynasties, see (4.61)). To take (4.61) for example, jiao chu is such a causative verb compound in which JIAO means causative “cause” while chu is an ordinary verb meaning “leave”. JIAO combines with chu to make up a causative compound “to cause (sb.) leave” with an omitted intervening NP.

(4.60) 我头上有宝珠，不能使去。

Wo tou-shang you baozhu, bu-neng shi qu.
NAME head there be pearl can’t make drop
‘There is a pearl on my head, (you) can’t make (the pearl) drop.’

(Zhuanji Baiyuan Jing, the Qin-Han and Six Dynasties, Early Chinese; Wei 1998: 833)
(4.61) 如来引接客教出。

Rulai yinjie ke jiao chu
NAME guide guest cause leave

‘Rulai guided the guest to cause (him) to leave.’

(Dunhuang Bianwen Ji, Five Dynasties, Middle Chinese; Wei 1998: 843)

(4.62) 予煮之，让沸。

Yu zhu zhi, rang fei.
1SG boil 3SG let get boiled with bubbles

‘I boiled it and let (it) get boiled with bubbles.’

(Yangsheng Fang, the Qin-Han and Six Dynasties, Early Chinese; Wei 1998: 841)

Around the late period (the Song Period) of Middle Chinese, the causative compounds involving SHI/JIAO/RANG ([CAUS V JIAO/RANG/SHI+V CAUSED]) developed into the periphrastic causatives ([SHI/JIAO/RANG CAUS V+NP+V CAUSED]). Compare the following three instances with the previous ones (4.60), (4.61) and (4.62). For example, in (4.64), ta (“him”) appeared between the causative verb JIAO and the caused action xing (“wake up”); by comparison, in (4.61), JIAO chu is a causative compound without an intervening NP. In short, JIAO chu in (4.61) is lexical while JIAO ta xing in (4.64) is phrasal.

(4.63) 我今日当使此人消。

Wo jinri dang shi ci-ren xiao.
1SG today have to make this man die

‘I have to make this man die today.’

(Fo Shuo, the Song Period, Middle Chinese; Wei 1998: 834)
(4.64) 其教他醒。
Qi jiao ta xing.
3SG cause 3SG wake up
‘She caused him to wake up.’
(Zhuzi Yulei, the Song Period, Middle Chinese; Wei 1998: 844)

(4.65) 其让粟米饭冷。
Qi rang sumifan xing.
3SG let rice freeze
‘She let the rice freeze.’
(Qimin Yaoshu, the Song Period, Middle Chinese; Wei 1998: 847)

Now we have briefly reviewed the development from the causative compounds involving SHI/JIAO/RANG to the periphrastic causatives involving SHI/JIAO/RANG. Let us move back to two earlier instances (4.58) and (4.59). Also note that both examples are implicatives as suggested earlier in this section. By comparison, the following instance (4.66) represents the non-implicative causative construction involving causative verb JIAO (‘tell’):

(4.66) 萧惠朗数百人突入东门，
Xiao Huilang shu bai ren tu-ru dong-men,
NAME several hundred people break into east-gate
‘Xiao Huilang (leading his troops of) several hundred soldiers broke into (the town) through the east gate,’

(萧惠朗)叫噪至堂下
(Xiao Huilang) jiao Zao zhi tang xia
(NAME) tell NAME arrive square down
‘(Xiao Huilang) told Zao to get down to the square.’

(Nan-Qi Shu, 502, the Qin-Han and Six Dynasties, Early Chinese)
Let us look at two instances involving the causative verb SHI, which represent the affective causative constructions. In either (4.67) or (4.68), the causer is inanimate while the causee is animate:

(4.67) (世祖之)旨使吾归云南
Shizu zhi (1st tone) zhi (3rd tone) shi wu gui Yunnan
Emperor’s NAME REL command make 1SG return PLACE
‘Shizu’s command made me return to Yunnan.’
(Yuan Shi, the Yuan Period, Late Chinese)

(4.68) 崩云使人惊
Beng yun shi ren jing
Broken cloud make people feel strange
‘The broken cloud made people feel strange.’
(Quan Tang Shi, the Tang Period, Middle Chinese)

Note that all the above instances involving JIAO, RANG and SHI contribute to a schema (Chinese causative construction, i.e. macro-construction-4) that licenses BA-4 causatives when they emerge, as will be shown in §6.1.5.

Compared with the syntactic causatives, the morphological/lexical causatives merely existed in Old Chinese and disappear in Contemporary Chinese. Since this is less relevant to my topic, I only have a brief discussion here. Many verbs in Old Chinese can be used as the causative verbs under certain circumstances. Occasionally, certain intransitive verbs (and some adjectives and nouns) could be followed by the nominal objects, whereby the intransitive verbs are coerced into causative verbs: “when intransitive verbs have an object, the verb must be understood in a causative or putative sense (consider X as Y)” (Norman 1988: 91). The basic usage and the causative usage of the same verb are exemplified in the following pair of sentences (adapted from Choonharuangdej 2008: 2), i.e. the basic usage of the two-place transitive verb xiang in (4.69), and the causative usage of xiang in (4.70):
The verb *xiang* (‘surrender (to)’) can be transitive or intransitive. In (4.69), *xiang* is a transitive verb (‘surrender to’), taking the agent-subject *Jianshe* and the Patient-Object *Chu*. The name *Chu* is metonymic to refer to the king of the whole country; and *Jianshe* is a soldier from another country. As a result, it makes sense that *Jianshe* (did not) surrender to the Country *Chu*. This is a canonical SVO pattern in which *xiang* is a basic content verb, as opposed to a causative verb as in (4.70):

(4.70) (单于)欲因此时降武。

```
Chanyu       yu     yin    ci shi   xiang       Wu
NAME of King desire at DEM time   make sb surrender (caus.) NAME
```

‘Chanyu desired to take this opportunity to *make* Wu *surrender* (to him).’

*(Han Shu, the Zhou Period, Early Chinese)*

In (4.70), *xiang* is used as a causative plus content verb. According to the general knowledge, we learn about the relationship between the NP *Chanyu* and the other NP *Wu*: the subject *Chanyu* was a famous King of a minor-nationality in the north border of Ancient China, whereas *Wu* was only a prisoner (and a well-known scholar at that time) who was expelled to the remote and wild North. It could not be the story that *Chanyu*, the powerful King, surrendered himself to a prisoner *Wu*. Instead, it was *Chanyu* that forced *Wu* to surrender to *Chanyu*, the King and his state. Therefore, the verb *xiang* should be understood as a causative verb.

Concerning the morphological causative in Chinese, Shi (2002: 181) observes that Old Chinese also employed a morphophonological device to distinguish the causative from other expressions “by shifting a voiced sound into its voiceless counterpart” although these “causative inflections” disappeared quickly (See Shi (2002: chapt 8) for details). As mentioned above, in the Indo-European
languages, it could be inflexion that marks some of the lexical causatives (e.g. *weaken* in English). By comparison, in Old Chinese, it was the combination of “tonal contrasts” (Choonharuangdej 2008: 1) and some other linguistic devices (e.g. phonological, morphological, syntactical factors, and context or discourse clues) (Choonharuangdej 2008: 15; see Downer 1959; Chou 1962; Cikoski 1970; Wang 1982 for elaborate accounts) that distinguished the basic usage and the causative usage of the same verb.

### 4.6 A review of object marker BA (BA-5) and typological work on the Chinese resultative construction

Sun (1996: 59; cf. Peyraube 1988; Li and Thompson 1974b on word order change; Her 1990; Xing 1994) argues that object marker BA was also attested in Middle Chinese. For example:

(4.71) 莫把杭州刺史欺

\[
\text{Mo ba Hangzhou cishi qi}
\]

\text{NEG BA PLACE magistrate deceive}

‘Do not deceive the magistrate of Hangzhou.’

(The Tang Period, Middle Chinese; cited from Sun 1996: 62)

In (4.71), BA is an object marker since it does not make sense if BA was a verb here: ‘do not hold the magistrate of Hangzhou physically (and) deceive him’. I label an object marker BA as BA-5. I use an instance from the BA Corpus to further illustrate this category of BA:

(4.72) (金哥) 把盘子放在供桌上

\[
\text{Jin-ge BA panzi fang zai gongzhuo-shang}
\]

\text{NAME-brother coverb plate put at desk-surface}

‘Brother Jin put the plate on the desk.’

(*Yuan-dai Hua-ben Xuan-ji*, the Yuan Dynasty, Late Chinese)
BA shows features of grammaticalization including categorial shift, semantic bleaching, and phonological reduction (Sun 1996: 78; cf. Ding and Li 1981; Lehmann 1985). BA has gone through a cline of grammaticalization into an object marker. In the process BA loses in autonomy while stronger internal dependencies arise. Object marker BA takes on a more grammatical function by providing the object to the main verb, and this shows increase in dependency (see Traugott 2010 for comments on grammaticalization as reduction and increased dependency; see also Givón 1979; Bybee, Perkins, and Pagliuca 1991; Heine, Claudi, and Hünne Meyer 1991; Lehmann 1995; Haspelmath 2004). In terms of semantic bleaching, object marker BA is obviously quite abstract compared with its original verbal meaning (see more literature on parameters of reduction in relation to grammaticalization: Givón 1979; Bybee, Perkin and Pagliuca 1991; Heine, Claudi and Hünne Meyer 1991; Lehmann 2002; Haspelmath 2004).49

With respect to the emergence of object marker BA, there is a hypothesis of lexical replacement that BA replaced JIANG to become an object marker during Middle Chinese (e.g. Zhu 1957; Her 1990; Li 1958; Bennett 1981; Sun 1996; see also §7.2 of Chapter 7). For example:

(4.73) 心将塘底测

Xin jiang tang-di ce
Heart JIANG pond-bottom test
‘measure the bottom of the pond by sight’
(The Tang Period, Middle Chinese; cited from Sun 1996: 61)

JIANG was initially used as a full verb in Early (and Middle Chinese) and it has disappeared (neither as a lexical verb nor an object marker) in Contemporary Chinese50 (see §4.4 for examples of usage of JIANG from the PKU-CCL corpus). Lexical verbs JIANG and BA were synonymous within the category of ‘take’ verbs

49 In term of phonetic attrition, object marker BA represents low vowel and low rising tone (this is not my focus).
50 However, JIANG is preferred in written texts in Cantonese.
and they behaved similarly as transitive verbs (see §4.3). Thus, Sun (1996: 62) assumes that BA won over JIANG during the competition between JIANG and BA. However, there has not been evidence provided to suggest exactly when and how this substitution occurred. As a consequence, we can hardly prove that JIANG was a precursor of BA. It is more likely that the historical pathway of JIANG encouraged BA to develop towards an object marker.

The BA corpus only provides instances involving BA (without data of JIANG) and thus it is not available for seeking evidence to explore the question of whether/how the substitution relationship between BA and JIANG exists. A potential solution could be to build up another specialized corpus (in comparison with the BA corpus), i.e. the JIANG corpus in the future so that I will be fully able to access sufficient data of JIANG to draw a reliable conclusion in this regard. In a word, more fine-grained research on JIANG would be beyond the scope of my current study, and I would rather leave this question for my further study.

In the current thesis, however, I attempt to seek some evidence of the development of JIANG with respect to BA in order to prove that Sun’s (1996) above claim of substitution could be questionable. Considering the fact that the BA corpus does not provide instances involving JIANG, I searched for the distribution of JIANG from the PKU-CCL corpus with respect to BA in Middle Chinese and Late Chinese. As I will show, there has not been robust evidence provided by previous scholars (e.g. Sun 1996) to prove that substitution occurred around Middle Chinese indeed; instead, I provide evidence that BA had not replaced JIANG as an object marker at least by Late Chinese, as opposed to Sun’s (1996: 61-62) claim that JIANG disappeared as an object marker after Middle Chinese.

During the period of Middle Chinese, JIANG and BA were both attested as object marker. For example, JIANG is an object marker in (4.74) (Sun 1996: 61) (see the same instance (6.47) in §6.1.6) according to my own searching from PKU-CCL:

(4.74) 宫女将《清夜游》曲诵得滚瓜烂熟。

Gong-nv jiang Qing-ye-you qu song de gungua-lanshu
Maid OBJ marker NAME lyrics read DE thoroughly familiar
‘The maid read the lyrics of Qing-ye-you until it is thoroughly familiar (to her).’
BA was also attested as an object marker (BA-5) in Middle Chinese (see also the same instance (4.71)):

(4.75) 莫把杭州刺史欺
莫 ba Hangzhou cishi qi  
NEG BA PLACE magistrate deceive
‘Do not deceive the magistrate of Hangzhou.’
(The Tang Period, Middle Chinese)

In (4.75), BA is an object marker since it does not make sense if BA was a verb here: ‘do not hold the magistrate of Hangzhou physically (and) deceive him’.

Hence, JIANG and BA both existed as object marker during the Middle Chinese. In order to find out whether BA replaced JIANG to become an object marker during Middle Chinese (e.g. Sun 1996; Zhu 1957; Her 1990; Li 1958; Bennett 1981), I attempt to use attested examples in Late Chinese from both the BA corpus (containing instances of BA) and PKU-CCL (by searching for JIANG). My hypothesis is: if BA indeed replaced JIANG to take over the function of object marking in Middle Chinese as suggested by previous work, one should not be able to see object marker JIANG but BA only in Late Chinese.

According to what I have found from the BA corpus, BA was used as an object marker in Late Chinese, as illustrated in (4.76) (see the repeated (6.37) in §6.1.6) as follows:

(4.76) (大郎) 把伤处解开
Da-lang ba shangchu jie kai  
NAME OBJ marker wound tear open
‘Da-lang tore the wound open.’
(Ye-sou Pu-yan, 1767, the Ching Period, Late Chinese)
Apart from instances of object marker BA, however, there were also instances of JIANG as an object marker during Late Chinese. As in (4.77) (see the same instance (4.43) in §4.4), JIANG still takes the function of object marking. In other words, object marker BA and JIANG both continued into Late Chinese, which proves that the object marker JIANG had not been replaced by BA earlier by Middle Chinese.

(4.77) 我 将棍头提高
    Wo  jiang  guntou  ti  gao.
    1SG  OBJ marker  stick  lift  high
    ‘I lift the stick high.’
    (Ji-xiao Xin-shu, the Ming Period, Late Chinese; from the PKU-CCL corpus)

Recall my analyses following instance (4.43) in §4.4; this is an object marking construction, considering semantic extension of semantic extension of post-JIANG N/NP, the function of the post-JIANG N/NP, and the action-result relation. To conclude, Sun’s (1996) claim is likely to be implausible: it was not the fact that BA replaced JIANG as an object marker while JIANG disappeared after Middle Chinese; instead, BA became an alternative way of marking objects while JIANG persisted into Late Chinese.

Now let us review typological work on the Chinese resultative construction. There have been a handful of studies on the resultative construction cross linguistically (e.g. Boas 2003; Goldberg and Jackendoff 2004; Bussmann 1996; Trask 1993; Bybee et al 199451). The resultative generally signals the state which exists as a result of an action. There tend to be constraints on the resultative construction. For instance, resultatives can only be applied to “arguments which potentially undergo a change of state as a result of the action denoted by the verbs” (Goldberg 1995: 188). The Chinese resultative construction also features the action-result relation, and thereby the object NP must be affected in a change caused by the subject-instigator. For another instance, Goldberg (1995: 194) suggests that the

51 According to Bybee et al (1994: 54, 78), the resultative could develop to “Anteriors” and “Perfectives” which are all about past (temporal) categories.
English resultative construction takes an “animate instigator argument”. In addition, Goldberg argues that “the change of state must occur simultaneously with the endpoint of the action denoted by the verb” (p.194). The Chinese resultative construction also sees the result immediately when the action finishes without time delay.

The resultative construction in Chinese has been a topic of frequent discussion (e.g. Li and Thompson 1981; Lu 1977; Thompson 1973; Ross 1990; Tsao 1990; Lin 2004; Li 2008). For example, Li and Thompson (1981: 54) define the Chinese resultative expression as below:

A two-element verb compound is called a resultative verb compound if the second element signals some result of the action or process conveyed by the first element.

The main verb is attached by a “result” (Tai 1984) which is one of the semantic categories\(^ {52} \) in Chinese (see Vendler 1967; Smith 1990; Teng 1986). The resultative element could be verb, adjective, and preposition in a verb compound (V-Resultative Predicate\(^ {53} \). Here, note the resultative in Chinese may not only refer to the resultant state but also the resultant action. As in English, the Chinese resultative generally denotes the resultative state, as exemplified below:

\[(4.78)\] ta ba shu ren chu men

\[3SG \ OBJ \ marker \ book \ throw \ out \ of \ door\]

‘He threw the book out of the door’

\[(4.79)\] ta qie sui le rou

\[3SG \ chop \ minced \ ASP \ meat\]

‘He chopped the meat into small pieces’

However, in some instances, we see the resultant action rather than the resultant state:

\(^{52}\) Semantic categories include State, Activities, Accomplishment and Achievement.

\(^{53}\) The term “resultative predicate” includes all kinds of predicates (such as verbs, adjectives, and prepositions) that are seen in the resultative position.
(4.80) wo ba ta da pao le
1SG OBJ marker 3sg beat escape ASP
‘I beat him and caused him to escape (by beating him)\textsuperscript{'}

In (4.80), \textit{pao} (‘escape’) seems to be a serial verb. If so, (4.80) would be a serial verb construction. However, I consider \textit{pao} to be the resultative element: if ‘I’ didn't beat him, he would not escape. In this sense, \textit{pao} (‘escape’) results from the action \textit{da} (‘beat’). In brief, \textit{pao} in (4.80) denotes the resultant action.

For convenience, I mark the action-result by V-R (where “R” represents all kinds of predicates in a broad sense, including ADJ, PP and V) in the following discussion.

(4.81) 函数了女儿。
Ta jiao xing le nv’er
3SG call awake ASP daughter
‘She called her daughter awake.’
\textit{(Renmin Daily, 1993)}

In (4.81), the resultative verb compound (V-R) \textit{jiao-xing} (‘call-awake’) can be paraphrased as a combination of a verb \textit{jiao} (‘call’) and a resultative element \textit{xing} (‘awake’). There are two sub-events in (4.81): \textit{jiao} (‘call’) denotes the action, while \textit{xing} (‘awake’) denotes the result caused by the action. There is a causative relation held between the action-predicate and the resultative predicate. NP1 \textit{ta} (3SG) is the subject of \textit{jiao} (‘call’). By comparison, NP2 \textit{nv’er} (‘daughter’) is the the object of \textit{jiao} (‘call’) and the subject of \textit{xing} (‘awake’). To take the following (4.82) as another example, \textit{xi} (‘wash’) is the action verb while \textit{ganjing} (‘clean’) is the resultative:

(4.82) 张三 洗干净了衣服。
Zhangsan xi ganjing le yifu
NAME wash clean ASP clothes
‘Zhangsan washed the clothes clean.’
\textit{(Adapted from Li 2008: 6)}
From both instances\(^4\) (4.81) and (4.82), we could see that the resultative in Contemporary Chinese has the form of \([V-R + NP]\) in contrast to its English counterpart with an intervening NP object between an action verb and the resultative in the form of \([V + NP + R]\). For example:

(4.83) He **sneezed** the napkin **off** the table.

(Cited from Goldberg 1995: 9; emphasis added)

Apart from the transitive resultative verb compound as in (4.81) and (4.82), there are intransitive \([V-R]\) in Contemporary Chinese. In (4.84), the resultative verb compound \([V-R]\) *chi-pang* (‘eat fat’) is intransitive and does not take a nominal argument, but \(V\) and \(R\) are still integrated and tightly bound.

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54 For another example, *sha-si* in Chinese means ‘kill-dead’. In Chinese, some verbs (e.g. *sha*) usually merely indicate the intention and performance of an action, and the result is not necessarily expressed by these verbs. In other words, *sha* does not necessarily have an implication of someone’s death, and thus it needs a separate resultative element/satellite (cf. Talmy 2000) to complete the resultative verb compound. In comparison, English is inclined to use the accomplishment and achievement verbs (Vendler 1967; Dowty 1979), e.g., the verb *kill* itself has contained the action and result already, without necessity of an additional expression of describing the state of death. The contrast between English and Chinese resultative could be illustrated below:

**Chinese:** *sha-si* = *sha* (‘to exert the action of killing without anyone’s death guaranteed’) + *si* (‘sb is dead’)

**English** *kill* = ‘to cause sb. to death’

The lexical difference between Chinese *sha* and English *kill* can be further demonstrated by the following tests:

**Chinese:**
(a) Ta sha le yi-zhi ji, keshi mei sha si.
3SG kill ASP one-CL chicken but NEG kill dead

“He killed a chicken, but he didn’t kill it dead.”

**English:**
(b) * He killed a chicken, but he did not kill it dead.

Sentence (a) is absolutely acceptable with two clauses staying compatible in Chinese, demonstrating that the verb *sha* does not necessarily lead to the result of death. Therefore, a satellite (e.g. *si*) is required to achieve the result while realizing an event. In this case, the fulfilment of this event of ‘killing’ must be achieved by the verb-satellite phrase *sha-si* (‘to perform the action of killing + dead’). By contrast, it is weird to have a similar saying in English because *kill* already entails a result of death.
(4.84) 她吃胖了。

Ta chi pang le.
3SG eat fat ASP

‘She ate herself fat.’

(San Jia Xiang, 1959)

Regarding the transitive/intransitive resultative verb compound in Chinese, here we have a summary of four types of the RVC classified by Li (2006), as in Table 4-5:

<table>
<thead>
<tr>
<th>V2</th>
<th>Predicated of subject</th>
<th>Transitive</th>
<th>Intransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>John cut-tired ASPECT tree</td>
<td>John got tired as a result of cutting trees.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Predicated of object</th>
<th>Transitive</th>
<th>Intransitive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V1-V2: tai-kai ‘push-open’</td>
<td>John tai-kai le men.</td>
<td>John push-open ASPECT door</td>
</tr>
<tr>
<td></td>
<td>John pushed the door open.</td>
<td>John pushed the door open.</td>
<td>John’s handkerchief got wet as result of his crying.</td>
</tr>
</tbody>
</table>

Table 4-5: Four types of the Resultative Verb Compounds in Modern Chinese (Li 200655)

In each type of the RVC, V1 and V2 (R) are always adjacent to each other as an integrated predicate, either transitive or intransitive. However, it was not the case to see the integrated [V-R] form in Old Chinese, as will be discussed shortly.

Although the resultative verb compounds occupy the majority of the resultative expressions in Chinese, there are some other resultative patterns such as expressions involving DE, i.e. the V1-DE-V2 pattern (Wu 2004) as in (4.85), and verb-copying constructions involving DE as in (4.86):

(4.85) 我夸得他大笑起来。

Wo kua de ta da xiao qilai
1SG praise DE 3SG loud laugh out

‘I praised him till he laughed out loud.’

55 http://www.ling.ohio-state.edu/~jianguo/papers/cg.pdf
(4.86) 我夸他夸得他大笑起来。

\[
\text{Wo kua ta kua de ta da xiao qilai}
\]
\[1SG\text{ praise 3SG praise DE 3SG loud laugh out}\]

‘I praised him till he laughed out loud.’

In both (4.85) and (4.86), the resultative da xiao qilai (‘laugh out loud’) appears after the action verb kua (‘praise’). Moreover, the resultative part is conjoined by DE which functions to mark the embedded resultative clause. Since DE separates the action verb and the resultative clause, the V-DE-V pattern is also called the “Resultative Complement Construction” (Huang 1988).

In addition, the resultative seems to be more generally defined in Chinese without as many constraints as in English. For example, in English there are idiosyncratic collocations of certain results with certain verbs, as exemplified in Goldberg (1995: 192):

(4.87) He ate himself sick.

* He ate himself ill/nauseous/full.

Also, constraints are imposed on the categories of the resultative predicates in English, and “the type of adjectives that occurs as a resultative is fairly limited” (Goldberg 1995: 195). In this sense, the Chinese resultative construction is more productive allowing for diverse collocations of V and R with relatively fewer restrictions. Any predicate that states the outcome of an action denoted by the verb has an entry into the resultative position.

Let us now look at the resultative expressions in Old Chinese. Shi (2002: 44, 56) argues that resultatives emerged in Early Chinese as exemplified below:

(4.88) 其子死，哭之失明。

\[
\text{Qi zi si ku zhi shi-ming}
\]
\[3^{rd}\text{ POSS son die cry 3^{rd}\text{ (‘it’)} get blind}\]

‘His son died, and he cried (for) it (i.e. his son’s death) blind.’

(Shi Ji, 100 B.C., the Qin-Han and Six Dynasties, Early Chinese)
(Adapted from Shi 2002: 56)

(4.89) (雷电) 果震柏粉碎。

(Leidian) guo zhen bo fensui.

Lightning really shock Cypress break into pieces

‘(Lightning) really shocked the Cypress tree broken into pieces.’

(Shi-shuo Xin-yu, 425, the Qin-Han and Six Dynasties, Early Chinese)

(Adapted from Shi (2002: 49))

To take (4.88) for example, the object of ku (‘cry’), i.e. zhi (‘it’) refers to the subject’s son’s death. The subject participant cried for this pain so sadly that he got blind. Both the action ku (‘cry’) and the resultative element shi-ming (‘get blind’) are attested in this instance.

However, the above instances given by Shi (2002), in my opinion, are not strictly defined resultatives compared with how the resultative constructions are represented as in Contemporary Chinese. In either instance (4.88) or instance (4.89), the action verb and the resultative are separated by the pronominal object zhi (‘it’) in the form of [V-N-R]. In (4.88), for example, the action verb and the resultative predicate are not bound together but set apart by an intervening NP (e.g. zhi ‘3SG’).

Interestingly, the form of the resultative expression in the early stage is very similar to the resultative construction in Modern English such as He sneezed the napkin off the table in which the action and the result are also separated by a nominal object.

As exemplified below, there is evidence of the [V-R-N] resultatives in Middle Chinese, based on data from the PKU-CCL corpus. Note that the [V-R-N] form is the only form of resultatives in the Present-day Chinese, while the [V-N-R] form as discussed earlier is no longer in use in Contemporary Chinese,

56 Here, the pronoun zhi is for sure not a reflexive of the Subject ‘himself’. In Old Chinese, there were two pronouns which were particularly used as reflexives, i.e. zi and ji (‘oneself’) (Aldridge 2008). Therefore, the possibility of zhi being a reflexive can be excluded.

57 Data is collected by me from the PKU-CCL corpus; since my BA corpus only contains instances involving BA and does not contain any data without BA, all non-BA examples in thesis are taken either from previous work or from the existing PKU-CCL corpus.
(4.90) 地动压杀人

Didong ya sha ren

Earthquake press kill people

‘Earthquake pressed and killed people (to death).’

(Xiang-shan Ye-lui, 1060, the Song Period, Middle Chinese; from the PKU-CCL corpus)

The form and meaning of the [V-R NP] Chinese resultative construction can be represented as below:

Form: NP₁ V R NP₂

Meaning: The INSTIGATOR NP₁ takes an ACTION in the manner expressed by V, ending with NP₂ in a RESULT (i.e. a resultant state/action of NP₂) designated by R

Note that the object is generally positioned in the post-verbal position, and there is not an object marker. However, Chinese Expressions involving object marker BA represent new instances in the category of the resultative construction in Old Chinese.

To conclude, this chapter reviewed grammaticalization of BA and typological work on relevant constructions in Chinese. For the former, the present chapter reconstructed the grammaticalization of BA from various studies in the literature. The conventional approaches primarily involve categorial change and take this as the basis of an approach to the diachronic study of BA. This chapter also discussed some issues that have arisen in the previous research on the grammaticalization of BA. Now I summarize the problems which have arisen from the literature on the grammaticalization of BA:
First, in the literature we find evidence that BA has at one time or another been a member of the following categories: full verb, serial verb, preposition, causative marker and object marker. However, the related changes have not been discussed in a systematic manner, let alone the correlations among these variants of BA.

Second, as mentioned above, the development of BA in Old Chinese was considered to be the grammaticalization of BA. In other words, the traditional approach only focused on diachronic change of the single item BA. Nevertheless, the grammaticalization of BA could not arise out of context, and it is not a single item BA that has undergone change in Old Chinese. The constructional model asks questions not only about the grammaticalization of BA but also changes of the entire Expression involving BA in form and meaning. To take a constructional approach, it is the whole Expression involving BA that is subject to grammatical change. This motivates me to provide a constructional account of the diachronic change in Expressions involving BA. In Chapter 6 (§6.1), I will show how new constructions involving BA emerge.

Third, the traditional approach tended to keep form and meaning apart. The previous research can be divided into two separate branches which deal with either decategorization of BA from a verb to an object marker, or the semantic bleaching of BA. However, I believe that this approach could be misleading and needs to be rethought from a constructional perspective. To take a holistic view, change occurs to both form and meaning, and there has not been such constructional research on the interplay between form and meaning in an Expression involving BA.

Considering the issues above, I take a constructional approach to rethink Expressions involving BA in the historical change on a holistic level, in order to solve these problems that have arisen in prior work on the grammaticalization of BA. In Chapter 6 (§6.1), I will show a constructionalization story involving BA, and a set of constructions (as have been reviewed in this chapter) are implicated to form a constructional network. In Chapter 6, I will show how formal clines and semantic change of BA are combined in each small step of diachronic change. This is also a fundamental difference between the constructional approach in this thesis and the
traditional grammaticalization ones. I will elaborate on this issue in some detail in the remainder of this thesis.
CHAPTER 5: METHODOLOGY FOR THE DIACHRONIC RESEARCH

Since the central idea underlying this study is the grammatical change in Expressions involving BA, it is necessary to construct a corpus in which I can access a source of examples. However, there was no such corpus available, so that I was motivated to create the BA Corpus. The BA Corpus was mainly intended for the qualitative study of an Expression involving BA in relation to its grammatical constructionalization. The BA Corpus is based on an online corpus, the “Centre for Chinese Linguistics Peking University Corpus (PKU-CCL)" (the Old Chinese Corpus) which is designed, compiled and maintained by the Department of Chinese Linguistics in the Peking University.

5.1 The BA Corpus as part of the PKU-CCL Corpus

The original PKU-CCL corpus has a high reputation as one of the most notable, commonly used corpora of Mandarin Chinese and has been more and more used in many Mandarin research projects recently (such as Li, Liu and Li 2010) due to its prominence and influence. It contains 477 million words in total, including 307, 317, 060 words of Contemporary Chinese and 171, 367, 413 words of Ancient Chinese.

To be specific, the BA Corpus is a specialised corpus built up based on the ‘Ancient Chinese Sub-corpus’ as part of the PKU-CCL Corpus with my searches restricted to BA. Given the nature of my diachronic research, this BA Corpus

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58 For more information about this corpus online, please visit the URL: http://ccl.pku.edu.cn:8080/ccl_corpus/ (URL accessed on 10 January 2010).
60 Calculated in Chinese characters
61 This is the latest count conducted automatically and updated on 20th July, 2009.
62 To be specific, 1059 texts make the Ancient sub-corpus amount to the total number of words.
enabled me to examine a considerable amount of data of BA distributed in historical Chinese.

5.1.1 Periodization of China’s and Chinese history

Above all, it was necessary to periodize historical Chinese in order to specify the chronological framework which is of crucial relevance in diachronic studies. Before our discussion of periodizing the Chinese language, let us firstly have an overview of China’s history.

5.1.1.1 China’s history

According to existing research of China’s history (e.g. Ebrey 2010; Morton and Lewis 2004; Norman 1988), there is general consensus on periodizing China’s history of civilization into roughly eight chronological phases corresponding to the socio-cultural development.

(1) The Zhou Dynasty (770 B.C. ~ 221 B.C.):
This was the first historical period made up of the Spring and Autumn Period, and the Warring State Period when literary texts start to emerge, and when “the intellectual foundations of Chinese civilization were established” (Ebrey 2010: 38), although it was said by a number of scholars that there was a pre-historical “Neolithic Period” (Ebrey 2010: 10), or the “Formative Period” (Morton and Lewis 2004: 22) before this time.

(2) The Qin, Han & Six Dynasties (or, The Age of division) (220 B.C. ~ 581 A.D.)
China was historically unified for the first time in the Qin Dynasty, with the “creation of the Bureaucratic Empire” (Embrey 2010: 60), together with formation and entrenchment of centralized administration. Meanwhile, the geographic domain of China was expanded. This unification was kept until the end of the Han Dynasty. During the Six Dynasties, China had been suffering from continual division, when social and political shaking resulted from rivalry forces and “alien rulers” (Ebrey 2010: 86). Also, this period saw introduction of “Buddhism” to China and local growth of “aristocracy” (Ebrey 2010: 86).
(3) The Sui & Tang Dynasty (581 ~ 907)
Starting from the Sui Dynasty, China achieved a stable and long-lived unification again and entered a new era when a centralized government was resumed. Until the Tang Dynasty, China had already “developed into a cosmopolitan empire” (Ebrey 2010: 108). Under the Tang, China saw cultural vitality (in terms of religion and arts particularly) which was characterized by remarkable economic growth, and more frequent international exchange.

(4) The Five Dynasties (907 ~ 960)
In the Five Dynasties, China “entered its Modern Times” (Morton and Lewis 2004: 98), although this was politically a period of wars undergoing cyclic unity and division.

(5) The Song Dynasty (960 ~ 1279)
During the Song Dynasty, economy saw constant rise and development in an even faster speed, in terms of both agriculture and industry. Regarding the socio-cultural situation, on the one hand, Confucianism was promoted by the governors; on the other hand, dynamic migration contributed to language contact, and thereby promoting language change.

(6) The Yuan Dynasty (1279~1368)
China was conquered by Mongol minorities, which therefore exerted alien influences on the whole country. Economic policy boosted the speed of development, while performing arts such as drama and opera were very well developed during this period (cf. Ebrey 2010: 187).

(7) The Ming Dynasty (1368~1644)
This was another dynasty founded by native Chinese people. The country in the early Ming saw “the high point of traditional Chinese civilization” (Ebrey 2010: 220), while in the later stages collapsed in every aspect mainly due to corruption of the political system.

(8) The Ching Dynasty (1644~1911)
Similar to Ming, China in the early stages of Ching was relatively prosperous with excellent leadership, whereas in the late period it suffered from severe social and political decline and hardship. It is worth noting that cruel policy of culture constrained the freedom of the intellectuals to publish and advocate their arguments pertaining to the society.
Let us turn to the periodization of Chinese language. In §5.1.1.2 I start with problems of periodization in existing literature.

5.1.1.2 Problems in existing periodization of the Chinese language

Periodization of Chinese had been ignored in traditional Chinese research (e.g. Tai and Chan 1998), and only started since Bernhard Karlgren’s (1915-1936) work which addressed the history of phonology only.

Unlike the general consensus on periodization of China’s history as discussed in the previous section, it seems more complicated to divide the history of the Chinese language in a systematic way. Since the evolution of the Chinese language correlates with China’s history, the general method the Chinese linguists use is to group a couple of dynasties together to constitute a period in line with fundamental changes of Chinese observed in literary texts.

With regard to the periodization of Chinese based on linguistic development, there have been fierce debates pertaining to how individual periods of China as exhibited in §5.1.1.1 should be grouped and thus how division should be made.

One centre of the debates is the usage of terminology such as “Archaic Chinese”, “Ancient Chinese”, “Old Chinese”, “Medieval” (cf. Ting 1996: 141-142; Norman 1988: 23) and different approaches to further sub-division. Nonetheless, it is problematic that these terms are even not defined according to the same criteria by different scholars. Therefore, the value of sticking to these terms is in much doubt, and actually these terms may still bear further scrutiny.

For example, Wang (1958: 32-35) posits three periods including Early Old Chinese (before 3rd A.D.), Middle Old Chinese (4th – 12th A.D.), and Modern Chinese (1919 – the Present). However, the first period is defined by phonological

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63 Another point to bear in mind is that there has not been a precisely systematic set of criteria available yet from the existing literature for me to adhere to particularly for grammatical periodization of historical Chinese. By comparison, English could be periodized by Old English, Middle English and Modern English in that morphological inflectional changes coincide with phonological and grammatical changes (cf. Jespersen 1982, Baugh and Cable 1993). For Chinese, however, there is not such a parameter (e.g. inflectional changes) to indicate parallel changes of phonology, lexicon, and grammar which could be compatibly incorporated into one system of periodization.
and grammatical criteria, the second period by grammatical criterion solely, and the third by a mixture of lexicon and grammar. Wang’s classification which is not based on consistent criteria results from an inherent problem underlying periodization of Chinese, i.e. phonological, grammatical and lexical changes in Chinese did not necessarily take place simultaneously for the lack of inflection by which changes can be easily identified.

Therefore, it seems impractical to establish a unified system of periodization which could accommodate all three dimensions in Chinese. Instead, there tends to be separate systems of criteria for periodizing Chinese in terms of phonology, lexicon and grammar. As a matter of fact, many scholars did so in practice, proposing periodization of Chinese phonology, vocabulary and grammar respectively, which lead to a complicated situation (e.g. Ting 1996: 141-142; Peyraube 1996: 164; Tai and Chan 1998: 228; and see further Ho 1981; Pulleyblank 1984 for more general discussion).

My primary concern is the grammatical (not phonological or lexical) periodization which is of most relevance to my topic in this thesis. However, even for the periodization solely for the development of Chinese grammar, linguists of many different theoretical leanings posit distinct views depending on different criteria (e.g. Wang 1958; Pan 1982; Lü Shuxiang 1985; Norman 1988; Ohta 1988). I will concentrate on how they differ in their grammatical periodization as below:

Pan (1982) proposes four periods including Shanggu (Early Old Chinese), Zhonggu (Middle Old Chinese), Jindai (Modern Chinese), and Xiandai (Contemporary Chinese), which is basically the same with Wang’s (1958) position, apart from a contemporary stage advanced by Pan for the first time.

Lü (1985) considerably simplifies the history of Chinese into only two periods: Old Chinese, and Pre-Modern Chinese. However, either period covers a considerable length of history and might not be able to indicate significant grammatical development in much detail at all.

Norman (1988) suggests four periods, i.e. the Preclassical Period (before the 5th B.C.), the Classical Period (5th B.C. – 200 A.D.), the Postclassical Period (200 A.D.-1920), and the Modern (1920 – the Present). We can see that Norman’s (1988) first two periods of the Preclassical and the Classical periods could be combined as
Wang’s (1958) first single period of Early Old Chinese. Nevertheless, the potential drawback of Norman’s periodization is that, according to Tai and Chan (1998: 231), the long Postclassical Period actually encompasses a number of stages which are crucial for grammatical changes and thus should be further subdivided.

In comparison, Peyraube (1988) differs significantly from the others, proposing five periods in total: Archaic Chinese (14th – 3rd B.C.), Pre-Medieval Chinese (2nd B.C. – 3rd A.D.), Medieval Chinese (3rd – 13th), Pre-Modern Chinese (13th – 14th), and Modern Chinese (15th – 18th).

Likewise, Ohta (1988) argues for five periods which are similar to Peyraube’s (1988) but are presented under the name of different terms, that is, Early Old Chinese, Middle Old Chinese, Late Old Chinese, Pre-Modern Chinese, and Modern Chinese. Particularly, Ohta (1988) emphasizes that the second period (Middle Old Chinese) is an important one featuring great development of the written vernacular.

Note that each period presented usually contains a couple of sub-periods, which makes the grammatical periodization more complicated. Worse still, there is a fatal deficiency that each classification as shown above does not spell out explicit grammatical criteria for why the specific division is made in a certain way. Thus, it is even harder to determine what the basis is for their disagreement. In other words, we have no means of judging which version is the most reliable approach to get the sense of Chinese periodization and is particularly suitable for me to refer to.

5.1.2 My periodization and criteria

In the light of above limitations regarding grammatical periodization, I suggest another method rather than selecting one of the periodizations discussed above (or, justifying those unsettled ones in fierce debate). Hence, I would like to propose a new set of criteria and accordingly to periodize the Chinese language into three stages in total, as sketched below.

<1>. Early Stage:
(1) The Zhou Dynasty (770 B.C. ~ 221 B.C.)
The Qin, Han and the Six Dynasties (220 B.C. ~ 581 A.D.)

<2>. Middle Stage:
(3) The Sui & Tang Dynasty (581 ~ 907)
(4) The Five Dynasties (907 ~ 960)
(5) The Song Dynasty (960 ~ 1279)

<3>. Late Stage:
(6) The Yuan Dynasty (1279~1368)
(7) The Ming Dynasty (1368~1644)
(8) The Ching Dynasty (1644~1911)

I will propose the linguistic criteria for the above periodization of mine in the following section §5.1.2.1.

5.1.2.1 Linguistic criteria for my periodization

The chief grammatical differences among three historical stages, according to my periodization, could be subsumed under the following three headings (where applicable):
   (i) Nominal system;
   (ii) Predicative system;
   (iii) Word-order change.

In each respect, I particularly focus on those prominent features which are especially important for the development of Chinese and significant for grammatical operations, and the periods of their emergence or changes which could be viewed as milestones for Chinese grammar.

   In the following three sections, I illustrate and exemplify what crucial grammatical changes occurred in each period and how these important features help to distinguish among three historical stages.
5.1.2.2 The Early Stage

The first period witnesses the formation of the Chinese language. For the first period in my grammatical periodization, I agree to a large extent with Tai and Chan’s (1998: 233) position that the first two periods in China’s history should be grouped into one single “Classical Chinese Period”, starting from the Zhou Period to the end of the Six Dynasties. Particularly, the Six Dynasties is argued to be a crucial stage for emergence of Chinese grammar by many linguists to be a “transition” stage (Tai and Chan 1998: 233) in the development of Chinese when classifiers (cf. Liu 1965), nominal prefixes and suffixes (cf. Norman 1988) abound. In the following part, I give a general idea of what these features were and explain why they marked the Early Stage.

Nominal system:

I mainly examine the following features of the nominal system: (A) classifiers, (B) prefixes and suffixes, and (C) pronominal forms and demonstratives. These features are characteristic of the grammatical operations in the Chinese language.

(A) Emergence of Classifiers:

As is well known, Chinese is a language featuring the grammatical class of classifiers (or “measures”, Chao 1968: 584). One of the fundamental changes that occurred in the Early Stage was the emergence and preliminary development of classifiers, for the following three reasons:

First, there was evidence that a classifier made its appearance in the literature in the Early Stage. It was argued that a classifier was rarely found before the Han Dynasty (Norman 1988: 115). In the period before the category of classifier was established, a noun was simply quantified by a numeral, such as san-ren ‘three-persons’ (Shi 2002: 148), as in the case of English. However, classifiers began to appear since the late Early Stage after the Han period, for example:
In (5.1), the classifier *pi* was used in collaboration with numeral *san* (‘three’) to form a corresponding category of numerative including a numeral and a classifier. However, one can also note that the numerative *san-pi* at this early stage followed the noun *wenjin* (‘beautiful silk’), in contrast with the norm of numeratives preceding nouns in the later periods.

Second, classifiers in the Early Stage had already displayed a great deal of variety, such as *zhi* and *ge*.

The example (5.2) reveals the close relationship between the classifier *zhi* and the noun *niao* (‘bird’), which was identified in the early time.

*Ge* was originally a noun denoting ‘bamboo-stalk’ (Norman 1988: 115), and then it gradually tended to serve as a classifier as in (5.3). *Ge* remains to be the most common classifier in Contemporary Chinese.
Thirdly, the classifiers which appeared since the Early Stage mostly became an obligatory practice in Chinese (Wang 1957), since most of the classifiers observed in the Early Stage have been retained in Chinese grammar. As advocated by Norman (1988: 115; cf. Liu 1956), “a good proportion of the individual measures used today can be found in Nanbeichao sources”, and “Nanbeichao” was just part of the Six Dynasties in the last period of the Early Stage.

(B) Prefixes and suffixes:

A number of common prefixes and suffixes in Modern Chinese (like prefix a and suffix zi) were already attested in the Early Stage. For example:

(5.4) 阿母
a-mu

‘mother’

(Kongque Dongnan Fei, 220)

Prefix a does not have lexical contents, and it was used merely to denote a nickname and to indicate the intimate relationship.

(5.5) 瞳子不能掩其恶
Mou-zi bu neng yan qi e

Pupil of the eyes NEG AUX hide 3rd POSS evil

‘One’s pupil of his eyes could not hide his evil.’

(Meng Zi, 289)

As in (5.5), suffix zi also originated from the Early Stage. As a polysemous lexeme, noun zi denotes ‘son, child’. Accordingly, the suffix zi which was derived from noun was generally used to refer to small/tiny things, such as ‘pupil of the eyes’.

(C) Pronominal forms and Demonstratives:

However, this does not affect the fact that Chinese is generally an isolating language.
The Early Stage possessed a basic set of pronouns including the 1\textsuperscript{st}, 2\textsuperscript{nd}, and 3\textsuperscript{rd} singular and plural pronouns, some of which have remained in use down to Modern Chinese. Nonetheless, the Early Stage differed considerably from the later periods in that there were “case” (Norman 1988: 117) distinctions in pronominal forms. To take 1\textsuperscript{st} singular pronoun for example, 
 \textit{wu} and \textit{wo} corresponded to the subjective and objective case respectively, as shown in (5.6) and (5.7):

\textbf{Wu: objective case}

\textit{wu\ }wen\ zhi
\textit{1SG\ hear\ 3SG}
‘I heard it’
\textit{(Lun Heng, 86 A.D.)}

\textbf{Wo: subjective case}

\textit{xian-sha\ wo}
\textit{kill\ 1SG}
‘to kill me’
\textit{(Qian Han Ji, 209 B.C.)}

In addition, demonstratives including \textit{zhe} (‘this/these’) and \textit{na} (‘that/those’) were also new elements in the Early Stage. Since these were of little relevance to the division of historical stages, they are not my focus here.

\textbf{Predicative system:}

The Early Stage gave the impression of bringing some very fundamental changes to the Chinese predicative system, with emergence of: (A) the aspectual system, (B) verbal modality, (C) copular verb \textit{shi}, and (D) the passive expressions, which laid the foundation for the Chinese predicative system.
(A) Emergence of Aspectual system:
In the early periods before the aspectual system was properly established, the perfective was generally indicated by preverbal adverbs such as ji (‘already’) or post-verbal particles such as yi (‘done’) (cf. Norman 1988: 123). For example:

(5.8) 天子既绝
Tianzi ji jue
King ASP adverb die
‘The king (has) died.’
(Lv-shi Chunqiu, 239 B.C)

(5.9) 退已
Tui yi
Leave ASP particle
‘(Sb) (has) left.’
(Zhuangzi, 286 B.C)

In (5.8), the adverb ji functions to mark the perfective aspect in a pre-verbal position. In (5.9), the particle yi marks the perfective aspect after the verb. In contrast, particular aspect markers such as le and guo are used for perfective aspect marking in Contemporary Chinese.

(B) Emergence of Verbal Modality: the potential

In the Early Stage, there emerged an expression of potentiality “by suffixing de” (Norman 1988: 124) while de was originally verbal ‘obtain’. The usage of suffix de in relation to potential can be represented as below:
Therefore, the potentiality seemed to be the first case of modality. As will be shown in §5.1.2.3, the expression of modality began to become rich alongside the emergence of more auxiliary verbs (e.g. volitional auxiliaries) in the Middle Stage.

(C) Emergence of copular verb shi

Before the emergence of shi (‘be’), an initially typical copular sentence in Chinese could be represented in the form of ‘X-Y-ye’ (Norman 1988: 125) which could be translated as ‘X is Y’, while ye is a sentential particle to finalize and mark a copular sentence. In (5.11), two NPs ren (‘humanity’) and ren-xin (‘human-heart’) appear in parallel to constitute a copular sentence without any copular verb.

(5.11) 仁人心 也

Ren ren-xin ye

Humanity human-heart particle

‘Humanity is the human heart.’

(Mengzi, 289 B.C)

Since the Han period in the Early Stage, shi (‘be’) made its appearance and has continued to be a copular marker throughout the succeeding centuries down to the present. Example (5.12) is taken from Norman (1988: 125):

65 The instance was cited from Norman (1988: 124) following his discussion, but the gloss and translations are mine.
(5.12) 其是吾弟欤

Qi shi wu di yu
3SG BE 1SG younger brother INTERROGATIVE
‘Is he my younger brother?’

(Shi Ji, 91B.C)

In comparison with the previous example (5.11), there exists a particular copular verb shi in (5.12) connecting two NPs qi (‘he’) and wu di (‘my younger brother’).

(D) Emergence of the passive expressions involving BEI:

In the late Early Stage, BEI replaced an older JIAN (Wang 1957) to function as a new passive marker, in a similar way in Modern Chinese. A comparison between the passive markers JIAN and BEI is provided in (5.13) and (5.14):

(5.13) 见诛

jian zhu
PASSIVE kill
‘to be killed’

(Shi Ji, 91 B.C)

(5.14) 扬骏被诛

Yang Jun bei zhu
NAME PASSIVE kill
‘Yang Jun was killed.’

(Sou Shen Ji, 336)

Both examples share a similarity that a passive marker (either JIAN or BEI) precedes the same predicate zhu (‘kill’). The oldest passive marker JIAN as shown by the example (5.13) was gradually lost in the contest with BEI as in (5.14).
Summary of the Early Stage:

To summarize, the Early Stage contributed to the formation of Chinese grammar in the following ways:

*In terms of contribution to the nominal system:*

(A) The Early Stage saw the emergence of the grammatical category of classifiers and numeratives which tended to appear *after* the nouns;

(B) Some of the most common prefixes and suffixes in Contemporary Chinese started to be seen already in this early period;

(C) Pronominal forms were initially established with “case” distinctions which would disappear in the later stages.

*In terms of contribution to the predicative system:*

(A) The Early Stage lacked particular aspect markers, but there were some adverbs (e.g. *ji*) and particles (e.g. *yi*) which functioned to mark the perfective.

(B) There emerged the verbal modality of the potential by suffixing *de*.

(C) There also emerged the copular verb *shi* (“be”) which continued to be used over time.

(D) The passive expressions involving *be* appeared.

All above features sufficed to conclude that the Early Stage played an essential role in forming the foundations of the Chinese grammar.

5.1.2.3 The Middle Stage

The Middle Stage in my periodization witnesses further development of the Chinese language. According to Tai and Chan (1998: 233), subsequent dynasties after the “Classical Chinese Period” all fall into the period of “Pre-Modern Chinese” lasting from Tang down to the present. I am not in favour of this, and it seems much better for this fairly long period to be further split into several sub-periods for the convenience of analysis, as I argue below.
It is advocated by many (e.g. Mei 1994; Peyraube 1994) that the foundations of Modern Chinese grammar came into existence particularly during the Tang Dynasty and the Song Dynasty. For instance, Tai and Chan (1998: 233; cf. Mei 1994) point out that “Tang and Song constitute another crucial period of grammatical changes” with the development of “vernacular language” (Tai and Chan 1998: 230) which can be exemplified by works such as Zu Tang Ji (952 A.D.) and Dunhuang Bianwen (9th – 10th). Likewise, Mei (1994) insists that Tang and Song share many similarities in terms of grammar, for which the grammar in Tang and Song is called the “grammar of Tang-Song common language” (Tai and Chan 1998: 237). More importantly and relevantly, this whole period saw the “grammaticalization of verbs” in a variety of constructions such as “the disposal construction” (Tai and Chan 1998: 237; cf. Peyraube 1994), accompanied by word-order change (e.g. post-verbal prepositional phrases are replaced by pre-verbal prepositional phrases, which is the norm for the Contemporary Chinese language).

To summarize, the Song Dynasty is a period of change when Chinese grammar became more standardized. All of the fundamental changes outlined in this section paved the way for the Chinese language to be highly developed during this period. Hence, it would be best to single out both dynasties including Tang and Song for an exclusive analysis. Therefore, I argue for subdividing the “Pre-Modern Chinese” period in Tai and Chan’s terms into two stages, i.e. Tang and Song dynasties stand out together as a whole to form an intermediate “Middle Stage” for the purpose of diachronic analysis. Next, I specify the features which differentiate this “Middle Stage”:

Nominal system:

(A) Development of Classifiers: word-order change and stabilization

66 An Expression involving BA is often titled as a “disposal construction”, and thus this period is particularly important for evolution of Expressions involving BA as my research topic.
In contrast with the case in the Early Stage, the numerative in the Middle Stage shifted to the front of a noun. This new position of PP has been fixed as the norm since then. For example:

(5.15) 三匹帛
san-pi bo
three-CL cloth
‘three pieces of cloth’

(Jin Shu, 648)

(5.16) 两个和尚
liang-ge heshang
two-CL monk
‘two monks’

(Zu Tang Ji, 952)

In (5.15) and (5.16), san-pi and liang-ge are numeratives which appear BEFORE the nouns bo (‘cloth’) and heshang (‘monk’). Such a positional change of PP was significant for word-order change in the Middle Stage, as will be further argued in this section.

(B) Development of Prefixes and suffixes: Increase in number and varieties

Compared with the Early Stage, more prefixes and suffixes developed during the Middle Stage. I take the prefix lao and suffixes tou and er as example. Prefix lao originally meant ‘old’ and it emerged as a prefix in the Song Dynasty in the Middle Stage, as in (5.17):

(5.17) 老虎无齿
Lao-hu wu chi
Tiger no teeth
‘A tiger had no teeth.’
As shown in (5.18), suffix *tou* which originally meant ‘head’ made its appearance as a suffix in the Tang Dynasty in the Middle Stage as well.

(5.18) 窃据石头

```
Qie   ju   shi-tou
Secretly obtain stone
‘to secretly obtain a stone’
```

*(Liang Shi, 636)*

Another new suffix was *er* (as in (5.19)) which derives from the original noun *er* (‘son’):

(5.19) 细雨鱼儿出

```
Xi-yu   xu-er   chu
Drizzle fish appear
‘(When it) drizzled, the fish appeared.’
```

*(Du Fu Shi, 770)*

The vast majority of all these prefixes and suffixes which appeared in the Early or the Middle Stage have continued to be used in the Present-day Mandarin.

**(C) Development of Pronominal forms: Disappearance of “case” distinctions**

The distinction between subjective and objective case in the Early Stage disappeared in the Middle Stage. Subjective case *wu* (‘I’) vanished (Gurevich 1974) so there was only one *wo* left. In other words, there were no distinctions between subjective and objective case any more, so that *wo* (‘me’) took over the function of *wu* as well. For example:
(5.20) **我三十成名**

Wo san-shi cheng-ming
1SG thirty make one’s name
‘I made my name in my thirties.’
*(Dunhuang Bianwen Ji, 907)*

**Predicative system:**

**(A) Development of the Aspectual System: le, zhe, and guo came into use**

In the Middle Stage, verbal suffixes *le* (perfective), *zhe* (progressive) and *guo* (experiential) (Norman 1988: 123-124; cf. Zhao 1979) arose and they still remain as three dominant aspect markers in Contemporary Mandarin. For example:

(5.21) **韦吃果子了**

Wei chi guozi le
NAME eat fruit ASP
‘Wei ate the fruit.’
*(Wudeng Huiyuan, 1253)*

The emergence of these particular aspect markers such as *le* replaced the old aspectual terms such as the adverb *ji* and the particle *yi*. The aspectual system had been set up by this Middle Stage (Norman 1988: 123).

**(B) Development of auxiliary verbs marking modality**

In the Middle Stage, there emerged a number of auxiliary verbs such as *yao* (‘want to’) (Ohta 1958: 200) and *dang* (‘must’) (Gurevich 1974). Therefore, the expression of modality extended its scope beyond the potential in the Early Stage to ‘volition’, ‘obligation’, and ‘permission’. For example:

*Yao* (volition: ‘want to’):
(5.22) 吾要识汝
   Wu yao shi ru.
   1SG want to know 2SG
   ‘I want to know you.’
   (Zu Tang Ji, 952)

_Dang_ (obligation: ‘must’):

(5.23) 当净其心
   Dang jing qi xin
   must purify POSS mind
   ‘(One) must purify his mind.’
   (Dunhuang Bianwen Ji, 907)

The Middle Stage was also noted for increases to the amount of Chinese vocabulary, particularly including extensive adverbs and prepositions (Norman 1988: 127; Li 1958). For example, _dou_ (‘all; altogether; completely’) appeared as an adverb of degree. In the trend of “a great increase in the number of prepositions” (Norman 1988: 121), new prepositions like _ZAI_ (‘at’) replaced an older form _YU_ with higher frequency, as will be exemplified in the following discussion.

(C) The causative expressions:

In the Middle Stage, causative expressions began to appear with two major representations: On the one hand, resultatives came into use to follow a main predicate (Norman 1988: 129). For example:

(5.24) 匈奴冒顿攻破之
   Xiongnu Modu gong po zhi
   NAME of an ancient Chinese minority NAME attack be broken 3SG
   ‘Modu, the leader of Xiongnu, attacked it (a town) broken / succeeded in seizing it.’
   (Zizhi Tongjian, 959)
As shown in (5.24), the adjective po (‘be broken’) follows the main predicate gong (‘attack’) to indicate the result. Alternatively, gong-po (‘attack-broken’) as a whole could be regarded as a causative verbal compound. On the other hand, the Middle Stage also observed the presence of particular causative verbs in analogy to English make, such as shi and ling. To take shi as an example as in (5.25):

\[(5.25) \text{使童子问} \]

\[
\text{shi} \quad \text{tongzi} \quad \text{wen} \\
\text{make} \quad \text{child} \quad \text{ask}
\]

‘to make a child ask’

\[(\text{Chanlin Sengbao Zhuan}, \ 1128)\]

Considering the emergence of such causative expressions, it was very likely for the Middle Stage to create a linguistic environment for BA to take the causative function around this time. Hence, there are a number of linguistic developments in the Middle Stage that suggest it should be treated as a separate ‘period’ in the history of Chinese.

**Word-order change:**

There were two main word-order changes which concerned classifiers and prepositional phrases. Since I have discussed the position of classifiers earlier in this chapter (recall that classifiers tended to move to be preverbal in the Middle Stage, which was one of the word-order changes that took place during this time), I concentrate below on prepositional phrases:

**Position of Prepositional Phrase (PP):**

In the Middle Stage, there was a remarkable word-order change that occurred to the prepositional phrase: to shift from the post-verbal position to the preverbal position. During the previous Early Stage, a PP is positioned after the main verb in general. Here, I cite an instance from Sun (1996: 25):
In (5.26), PP *yu tang shang* (‘in the hall’) follows the predicate *zuo* (‘sit’). However, the post-verbal PP which used to prevail in the Early Stage was seldom found in the Middle Stage. Instead, the preverbal usage of *yu* became the dominant type. In (5.27), PP *yu Luo-shui zhong* (‘in the Luo River’) with the same preposition *yu* moves from the post-verbal position to precede the predicate *huo* (‘obtain’).

As Sun (1996: 24) observed, the postpositional PP “became extremely rare in the texts during and after the time of the Han dynasties”. Alternatively, such a positional shift was said to have taken place by the Six Dynasties at the latest (Norman 1988: 31; Gurevich 1974). No matter when a positional shift occurred (the Han period or the Six Dynasties), the positional shift of PP took place within the span of the Middle Stage in my periodization. More importantly, the consequence of this positional reverse with a preverbal PP has remained considerably stable over time until Contemporary Chinese. Therefore, the Middle Stage clearly marks a significant period of change to the position of PPs in Mandarin Chinese.

However, this was far from the end of the story of PP in the Middle Stage: apart from positional change, there emerged new prepositions for introducing the object of place/location. For instance, another preposition *zai* (‘at’) (cf. Peyraube 1994) started to replace *yu* with the same function in exactly the same preverbal position (Norman 1988: 130), as in (5.28):
In (5.28), the reversed location of ZAI PP precedes the main predicate dengdai (‘wait’) to introduce the place ting-shang (‘hall-up’).

**Summary of the Middle Stage:**

To summarize, on the basis of the linguistic features in the Early Stage, the Middle Stage was noted for the following changes:

*In terms of the nominal system:*

  (A) Classifiers underwent word-order change which then stabilized: N+CL > CL+N.
  (B) Prefixes and suffixes increased in both number and varieties;
  (C) Pronominal forms developed with disappearance of “case” distinctions (subjective, objective).

*In terms of the predicative system:*

  (A) An aspectual system was established with emergence of particular aspect markers (e.g. le) which have remained in Contemporary Chinese;
  (B) New expressions of modality developed as a result of the emergence of a wide range of auxiliary verbs;
  (C) The causative expressions diversified with the emergence of causative verbs and resultatives.

*In terms of word-order change:*
The Middle Stage saw some significant word-order changes, including the positional change of Classifiers and Prepositional Phrases.

For all above reasons, the Middle Stage was markedly distinctive from the Early Stage and the succeeding Late Stage.

5.1.2.4 The Late Stage

The remaining dynasties after Middle Stages constitute the Late Stage, including the Yuan, Ming and Ching periods. My way of grouping Ming and Ching together accords with Norman’s (1988: 23) periodizing Chinese. Actually, all three dynasties within this period also shared similarities seeing the development of vernacular ("spoken Chinese" in Tai and Chan’s (1998: 230) term).

In the Late Stage, the Chinese language underwent further development including refinement and expansion of some linguistic features. Here, I take the passive expressions in the Late Stage by way of example:

The passive expressions:

In the Late Stage, the passive expressions continued to develop with expansion of passive markers without fundamental structural changes. Apart from BEI, the Late Stage started to employ more passive markers such as JIAO and RANG (Ohta 1958: 247) which competed with BEI. As in (5.29), RANG is such a passive marker, and it precedes the noun ta (3SG) which is the agent.

(5.29) 让他打入天门

    Rang    ta    da    ru    tian-men
    PASSIVE 3SG beat into heaven-gate

    ‘(Sb) was beaten by him into the heaven-gate.’

    (Xi You Ji, 1580)

I have stated above the criteria for periodizing the Chinese language in this thesis. In the following §5.1.3, I introduce text types and varieties in the BA Corpus.
5.1.3 Text types and varieties in the BA Corpus

The BA Corpus contains a variety of historical texts illustrated in Table 5-1:

<table>
<thead>
<tr>
<th>Text Type</th>
<th>Example Text</th>
<th>Number of Texts of this Type</th>
<th>Total Word Count for texts of this type (genre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General fiction</td>
<td><em>Hong Lou Meng</em></td>
<td>13</td>
<td>5,186,501</td>
</tr>
<tr>
<td>2. Legend fiction</td>
<td><em>Shui-hu Quan-zhuang</em></td>
<td>4</td>
<td>4,541,634</td>
</tr>
<tr>
<td>3. Detective fiction</td>
<td><em>Bao-gong An</em></td>
<td>5</td>
<td>1,986,607</td>
</tr>
<tr>
<td>4. Adventure fiction</td>
<td><em>Jing-hua Yuan</em></td>
<td>2</td>
<td>422,847</td>
</tr>
<tr>
<td>5. Mystery fiction</td>
<td><em>Qian-nv li-hun</em></td>
<td>7</td>
<td>2,500,905</td>
</tr>
<tr>
<td>6. Romance fiction</td>
<td><em>Xing-shi Yinyuan Zhan</em></td>
<td>1</td>
<td>768,822</td>
</tr>
<tr>
<td>7. Wars and history fiction</td>
<td><em>Nan-chao Mi-shi</em></td>
<td>3</td>
<td>282,290</td>
</tr>
<tr>
<td><strong>Fictional subtotal</strong></td>
<td>——</td>
<td>35</td>
<td><strong>15,689,606</strong></td>
</tr>
<tr>
<td>8. Science and academic texts</td>
<td><em>Lun Heng</em></td>
<td>9</td>
<td>5,580,381</td>
</tr>
<tr>
<td>9. Skills, business and hobbies</td>
<td><em>Wenming xiao-shi</em></td>
<td>4</td>
<td>504,303</td>
</tr>
<tr>
<td>10. Miscellaneous (Official reports and documents)</td>
<td><em>San-guo Zhi</em></td>
<td>5</td>
<td>937,746</td>
</tr>
<tr>
<td>11. News reportage</td>
<td><em>Xi-chao Xin-yu</em></td>
<td>5</td>
<td>259,326</td>
</tr>
<tr>
<td>12. News reviews</td>
<td><em>Xiang-shan Ye-lu</em></td>
<td>3</td>
<td>8,914,832</td>
</tr>
<tr>
<td>13. Popular lore</td>
<td><em>Ji-gong Quan-zhuang</em></td>
<td>9</td>
<td>3,250,027</td>
</tr>
<tr>
<td>14. Biography and essays</td>
<td><em>Mengzi</em></td>
<td>8</td>
<td>2,738,497</td>
</tr>
<tr>
<td>15. Poetry</td>
<td><em>Tang Shi San-bai Shou</em></td>
<td>12</td>
<td>244,029</td>
</tr>
<tr>
<td>16. Drama</td>
<td><em>Xi-xiang Ji Zaju</em></td>
<td>3</td>
<td>75,567</td>
</tr>
<tr>
<td>17. Religion</td>
<td><em>Zu-tang Ji</em></td>
<td>12</td>
<td>3,844,906</td>
</tr>
<tr>
<td><strong>Non-fictional subtotal</strong></td>
<td>——</td>
<td>70</td>
<td><strong>26,349,614</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>——</td>
<td>105</td>
<td><strong>42,039,220</strong></td>
</tr>
</tbody>
</table>

Table 5-1: Text Types in the BA Corpus
As presented in the Table 5-1, I classified two broad types of text material, i.e. the fictional texts and the non-fictional texts. Out of a total of 105 texts in the entire BA Corpus, there are 35 fictional texts of 15,689,606 words, while there are 70 non-fictional texts of 26,349,614 words. In terms of both the number of texts and total word counts, the non-fictional occupies a bigger proportion than (approximately twice as many as) the fictional. In addition, both fiction and non-fiction cover a large spectrum of subjects.

To take into account the extra-linguistic variables, one methodological concern relates to varieties of language involved in the BA Corpus. Varieties of language use generally link to geographical, sociological, or genre factors (cf. Aston and Burnard 1998). Tokens of BA are collected out of texts of various sources, and thus are subject to all potential problems resulting from variation between dialects, registers and styles. It is likely that these textual and stylistic varieties lead to structural variations, which are not my current foci at this moment.

In the following section §5.2, I discuss the creation of the BA Corpus:

5.2 Creating the BA Corpus

The BA Corpus provided me with a large amount of data involving BA in Old Chinese, which will be used for my diachronic analysis mainly in Chapter 6. In this section, I briefly outline the procedures for collecting data and establishing the BA Corpus.

The PKU-CCL corpus website readily provides a list of all the texts in chronological sequence, although there are some texts whose precise dates of composition are subject to academic debate. For each text on the list, the first step of processing was to search for occurrence of BA via command input of the string “把 path: [text name]”. Accordingly, the texts which did not contain BA were removed straightaway from the list. By contrast, those which contained BA were selected from the original corpus to form my BA Corpus. In this database, the following notes were included for the sake of retrieving, i.e. period, text source, and the specific
category of BA. Each instance involving BA was fully represented with the following information:
— Transcription of original texts in Chinese characters;
— Chinese pinyin\(^{67}\) (romanization symbols for pronunciation without tones);
— Gloss (semantic annotation);
— Translation into English.

In this section I reported the procedures of creating the BA Corpus, and I will address a couple of issues pertaining to the BA Corpus in the following section §5.3.

### 5.3 Several Issues about the BA Corpus

In this section, I focus on three issues about the BA Corpus, i.e. the categorization of BA, the false positives, and data selection in the final two periods in Old Chinese.

#### 5.3.1 Categorization of BA

There are five categories of BA identified for convenience of analysis: BA-1, BA-2, BA-3\(^{68}\), BA-4, and BA-5, as shown in Table 5-2. These categories were marked for data involving BA while creating the BA Corpus. Suffice it here to have an overview of the categorization of BA; it has been reviewed in §4.2.

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\(^{67}\) Note that Chinese words are transcribed in Pinyin here without tones for the following reasons: first, tones vary from Ancient Chinese to Contemporary Chinese, from one dialect to another; second, possible ambiguity due to tonal alternations could be removed thanks to English gloss and translations.

\(^{68}\) In my analysis, I have identified the BA-2/3 as well.
In the following §5.3.2, I turn to another issue about the false positives in the BA Corpus.

### 5.3.2 The false positives

When I created the BA Corpus, a manual search for BA automatically produced different word categories of BA. They are all in the same Chinese character, and some needed to be discounted from the corpus. Apart from the categories as shown in Table 4-2, there are two other classes of BA as false positives in the output, i.e. noun BA and classifier BA; they are not covered in my current research. I briefly introduce these false positives below:

(a) **Noun BA:**

It refers to the ‘handle’ of an object as in (4.30):

(5.30) 那个喽卒刚一摸刀把

Na ge louzu gang yi mo dao-ba

DEM CL soldier just now once touch knife-handle

‘That soldier just now touched the knife-handle once.’

*(San-xia Jian)*
(b) **Classifier BA:**

It is used with a numeral to appear in a numeral-classifier pair. For example:

(5.31) 拉着 一把 椅子

`la zhe yi ba yizi`

pull ASP one CL chair

‘to pull a chair’ (Nie-hai-hua)

As mentioned above, I admit that noun BA and classifier BA may be associated with the development of BA as a verb, an instrument marker, a causative marker, and an object marker. For instance, it would be of interest to investigate the relationship between the verb BA (‘grasp/hold’) and the noun BA with quite a concrete meaning of ‘handle’ of an object (e.g. *a chair/a knife*). However, the relationship between the grammaticalization of a verb BA and (a)/(b) is not as close as that among the verb BA and its grammaticalized and more grammaticalized instances. To be more specific, five categories as in Table 5-2 are relatively more closely associated as a series of changes in a chain of grammaticalization (i.e. a process about a decline of an original verb). Due to the limited space in my thesis, I do not attempt to extend to two false positives produced by classifier and noun BA provisionally.

In sum, both classes (a) noun BA and (b) classifier BA precisely correspond to a given command for searching BA, but wrongly occur as they appear incompatible with my defined (and, refined) research object, i.e. the grammaticalization of the verb BA. With respect to noun BA and classifier BA, I would prefer leaving them for my future research pertaining to constructions of BA in a more general map.

### 5.3.3 Data selection in the final two periods

In the texts in the last two periods of the Ming (1368~1644) period and the Ching period (1644~1911), the total number of instances involving BA roughly reaches 44,480 (12,716 and 31,764 for Ming and Ching respectively). Given the huge
amount of data, I did not provide an exhaustive analysis of all the data from these periods but adopted a sampling method as an alternative: I wanted to have sufficient texts selected from the original corpus to enable a manageable analysis without compromising the validity of data.

On the basis of relevant information about texts within these two periods\(^{69}\), various sampling methods were considered. One choice could be to select certain fictional texts (e.g. general fiction, detective fiction, adventure fiction, and mystery fiction) only since they occupy the vast majority compared with non-fiction during the Ming period and the Ching period. However, this is subject to criticism for negligence over other text types including the non-fiction which were included in the earlier periods. The other option was to select first 250 instances of BA in each text within these two periods. Nevertheless, the distribution of BA in the first 250 instances is not necessarily the same with that in the remaining of a text. Since consistency plays quite an essential role in evaluation of a corpus, this option was dismissed. Eventually, I decided to choose every other text chronologically following the conventions of corpus linguistics (e.g. Meyer 2002: 20; Sinclair and Carter 2004). It was possible in this way to retain a range of text types, registers, length and provenance, with a balance over these varieties and without interference from any personal judgement imposed on text selection.

I have discussed several special issues about the BA Corpus in this section, and I will evaluate the BA Corpus in terms of benefits and potential weakness in §5.4.

5.4 Evaluation

5.4.1 Benefits

On the whole, the original PKU-CCL corpus is of good quality and large size, providing sources for real language. Most importantly, it is user-friendly with a search engine which is easy to access and thus facilitates the users’ searches. Additionally, it contains texts which cover a variety of subjects and genres.

\(^{69}\) As recorded in another document special for textual sources in the Ming and Ching Periods
With respect to the BA Corpus, it allows for the collection of a large number of tokens of BA (completely exhaustive for the first six periods in particular), which had not been seen in the literature. Also, it contains tokens of BA which are distributed in various periods in Old Chinese. The value of this BA Corpus does not only lie in providing me with immense data of BA for an investigation into the grammaticalization of BA, but also the potential contributes to the future research on this topic.

**5.4.2 Potential improvements to the BA Corpus in the future**

In the future I could develop the BA Corpus in terms of both its contents and size. On the one hand, the exhaustive searching of texts in the final two periods could be completed. Although the current BA Corpus is sufficiently large for my scale of analysis, it would be ideal to expand it with more data involved in order to yield more fruitful results. On the other hand, it is worth pointing out that it will enhance the descriptive adequacy of data to compare the results from a sole PKU-CCL corpus to the searching results from other Ancient Chinese corpora as parallel references. Actually, the PKU-CCL corpus itself has deficiency in the following respects:

First, the PKU-CCL corpus lacks syntactic parsing and semantic annotation, which is one of the biggest pitfalls. In comparison, many standard corpora are automatically “tagged” or “parsed” (Biber et al. 1998: 284), such as the Brown corpus (Francis and Kucera 1982), and LOB (Johansson et al. 1978; Johansson 1982). To take “Bank of English” for another example, “every word in it has a part-of-speech tag” and it is “fully parsed” (Sinclair 1997: 38). Second, the PKU-CCL corpus does not contain detailed extra-linguistic information regarding the texts and authors which have to be consulted by the users themselves as part of the corpus design. This leads to extra cost of time and labour spent on searching for BA. Potential improvements to the BA Corpus will be mentioned in Chapter 7 (§7.2) as well.

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70 For example, ‘Sheffield Corpus of Chinese for Diachronic Linguistic Study’; ‘Beijing Language and Culture University corpus’.
71 The Brown University corpus of written American English
To conclude, in this chapter, I introduced how I created the BA Corpus, including the motivation, procedure, and results. In addition, I discussed some issues related to the BA Corpus. I proposed my periodization of the Chinese language by discussing what linguistic criteria were considered, why they were important, and how these features distinguished each period\footnote{While discussing quantitative data in §6.3, I will represent more details about the BA Corpus such as the total sample size, how many tokens per period, how many tokens of different categories of BA per period, frequency and percentage of different types of Expressions involving BA.}.
In this Chapter, I discuss a grammatical constructionalization story involving BA. Essentially the idea is that an Expression involving BA is reanalyzed in a network of constructions in Old Chinese. Different from the traditional approach to grammaticalization of BA (Chapter 4), it is not only the single item BA that has changed from the constructional perspective. In Construction Grammar, an expression involving BA is taken as a construction at a micro-level (see §2.3.4 for a brief introduction to a range of constructional terms); the constructionalization process signals “<new-form><new-meaning>” as defined below:

(Constructionalization is) a process in which form<new>-meaning<new> (combinations) of signs are created through a sequence of small steps in which form and meaning are reanalyzed. (Traugott and Trousdale forthcoming)

As will be shown in §6.1.1, for example, BA appeared as a full verb in the Chinese two-NP transitive expressions in Early Chinese. The substantive and specific constructions involving verb BA at the micro-level are sanctioned by higher-level meso-constructions and macro-constructions. As constructions change over time, new members of a set develop. Different form-meaning pairs involving BA are recruited into a range of constructions at the meso-level and the macro-level (e.g. the Chinese serial verb construction, the causative construction). A micro-construction involving BA is therefore combined with more abstract schemas and forms new network links with more schematic higher-level constructions.

The present chapter is organized as follows: In §6.1, I present some of the small steps of the reanalysis process in which the form-meaning pairings involving BA participate in a network of constructions. In this section, I also investigate how the constructional network is established and represented. In §6.2, I discuss the role of expansion (Himmelmann 2004) in particular in constructionalization involving BA, in terms of host-class expansion, syntactic expansion, and semantic-pragmatic expansion. For example, a greater range of elements enter into certain syntactic...
positions, which leads to less restrictive environment. In §6.3, I discuss directionality in constructionalization involving BA, in terms of increased schematicity.

6.1 A constructionalization story involving BA

The present section focuses on diachronic reanalysis of Chinese involving BA Expressions. Since each change is viewed to be a tiny step (Traugott and Trousdale forthcoming; Traugott and Trousdale 2010; Lehmann 2004), this section aims at showing some of the discrete steps of micro-change involving BA, and how constructionalization involving BA occurs in Old Chinese. To be specific, I show how new form-meaning pairings involving BA come into being and how they are associated with different higher-level constructions. In the following discussion, I use instances (tokens) to illustrate recruitment of the micro-constructions involving BA into different constructions. These sets of micro-constructions are sanctioned by different meso- and macro-constructions, leading to a network of constructions.

The organization of this section is as follows: By attesting tokens in the BA corpus, I show how micro-constructions involving BA change in terms of both form and meaning. Then, I show how a set of micro-constructions are sanctioned by more schematic higher-level meso-constructions and macro-constructions. This pertains to how a constructional network is built up, followed by the representation of the taxonomy for each macro-construction involving BA. While discussing the most schematic and abstract macro-constructions (which will be identified as macro-construction 1-5), I offer a general discussion of five Chinese constructions including the Chinese transitive construction, the serial verb construction, the prepositional instrument construction, the causative construction, and the resultative construction (as a case study for object marking BA). Note that the resultative construction is not the only construction in which BA functions as an object marker, and there are other non-resultative constructions (e.g. ordinary transitive constructions) involving object marking BA (see §6.1.6 for examples). However, for convenience, I focus on the resultative in this thesis as a case study for representing the object marking Expressions involving BA.
6.1.1 Micro change, meso and macro constructions involving verb BA-1

Let us firstly look at the instances involving BA in Early Chinese in order to find out what micro-constructions can be generalized from these tokens. In the early period, BA (‘grasp’) was initially attested as a full verb (BA-1) in the transitive construction of agent-patient type (Type I). For example:

**Type I: Agent-Patient transitive**

Case of **BA-1 (‘grasp’): Early Chinese**

(6.1) 武王入，

Wu-wang ru,

SURNAME-king rush in

‘The King Wu rushed in,’

周公把大钺,

Zhou-gong ba da-yue

SURNAME-sir grab big bronze weapon

‘Mr Zhou grasped the big bronze weapon,’

以夹武王。

yi jia Wu-wang

in order to fight against SURNAME-king

‘in order to fight against the King Wu.’

‘The King Wu rushed in. Mr Zhou grasped the big bronze weapon, in order to fight against the King Wu.’ (Yi-zhou Shu, the Zhou Period, Early Chinese)

73 In some cases in this thesis, I provide occurrences of Expressions involving BA in a paragraph taken from the literary texts as the context.
In (6.1), BA denotes a concrete action ‘grasp’ involving two participants, i.e. the agent and the patient. Two NPs Zhou-gong (‘Mr Zhou’) and da-yue (‘big bronze weapon’) denote two participants who interact with each other in an activity indicated by the transitive predicate BA ‘grasp’. They are the topic-subject and the comment-object, respectively. To the left of the predicate, Zhou-gong (‘Mr Zhou’) is the subject and denotes the doer (agentive) which performs the action. The other noun da-yue (‘big bronze weapon’) is the object since it is located to the right of BA, in the typical position of an object. A noun in this slot is an obligatory complement for a transitive verb BA. The above (6.1) is an instance of micro-construction-1 involving verb BA-1, as illustrated in Figure 6-1:

**Form:** N/NP  Vt. (transitive verb) BA  N/NP  

**Meaning:** Two participants (denoted by two N/NPs) interact with each other in an activity indicated by a transitive verb BA.

![Figure 6-1: Constructional representation of the Chinese involving verb BA-1 micro-construction](image)

The above Figure 6-1 shows the properties of the canonical two-NP construction (of agent-patient type) involving BA. There is interplay (mapping) between the transitive construction and verb BA. The single verb BA is subcategorized for two nominals, while the transitive construction requires two nominals to fill in its constructional roles.

As will be shown later in this section, the above micro-construction involving BA-1 is sanctioned by the more schematic transitive construction at the macro-level (the syntactic and semantic properties of the Chinese transitive...
construction have been discussed in detail in §4.2, including identification of the Chinese subject/object and topic/comment). We can see the interplay between the transitive construction and BA: Two constructional roles required by the transitive construction fuse into two arguments of the verb BA, i.e. the agent Zhou-gong (‘Mr Zhou’), and the patient da-yue (‘big bronze weapon’).

Note that the earliest variant of BA-1, i.e. ‘grasp’, even persisted into the very late period of Old Chinese (1524, the Ming period), for example:

(6.2) 听的里面叫救人
Ting-de limian jiao jiu-ren
Hear inside shout ‘help’
(The great-grandfather) heard (someone) was crying ‘help’ inside,‘

太公慌忙把灯烛
taigong huangmang ba dengzhu
great-grandfather in a hurry grasp candle
‘The great-grandfather grasped the candle in a hurry.’

(Shui-hu Quan-zhuan, 1524, the Ming period, Late Chinese)

Here BA still means ‘grasp’ (rather than ‘hold’, ‘carry’ which will be discussed below). According to the context, taigong encountered expected chaos, i.e. someone was crying ‘help’ inside, so he instantly grabbed a candle in a hurry.

As has been shown in §4.2, transitivity is a matter of degree in a couple of respects (Figure 4-1). More instances involving variants of the transitive verb BA (BA-1) will be discussed below.

Apart from ‘grasp’ (which is now labelled as BA-1 (a)), other variants of BA-1 were found in the transitive construction of agent-patient type, i.e. ‘hold’, ‘carry’, and ‘control’. In the following instances, I show this micro-polysemy of BA-1 which appears chronologically in Old Chinese. This represents an innovation in the analysis of the diachronic development of BA. Note that the following sub-categorization of the BA-1 transitives based on semantic distinctions is fully original.
These sub-categories of BA are presented by me for the first time and were not available in any previous research (see §4.1 and §4.2).

Case of **BA-1 (b) (‘hold’): Early Chinese**

(6.3) 皇帝临崩，

Huangdi lin-beng,
Emperor be dying
‘The emperor was dying,’

(皇帝) 把太傅臂，

(huangdi) ba Taifu bi
emperor hold NAME arms
‘the emperor held Taifu’s arms,’

属以后事
zhu-yi houshi
tell what happened after one’s death
‘to tell what would happen after his death’

‘The emperor was dying. The emperor held Taifu’s arms, telling Taifu what would happen after the emperor’s death.’

*(San-guo Zhi, the Qin-Han and Six Dynasties, Early Chinese)*

In (6.3), as the emperor is dying, he has some words to tell Taifu. While speaking to Taifu, the emperor is supposed to ‘hold’ Taifu’s arms. Therefore, BA in (6.3) denotes a durative action ‘hold’, which is a more likely interpretation than an instant action ‘grasp’ in this context.

For another example from the Middle period of Old Chinese:
(6.4) (友人)把臂有多日

Youren ba bi you-duo-ri
Friends hold arms for several days
‘Friends kept holding each other’s arms for several days.’

(Du Fu Shi, the Sui and Tang periods, Middle Chinese)

In this case, considering the existence of a temporal adjunct of you-duo-ri (‘for several days’), we know that BA means a durative ‘hold’ rather than ‘grasp’. In addition, references could be made to the context. This sentence is selected from a Tang Poem which describes a story about two old friends meeting each other again after many years’ loss of contact. Each was very excited to know that the other was still alive particularly in that turbulent and hard period. This sentence describes how warm their reunion was by slightly exaggerating their intimate body language (to hold each other’s arms while chatting for a long time).

Case of BA-1 (c) (‘carry’): Early Chinese

(6.5) 辅框怯失守,

Fu-kuang qie shi-shou,
NAME worry about lose in the battle,
‘Fu-kuang worried about losing in the battles,’

(辅框)常把辟兵符

Fu-kuang chang ba pi-bing-fu
NAME usually carry protective-talisman
‘Fu-kuang usually carried a protective-talisman’

‘Fu-kuang worried about losing in the battles, (so) he usually carried a talisman (to protect himself from injury and death in the battles).’

(San-guo Zhi, the Qin-Han and Six Dynasties, Early Chinese)
In (6.5), BA means ‘carry’. This is more appropriate than ‘grasp’ or ‘hold’. Supposing a soldier is fighting in the battle field, he is less likely to grasp or hold a talisman in his hands but to carry it along with him (wearing it on his neck, or putting it in his pocket).

Here is another example from the Middle Period of Old Chinese:

(6.6) 我明日把些银子
wo mingri ba xie yinzi
1SG tomorrow carry some money
‘I will carry some money (along) tomorrow.’

(Yuan-dai Hua-ben Xuan-ji, the Yuan Period, Late Chinese)

Similarly, BA in (6.6) means carrying the money along with ‘me’, rather than grasping or holding the money in hands.

Case of BA-1 (d) (‘control’): Middle Chinese

(6.7) 帝子王孙把王位
dizi-wangsun ba wangwei
emperor’s offspring control kingship
‘The emperor's offspring controlled the kingship (due to hereditary policy).’

(Dunhuang Bianwen Ji, the Five Dynasties, Middle Chinese)

Here, BA has a more abstract reading, i.e. ‘control’ since wangwei (‘kingship’) cannot be physically grasped, held or carried.

Instances (6.1-6.7) of type I generalize a list of Chinese micro constructions involving variants (a-d) of a full verb BA-1, i.e. ‘grasp’, ‘hold’, ‘carry’, and ‘control’. Among these various micro-constructions, I take the example (6.1) involving the most concrete BA-1 (a) ‘grasp’ as the canonical instance of the other instances (as will be illustrated in the scale of transitivity in Figure 6-3). But all these constructions represent the canonical transitive construction of the agent-patient type.
However, the same full verb BA-1 can appear in more than one type of the transitive constructions in Old Chinese. The following cases see the presence of BA-1 (e) in another type of the transitive construction, i.e. the experiencer-source transitive type:

**Type II: Experiencer-Source transitive**

Case of **BA-1(e) (‘know; understand’):** Middle Chinese

(6.8) (君主) 既成社稷之基，

Junzhu ji cheng sheji zhi ji
Emperor already establish country REL foundation

‘The emperor has already established the country’s foundation,’

(君主) 复把山河之险，

junzhu fu ba shanhe zhi xian
emperor still know regime REL importance

‘(but the emperor) still knew the importance of regime (governing a country),’

居安虑危，

ju-an-lv-wei,
be prepared for danger in times of peace,

‘he was prepared for danger in times of peace,’

辟四门以求贤。

pi si men yi qiu xian
open four doors in order to recruit talents

‘he opened four doors in order to recruit talents.’

‘The emperor has already established the foundation of the country; but he still knew the importance of regime. He was prepared for danger in times of peace, (so) he opened four doors in order to recruit talents.’
In this case, *junzhu* (‘emperor’) and *shanhe zhi xian* (‘the importance of regime’) are the experiencer and the source, respectively. These two arguments interplay in a psychological process indicated by BA ‘know’. This meaning ‘know’ can be interpreted as a kind of ‘holding in one’s mind’ in a metaphorical manner.

Now let us see how the above micro-constructions involving verb BA are associated with more schematic and general higher-level constructions. Instances (6.1) – (6.7) of Type I generalize Chinese involving BA-1 micro-construction (a-d). These constructions form a subgroup of a more general category of agent-patient meso-construction (A). By comparison, instance (6.8) represents another type of transitive construction, i.e. the experiencer-source type. Micro-construction involving BA-1 (e) and some other non-BA micro-constructions (as exemplified by instances without BA in Figure 6-2) are sanctioned by meso-construction (B). In meso-construction (B), one argument is the experiencer and the other is the source in a psychological process. Meso-construction (A) and meso-construction (B) are sanctioned by the most schematic macro-construction at the super-ordinate level, i.e. the Chinese transitive construction, which is the most generalized construction in terms of form and meaning.

Recall an overview of the transitive construction in Chinese (see §4.2); the above discussion have shown that the transitive construction is a schematic construction in which the verb BA appears. The transitive construction is identified as macro-construction-1 as in the following Figure 6-2. We are now able to establish the constructional taxonomy for Chinese two-NP transitive constructions involving BA-1 as follows:
Figure 6-2: The taxonomy for the 2-NP transitive construction involving BA-1 in Old Chinese

1 An asterisk marks the canonical micro-construction: proto-agent and proto-patient appear in a typical transitive action; as will be shown in Figure 6-3, a ‘grasp’ action encoded by micro-construction (A-a) involves the highest degree of transitivity; therefore, here is an asterisk which marks the canonical micro and meso constructions.
I have shown above the various micro-constructions involving variants of BA-1 (a-e) under the highest category of the transitive construction. Here, I further illustrate how the parameters of transitivity relate to the differences among these micro-constructions. I propose the following Figure 6-3 considering some parameters given by Hopper and Thompson (1980) (see Figure 4-1 in §4.2).

Instances (6.1) to (6.8) vary in terms of degrees of transitivity and are thus distributed on a scale of transitivity. Instance (6.1) involving BA-1 (a) ‘grasp’ carries the highest degrees of transitivity: it is telic and denotes a typical action; also, it has the proto-Agent (Dowty 1991: 574) with the most volition and consciousness in taking an action, as well as a proto-Patient which is affected. As a consequence, instance (6.1) represents the most canonical member in terms of transitivity. In contrast, instance (6.8) involving BA-1 (e) ‘know’ bears the lowest degrees of transitivity since it is atelic and denotes a psychological process rather than an action. Therefore, instance (6.8) represents the most non-canonical member in terms of transitivity.

Overall, the direction from (a) to (e) in Figure 6-3 shows the gradual transition from the canonical member to the non-canonical member which instantiate the transitive construction. However, there might be controversy on the order of (b) and (d): why does (b) precede (d), and isn’t (d) ‘control’ more agentive than ‘hold’? Comparing instances (6.3) and (6.7), we can see that the latter involves higher VOLITIONALITY than (b): to control the kingship requires a more volitional agent than to hold one’s arms. This suggests that the CONTROLLER is more purposeful than the HOLDER in an action. However, with respect to some other parameters, instance (6.3) involving BA-1 (b) ‘hold’ is higher than instance (6.7) involving BA-1 (d)
‘control’. To hold one’s hands is an action and telic, while to control the kingship is not a typical action and less telic. On the part of the object, the abstract object kingship in one’s control is not necessarily affected directly, immediately or visibly. In contrast, the action of holding must lead to the visible affectedness of the concrete object ‘arms’. At first sight, holding tends to be less agentive and lower in potency than controlling. However, as in (6.7), BA-1 (d) normally encodes an abstract control: to control the kingship is not an observable transfer of force in a concrete and instant action. By comparison, holding one’s arms is a more perceptible event which obviously entails the transfer of force from the Agent to the Patient. Considering another parameter of Individuation of Object, bi (‘arms’) in (6.4) is higher than wangwei (‘kingship’) in (6.7). In a word, it is the combination of a set of parameters, rather than any single one, that determines the degree of transitivity, as suggested by Rosch (1978: 197; see also Rosch and Mervis 1975):

The more prototypical of a category a member is rated, the more attributes it has in common with other members of the category and the fewer attributes in common with members of the contrasting categories.

What we see, therefore, is that (b) type outranks (d) with a higher degree of transitivity on the scale, sharing more attributes in common with other members within the category of transitivity.

I have discussed the transitive construction in Chinese in this section. I will show new micro-constructions involving serial verb BA-2 in the following section §6.1.2; accordingly, different meso-constructions are generalized from new tokens.

**6.1.2 Micro change, meso and macro constructions involving serial verb BA-2**

Departing from the taxonomy for the two-NP transitive construction involving BA, let us move on to how new micro-constructions involving serial verb BA are created. Also in the early period of Old Chinese, BA was attested in the serial verb construction in which BA existed as a serial verb (BA-2).
I will present examples involving serial verb BA from my corpus as follows. In order to label theses tokens of different types, I use terms including “consecutive”, “purpose” and “circumstances” which are created by Li and Thompson (1981: 595). In §4.3, I have offered a detailed review of Li and Thompson’s work on the Chinese serial verb construction by providing examples. Here I need to clarify again that Li and Thompson (1981) classify the Chinese serial verb construction into four groups (see Table 4-1) and further classify Group 1 into four subtypes, i.e., consecutive, purpose, alternating, and circumstances (see Table 4-2). Since there are BA instances which are proved to be the serial verb construction (see e.g. Figure 6-4) according to my BA corpus, I intend to find out how instances involving serial verb BA fit into the typology of the Chinese serial verb construction as proposed by Li and Thompson (1981). Based on data from the BA corpus, the following observations may be made in this thesis:

(1) BA only appeared in the serial verb construction of Group 1 as mentioned by Li and Thompson (1981). In other words, instances of Group 2 to 4 are not found in my BA data (see discussion following Table 4-2 for details). Therefore, I focus on Group 1 in this thesis;

(2) furthermore, there are serial verb constructions involving BA which fall into these categories (of Group 1) which are previously set up by Li and Thompson (1981), including “consecutive” (e.g. (6.9)), “purpose” (e.g. as one of the ambiguous interpretations for (6.17)), and “circumstances” (e.g. (6.11));

(3) however, Li and Thompson’s (1981) subtype “alternating” has not been found in my BA data, although “alternating” has been mentioned in the general serial verb constructions in Chinese (one example (4.29) has been cited in §4.3);

(4) instead, a new subtype of *simultaneous* is found from BA data, as in (6.10) and (6.14). This subtype of the Chinese serial verb construction has not been attested in any previous work.

**Type I: Consecutive events:** Early Chinese

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74 Thanks to Dr Willem Hollmann for the suggestions to use this term.
(6.9) 生有急求去，
Sheng you-ji qiu qu,
A young man urgently ask to go
‘The young man urgently asked to go,’

(主人)不听，遂留当宿,
Zhuren bu ting, sui liu dang-su
Host NEG agree and intend to keep sb. stay overnight
‘The host didn’t agree and intended to keep him overnight,’

(生) 意大不安，以为图己。
Sheng yi da bu-an, yiwei tu ji
A young man feel very panic worry murder oneself
‘The young man felt panic and worried that the host would murder him,’

生把刀出门
Sheng ba dao chu men
A young man grasp/hold/carry knife leave room
‘(so) the young man grasped/held/carried a knife (and) left the room.’

‘The young man urgently asked to go, but the host didn’t agree and intended to keep him overnight. The young man felt panic and worried that the host would murder him, so he grasped/held/carried a knife and left the room.’

(San-guo Zhi, the Qin-Han and Six Dynasties, Early Chinese)

Further analysis of the Chinese serial verb construction (which will be known as macro-construction-2) has been provided earlier in §4.3. Here I take (6.9) as an example to show the form and meaning in the micro-construction involving serial verb BA. In (6.9), BA is still a verb, but an Expression involving BA is reanalyzed as the serial verb construction largely due to the presence of the other serial verb chu (‘leave’).
At first glance, as illustrated in Figure 6-4, the micro-construction involving serial verb BA-2 seemingly comprises of two transitive constructions as framed by two orange boxes: In transitive construction-1, the predicate BA (‘carry’) takes two syntactic arguments, i.e. the agent-subject and the patient-object; in transitive construction-2, the other verb (denoting a serial action) also takes the agent-subject and the patient-object. To take (6.9) as an example, it seems that the transitive construction involving a verb BA formally stands with the other transitive construction involving chu (‘leave’). However, note that the serial verb construction is not simply a combination of two transitive constructions. Instead, it is an idiosyncratic construction.

In §4.3, I have offered a literature review on the Chinese serial verb construction (e.g. Baker 1989; Bisang 1995; Li and Thompson 1981) which will be labelled as macro-construction-2 in this thesis. To repeat it here, usual diagnostics for the serial verb construction include non-existence of connective markers, argument sharing, unchangeable positions of serial verbs, and head-dependent relationship. Then, we can see the reasons why (6.9) instantiates the serial verb construction:

First, as in Figure 6-4, the subject (SUBJi) is shared by both serial verbs. In (6.9), BA and chu share the same subject sheng (‘a young man’) although they take different objects. Note that when the other serial verb is transitive, it can take an object different to or the same as the object of the first verb. As shown in Figure 6-4, given the object of BA is OBJx, the Object of the other serial verb (if transitive) can be OBJx or OBJy.

Second, there is not any connective marker intervening between these two verbs. As in Figure 6-4, the micro-construction involving BA-2 has a single complex predicate (as framed by the blue dotted box) which consists of two serial verbs. In other words, either serial verb is part of this complex predication in the serial verb construction. In contrast, in the chaining of two transitive clauses, two verbs should be viewed as two independent predications. Accordingly, in terms of meaning, the single complex predicate in the serial verb construction expresses a serial event which takes place “in a single spatio-temporal frame” (Rose 2009: 647). This contrasts with chaining of two transitive clauses which might express two separate events taking place not successively or not strictly at the same location. In (6.9), two
verbs in collocation express consecutive events: to grasp/hold/carry the knife and then to leave the room. These two sub-events are inherently tied to each other as parts of a unitary event.

Third, there can be a head-dependent relationship in the serial verb construction in some circumstances. Note that there is not head-dependent relationship between the two serial verbs in (6.9), because this instance (which has been labelled as subtype 1 as in Table 4-2) expresses two consecutive events. However, as has been shown in §4.3, there are other subtypes (e.g. “circumstances”, see Table 4-2) of the Chinese serial verb construction in which a head-dependent relationship can be held between two serial verbs.

Here is the constructional representation of the Chinese micro-construction-2 involving serial verb BA-2 according to the above form and meaning analysis. Note that the following constructional representation in Figure 6-4 is generalized from tokens in Early Chinese and Middle Chinese, illustrating four syntactic properties which have been discussed in §4.3 (on the Chinese serial verb construction) based on Li and Thompson (1981). Also, as have been represented in Table 4-1 and Table 4-2, Li and Thompson (1981) propose categorization and sub-categorization of the general serial verb construction in Chinese. As mentioned in §4.3, I use some of their terms (e.g. “consecutive”, “circumstances”) to label types and subtypes of the BA-2 serial verb constructions for convenience of discussion in this thesis. These terms basically depict different semantic relations held between two serial verbs. Note that the following Figure 6-4 represents the over-arching schema that sanctions all types of the serial verb construction involving BA-2, despite semantic differences at lower levels.

![Figure 6-4: Constructional representation of the constructions involving serial verb BA (BA-2)](image)
The above instance (6.9) of the consecutive type is a canonical serial verb construction in which two serial verbs denote two sequential actions. Let us now have a look at other types of instances involving a serial verb BA:

**Type II: Simultaneous events:** Middle Chinese

(6.10) (巧宦共君) 把酒听杜宇

Qiao huan gong jun **ba** jiu ting duyu

Smart official and emperor **hold/carry** wine listen to cuckoo

‘The smart official and the emperor held/carried the wine (and) listened to the cuckoo (singing).’

*(Liu-Yong Ci, the Song period, Middle Chinese)*

Here, *ba jiu* (‘hold/carry the wine’) and *ting duyu* (‘listen to the cuckoo’) denote two events which take place simultaneously.

**Type III: Circumstances:** Late Chinese

(6.11) (主人) 兰堂把酒思佳客

(Zhuren) lantang **ba** jiu si jia-ke

Host bright hall **hold/carry** wine miss good-friend

‘(The host) missed his good friends (while) holding/carrying the wine in the bright hall.’

*(Jing-shi Tong-yan, 1624, the Ming period, Late Chinese)*

In this example, *ba jiu* (‘hold/carry the wine’) expresses the circumstance under which the host missed his friends. They used to have parties very often in the bright hall; however, all his friends are now gone. So when the host carried the wine again in the bright hall, all memories come back and he misses his friends. Therefore, *ba jiu* (‘hold/carry wine’) denotes the circumstances, whereas *si jia-ke* (‘miss the good friends’) tends to be the main event. Note that the above instance (6.11) will be
known as subtype 3 in Figure 6-5 (see Table 4-2): the first serial verb denotes “circumstances” while the other denotes the main event. In this case, there is head-dependent relationship between these two serial verbs.

From the above instances (6.9), (6.10) and (6.11), we see that BA in the serial verb construction means ‘grasp’, ‘hold’ or ‘carry’. Recall that BA-1 in the transitive construction has five variants (see Figure 6-3), but we have not found any instance of the serial verb construction involving another two variants of BA ‘control’ or ‘know’. This is because the serial verb construction expresses the serial events (actions), and the first serial event particularly tends to be a concrete action (see §4.3). These two relatively abstract variants of BA, i.e. ‘control’ and ‘know’, are thus not appropriate to denote the first concrete serial action. As a consequence, only three of five variants of a full verb BA (‘grasp’, ‘hold’ and ‘carry’) are attested in the serial verb construction. In (6.9), (6.10) and (6.11), more than one meaning of BA is plausible, but ‘carry’ seems to be generally possible. Therefore, I use BA ‘carry’ to represent all the variants of the serial verb BA ‘grasp/hold/carry’ in the taxonomy for the serial verb construction involving BA (see Figure 6-5 and Figure 6-6).

In the above instances, the object of BA and the object of the other verb have different referents. Nonetheless, the object of the second verb could also have the same referent with the object of BA. For example:

(6.12) 还把身心细认之

hai BA shen-xin xi ren zhi
still hold body-heart carefully recognize 3rd PRON
‘(Sb.) still held (someone else's) body and heart and carefully discerned it.’

(Dunhuang Bianwen Ji, the Five Dynasties, Middle Chinese)

Here, the object of the serial verb ren (‘recognize’) is a 3rd reflexive pronoun zhi (‘him/her/it’). It is co-referential to the BA object, i.e. shen-xin (‘body-heart’).

The above instances (6.9) to (6.12) of different types generalize various micro-constructions involving a serial verb BA. Since they share a similarity that the second serial verb is (can be) transitive, they are considered to be sanctioned by a higher meso-construction (A) which features a transitive serial verb in collocation.
with BA (see Figure 6-5 and Figure 6-6 for the taxonomy for the serial verb construction involving BA).

However, the serial verb BA appears not just in the serial verb constructions in which the other serial verb is transitive. In the Middle Period and the Late Period of Old Chinese, BA was found to co-exist with an **intransitive** serial verb in the serial verb patterns. These instances are of the same three types, i.e. consecutive events, simultaneous events, and circumstances, as exemplified below:

**Type I: Consecutive events:** Middle Chinese

(6.13) 婆婆把茶点来

popo ba chadian lai
old lady carry snack come
‘The old lady carried some snacks and came.’

*(Huaben Xuanji, 1127, the Song period, Middle Chinese)*

Similar to (6.13), the first action *ba chadian* (‘carry snacks’) occurs before the second action *lai* (‘come’). The difference is that the second verb *lai* (‘come’) is intransitive.

**Type II: Simultaneous events:** Late Chinese

(6.14) 十一娘 (与封氏) 把臂欢笑

Shiyi-niang yu Feng-shi ba bi huanxiao
NAME and SURNAME-lady hold arms laugh
‘Shiyi-niang and Ms Feng held (each other’s) arms while laughing,’

大相爱悦，依恋不舍
Da xiang aiyue, yilian-bushe
Very much like each other be unwilling to leave
‘they like each other very much and are unwilling to leave’
‘Shiyi-niang and Ms Feng held each other’s arms while laughing; they like each other very much and are unwilling to leave.’

*(Liao-zhai Zhi-yi, the Ching Period, Late Chinese)*

Here, *ba bi* (‘hold arms’) and *huanxiao* (‘laugh’) occur simultaneously.

**Type III: Circumstances:** Late Chinese

(6.15) (女) 把履号啕

(Nü) ba lü haotao

Lady *hold/carry* shoes *cry loudly*

‘The lady cried loudly when she held/carried the shoes (of Sister Lian’s).’

*(Liao-zhai Zhi-yi, the Ching Period, Late Chinese)*

In (6.15), the lady cried when she held the dead Sister Lian’s shoes. That is, *ba lv* (‘hold/carry the shoes’) denotes the circumstances under which the other event *haotao* (‘cry loudly’) occurs.

Note that in the Late Period, the intransitive verbs even more frequently collocate with BA-2 in the serial verb construction. As shown in Table 6-1, the frequency of intransitive verbs in the micro-constructions involving BA-2 increased by 15.71% in the Late Period compared to the Middle Period.

<table>
<thead>
<tr>
<th>Number of Instances &amp; Percentage</th>
<th>The Middle Period</th>
<th>The Late Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Serial verb (V2) in collocation With BA in the serial verb construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitive V2 with Object</td>
<td>185 (60.06%)</td>
<td>102 (44.35%) ↓</td>
</tr>
<tr>
<td>Intransitive V2 without Object</td>
<td>123 (39.94%)</td>
<td>128 (55.65%) ↑</td>
</tr>
<tr>
<td>Total</td>
<td>308 (100%)</td>
<td>230 (100%)</td>
</tr>
</tbody>
</table>

Table 6-1: Frequency of the serial predicate WITH/ WITHOUT Object in the Middle Period and the Late Period

Compared with the Middle Period, the transitive verb in the Late Period occurred less frequently with BA in the serial verb construction (44.35% to 60.06%). In
contrast, the frequency of intransitive verbs increased from 39.94% to 55.65% in the Late Period. Moreover, within the Late Period, we can see that instances of the intransitive verbs outnumbered the transitive verbs (128 to 102); meanwhile, the frequency of intransitive verbs was higher than that of transitive verbs (55.65% to 44.35%). It is of grammatical significance to have the increase in the frequency of intransitive verbs in collocation with BA in the serial verb construction. To be specific, the serial verb construction involving an intransitive verb is a pattern with only one NP object in the post-BA position:

\[
NP1 + BA-2 + NP2 + Vi
\]

When the intransitive verbs occur more frequently, the above configuration is more likely to be entrenched. To put it in another way, the speakers could more easily accept Expressions involving BA without an object in the post-verbal position. As will be shown in §4.6, there is also only one object in the pre-verbal position (or, post-BA position) in the object marking Expressions involving BA:

\[
NP1 + BA-5 + NP2 + V \text{ (resultative)}
\]

We should be aware that there is a difference between NP2 in the serial verb construction and NP2 in the object marking expression: NP2 is merely the object of the serial verb BA-2 in the serial verb construction. In contrast, NP2 in the object marking expression is the object of the main predicate (V).

However, there is a syntactic similarity between the serial verb construction involving an intransitive verb and the object marking expression: NP2 is the only object found in both patterns. Hence, I assume that the serial verb construction involving an increasingly frequent intransitive verb syntactically motivates the formation of the object marking expression with one object in the post-BA position and meanwhile without object in the post-verbal position. To be more explicit, the serial verb construction involving the intransitive verb BA-2 paved the way syntactically for the emergence of BA-5. This is one of my original findings according to my observation of the BA data in this thesis.
Now let us get back to the above instances (6.13), (6.14) and (6.15), since they form another group of instances in which the second serial verb is intransitive. These instances represent various micro-constructions which instantiate a more general category, i.e. meso-construction (B). Meso-constructions (A) and (B) are sanctioned by the most schematic macro-construction, i.e. the Chinese serial verb construction. In §4.3 I have already discussed the Chinese serial verb construction (counted as macro-construction-2 in this thesis) which features the shared subject, non-existence of connective markers between the serial verbs, and the head-dependent relation between the serial verbs under some circumstances.

The above discussion has generally introduced the micro-change involving serial verb BA-2 and how meso-constructions are sanctioned by the Chinese serial verb construction which will be identified as macro-construction-2 in Figure 6-5 and Figure 6-6. We are thus able to construct the taxonomy for the constructions involving a serial verb BA in Old Chinese⁷⁵:

---

⁷⁵ Note that instances of the **PURPOSE** subtype do not appear in both Figure 6-6 and Figure 6-7 but will appear in the ambiguous instances (see Figure 6-8).
Figure 6-5: A partial taxonomy for the serial verb construction involving BA-2 in Old Chinese (Part I)
2 “NP2” and “NP3” are in dashed boxes since they are not necessarily present (e.g. when the serial verbs are intransitive). “VPn” is also in a dashed box because there might be more than two serial verbs in the serial verb construction.
3 NP1 is an argument (“ca-er”: carrier) of the serial verb BA, and it is also the agent (“Agt”) for the other serial verb.
Figure 6-6: A partial taxonomy for the serial verb construction involving BA-2 in Old Chinese (Part II)
All the instances involving BA as discussed above are unambiguous examples of the serial verb constructions. Nonetheless, more than one plausible analysis might apply to some other instances in Old Chinese. In these ambiguous instances, the micro-constructions involving BA could be interpreted as either a serial verb construction (involving a serial verb BA-2) or a prepositional instrument construction (involving an instrument marker BA-3).

### 6.1.3 Ambiguous constructions involving BA-2/BA-3

In this section, I show that in the entire period (including Early Chinese, Middle Chinese, and Late Chinese) we can see the development of ambiguous instances involving BA-2/BA-3. As I have claimed in Chapter 4, these ambiguous instances (BA-2/BA-3) were not discussed in any previous work on BA, and they are my original contributions based on the BA corpus. Let us firstly see an ambiguous Expression involving BA-2/BA-3 in Early Chinese. Note that BA-3 is the instrument marker and I will have a detailed discussion of instrument markers in §6.1.4.

(6.16) 一人把大炬火夜行于道

\[
\text{yi-ren} \quad \text{ba} \quad \text{da} \quad \text{juhuo} \quad \text{ye} \quad \text{xing} \quad \text{yu} \quad \text{dao}
\]

one-person ?  big torch night walk on street

Ambiguous interpretations as below

\[\text{（Lun Heng, the Qin-Han and Six Dynasties, Early Chinese）}\]

There are three ambiguous analyses of the above instance (6.16):

1. The serial verb construction of the **consecutive** type (or, **simultaneous** type) involving BA-2 (‘grasp/hold/carry’);
2. The serial verb construction of the **purpose** type involving BA-2 (‘use’);
3. The prepositional instrument construction involving BA-3 (‘with’)

*Analysis 1:*
The above instance can be analyzed as the serial verb construction in which BA is a serial verb ‘grasp/hold’/‘carry’. The sentence expresses two consecutive events which occur in temporal sequence: ‘to grasp/hold/carry a big torch’ before ‘walking on the street in the night’. Alternatively, this sentence could express two concurrent events, i.e. ‘to grasp/hold/carry a big torch while walking on the street in the night’.

**Analysis ②:**
The instance (6.16) can also be a serial verb construction of a new type, i.e. **purpose**, in which one sub-event occurs for the purpose of the other sub-event (target event). This can be viewed as the **fourth type** of the serial verb construction considering other three existing types as discussed so far, i.e. consecutive, simultaneous, and circumstances. The ‘purpose’ subtype is the last to diachronically appear as the most recent of all subtypes of BA. In this type of the serial verb construction, the serial verb BA develops a new usage, i.e. ‘use’. According to this analysis, (6.16) is interpreted as ‘… used a big torch (**in order to**) walk on the street in the night’.

**Analysis ③:**
Alternatively, the BA phrase in (6.16) could be a prepositional instrument expression which modifies the main predicate. If so, BA is a preposition ‘with’, and the whole sentence is read as ‘…walked on the street in the night **with** a torch’.

Compared with analysis ①, analysis ② is more similar to analysis ③ particularly in terms of meaning. That is, ‘to use A (to) do B’ is very similar to ‘to do B with an instrument A’. Hence, the serial verb construction of the purpose type is more like a bridging construction: it encourages the Expression involving a serial verb BA (‘use’) to be reanalyzed as a prepositional instrument expression involving an instrument marker BA (‘with’). Let us see an ambiguous instance involving BA-2/BA-3 in Middle Chinese:

(6.17) 引诸将帅入其府藏，
    Yin  zhu  jiangshuai  ru  qi  fu-cang,
    Guide  all  marshals  and  generals  enter  3rd  POSS  mansion-storehouse
‘(The emperor) guided all marshals and generals to enter his private storehouse,’

各令任意取金玉。
ge ling renqi qu jin-yu
every let free collect gold-jade
‘(he) let (all the marshals and generals) collect the gold and jade for free,’

诸将取之盈怀,
zhu jiang qu zhi ying huai,
All general collect 3rd PRON insert one’s embrace
‘all the generals collected it (the gold and jade) and inserted it into their arms,’

轨独不取。
Gui du bu qu.
NAME only NEG collect
‘only Gui did not collect (any gold or jade).’

帝把手亲探金赐之。
Di ba shou qin tan jin ci zhi
Emperor hand in person catch gold grant 3rd PRON
Ambiguous translations as below
(Ce-fu Yuan-gui, 1005, the Song period, Middle Chinese)

This instance cannot be analyzed as the serial verb construction of the consecutive type and BA cannot mean ‘grasp/hold/carry’ (*‘to grasp/hold/carry one’s own hands and to catch the gold’). But it still has the following two plausible analyses:

Analysis ①: the serial verb construction of the purpose type involving BA-2 (‘use’):
‘The emperor used his hands to catch the gold (and) granted it to Gui personally.’

Analysis ②: the prepositional instrument construction involving BA-3 (‘with’):
‘The emperor caught the gold with his hands (and) granted it to Gui personally.’

For (6.17), however, analysis ② is more likely than analysis ①:

In (6.17), another verb qu (‘collect’) (in italics and boldface) with the similar meaning ‘carry with hands’ has appeared for three times in the narratives. Furthermore, in the same clause involving BA, there are two handling verbs tan (‘catch’) and ci (‘grant’). Also, the object of tan (‘catch’) and the object of ci (‘grant’) have the same referent, i.e. the gold. Therefore, it is more likely to have these two verbs tan and ci paralleled, i.e. ‘to catch the gold and to grant the gold’. In comparison, BA takes a different object shou (‘hands’), and it is less likely to have BA as a serial verb in collocation with ci and tan: ‘to use his hands to catch the gold and to grant the gold’. As a consequence, although (6.17) can legitimately be a serial verb construction, it is more appropriate to interpret BA shou as an instrument phrase ‘with hands’ which modifies the main verb tan ‘catch’.

Let us see an ambiguous instance involving BA-2/BA-3 in Late Chinese:

(6.18) 小弟把尖刀剜了自己的眼睛
   xiao-di  ba   jiandao  wan le  ziji-de  yanjing
   little-brother use/with   knife   cut   ASP own  eyes

Ambiguous translations as below
   (Shui-hu Quan-zhuang, 1524, the Ming Period, Late Chinese)

Similarly, the above instance (6.18) has two possible readings as below: it can be read as the serial verb construction with the meaning ‘the little brother used a knife (to) cut his own eyes’; it can also be the prepositional instrument construction meaning ‘the little brother cut his own eyes with a knife’. In the latter analysis, the sharp knife is a concrete instrument. For (6.18), these two interpretations are equally plausible. This is the same with the following instance (6.19):
(6.19) 罗爷把石块打死了七八个官兵

Luo-ye  ba  shikuai  da  si  le  qi-bai  ge  guanbing
SURNAME-sir  use/with  stone  beat  dead  ASP  seven-eight  CL  soldier

Ambiguous translations as below

(Sui-Tang Yanyi, the Ching Period, Late Chinese)

Here, this instance can be interpreted as ‘Mr Luo used a stone to beat seven or eight soldiers dead’, or ‘Mr Luo beat seven or eight soldiers dead with a stone’. In the former reading, the micro-construction involving BA is analyzed as a serial verb construction. In the latter analysis, BA appears in a prepositional instrument construction, and BA takes a concrete instrument.

From (6.18) and (6.19), we can draw such a conclusion: in an instance in which BA can be analyzed as an instrument marker and also the instrument is concrete, this instance always tends to have an alternative analysis as the serial verb construction of the purpose type.
4 Other meso-constructions apart from meso (A) are represented in Figure 6-10.
5 Other micro-constructions under this category of meso-construction are omitted here to save space. For full representation of the taxonomy for Construction-2 and Construction-3, see Figures 6-5, 6-6 and Figure 6-10, respectively.
6 The micro-constructions of the [Purpose-Target events] type involving BA-2, and the micro-constructions of the [Concrete instrument] type involving BA-3 (highlighted in red) are newly developed and attested in the ambiguous instances involving BA-2/BA-3. These two types, as two plausible analyses, tend to be both appropriate for the ambiguous instances involving BA-2/BA-3.
In sum, the above ambiguous instances from (6.16) to (6.19) belong to both categories of the serial verb construction and the prepositional instrument construction. They can be taken as a separate group of instances which instantiate more than one higher construction (see Figure 6-7 for representation of the taxonomy for these special instances).

### 6.1.4 Micro change, meso and macro constructions involving instrument marker BA-3

In this section, I show new micro-constructions involving instrument marker BA-3, and how they are sanctioned by different meso-constructions. Note that in §4.4 I have offered a general discussion of the prepositional instrument construction in Chinese from the typological perspective. The prepositional instrument construction is labelled as macro-construction-3 in this thesis. I arrange this section following the bottom-up direction of constructing the taxonomy, i.e. from micro-constructions through meso-constructions up to macro-constructions.

In the Middle Stage of Old Chinese, BA appears in a pure prepositional instrument micro-construction, as exemplified below:

(6.20) **自家把许多精神智巧对副他**

\[
\text{zijia} \quad \text{ba} \quad \text{xuduo} \quad \text{jingshen-zhiqiao} \quad \text{duifu} \quad \text{ta}
\]

someone **with** lots of **skills-schemes** **tackle** 3SG

‘Someone tackled him with lots of skills and schemes.’

(\textit{Zhu-zi Yu-lei}, 1263, the Song period, Middle Chinese)

Here, \textit{jingshen-qiaozi} (‘skills and schemes’) is an inherent capacity and it cannot be grasped/held/carried or used physically. Therefore, the above instance (6.20) no longer has an alternative interpretation as the serial verb construction. Since \textit{jingshen-qiaozi} refers to the means by which \textit{zijia} (‘someone’) deals with \textit{ta}, a person who is not easy-going, \textit{jingshen-zhiqiao} is an abstract instrument for the mental action \textit{duifu} (‘tackle; deal with’). Note that the BA object is never used as an
instrument after a serial verb BA in the serial verb construction. However, in the prepositional instrument construction as in (6.20), the NP following BA-3 is interpreted as an instrument. As will be illustrated in Figure 6-9, the BA-3 phrase [BA N/NP] has gone through the reanalysis to be a non-obligatory modifier which is subordinated to the main predicate and modifies the manner in which the main action takes place.

But, why the above instance could not be analyzed as an ambiguous instance (BA-2 /BA-3)? Although BA-1 is not just concrete but may be abstract ‘control’/ ‘know’ (see Figure 6-3), BA-1 is slightly different from BA-2 which is in the serial verb construction. As I argued in §4.3, the first serial verb tends to denote a concrete action because the serial verb construction expresses the serial events (actions). Accordingly, the object of the first concrete action tends to be a concrete entity that can be physically/visually dealt with. Obviously, jingshen-zhiqiao (‘skills and schemes’) is not such a concrete entity. Therefore, I suggest that BA in (6.20) is the instrumental use and cannot be a serial verb.

From the above token (6.20), the BA-3 micro-construction [BA-3 N/NP] can be seen as one step in a series of micro-constructions in which BA historically appeared (see Figure 6-8). Before analyzing the form and meaning in this type of micro-construction, let us first discuss the word class of BA-3. As have been discussed in §4.3 and §4.4, BA as a ‘take’ verb and a first serial verb (V1) is very likely to undergo a prepositional instrument marker stage, from the typological perspective.

As in (6.20), it seems that [BA N/NP] could be analyzed in two ways: either being a referring construction (Croft 2001) in which BA is a case marker, or being a prepositional instrument construction in which BA is a preposition ‘with’. Although case markers and prepositions have similar functions with the only difference that the former is more morphological and the latter is more syntactic, the analysis of the entire expression [BA N/NP] will become different. To be specific, in the former analysis, case marker BA is attached to N/NP to denote a reference to the object, and thus the entire expression is an NP in nature. In the latter analysis, the entire [BA N/NP] is a prepositional phrase in which BA is a preposition and N/NP denotes an instrument.
In order to decide which analysis is more appropriate, let us recall the debate on the word class of BA in history in connection to its development as an object marker (see §3.1.3.2): There has been a consensus that BA originated from a verb (e.g. Sun 1996; Huang 1982). However, opinions differ in terms of how the word category of BA historically changes. Although Jing-Schmidt (2005: 243) argues that case marking is atypical in Chinese from the typological perspective, Sun (1996; cf. Huang 1982) claims that BA developed into a case marker, as in the following instance:

(6.21) Ba xiangzi yiqi da kai
    BA suitcase together open (v) open (adj)
    ‘Open all the suitcases’

*(Hongloumeng; the Ching Period, Late Chinese; adapted from Sun 1996: 73)*

Does this suggest that BA in [BA N/NP] as in (6.20) could be a case marker? The instance (6.21) might prove the existence of case marker BA. But even if BA is a case marker in (6.21), BA is not necessarily a case marker in (6.20) as well. To compare (6.21) with (6.20), we can find at least two differences: First, the post-BA noun *xiangzi* (‘suitcase’) in (6.21) denotes a general entity whereas the referent of N/NP in (6.20) is taken as an instrument. Here, “instrument” refers to how the NP after BA is used in the sentence, rather than a lexical restriction (since there is not a nominal category called “instrument”). For example, in (6.20), *jingshen-zhiqiao* (‘skills-schemes’) is used as an instrument for tackling a person in the particular sentence. Second, the case marker BA as exemplified in (6.21) by Sun (1996) is actually an object marker (I term this category of BA as BA-5 in this section) in my analysis. As will be shown in §6.1.6, one of the clearest characteristics of the object marking Expression involving BA is that the post-BA noun is primarily the object of the main predicate. In contrast, the post-BA noun in (6.20) is not an object of the main verb *duifu* (‘tackle’) but the object of the instrument marker BA only. These differences suggest that BA in (6.20) is probably not a case marker as in (6.21) as defined by Sun (1996).
In addition, Sun (1996: 180) points out that there was indeed a prepositional instrument marker phase (in the Middle Chinese) before a full verb BA continued to grammaticalize into a more grammatical case marker (or, object marker\textsuperscript{76} in my analysis). In other words, in this intermediary stage, BA in the given [BA N/NP] expression as in example (6.20) has not yet been fully grammaticalized to be a case marker or object marker, being a preposition which might retain verbal contents to some extent.

To conclude, I support Jing-Schmidt’s (2005: 243) claim that there is not a case marking system in Chinese. I suggest that BA in the expression [BA NP] as in (6.20) is not a case marker, but a less grammaticalized prepositional instrument marker (‘with’) (cf. Mei 1972; Li and Thompson 1974b on coverbs, 1981; Wang 1947; Bennett 1981). This accords with the second analysis as mentioned in the beginning of this section: the entire [BA N/NP] is a prepositional instrument expression. Alternatively, BA is an adverbial relator which is used to introduce the instrument participant to the main verb, thereby increasing the valency to the main verb (cf. Bisang 1992: 69). The whole phrase [BA N/NP] is a kind of relational construction: it is a modifying adjunct specifying the manner in which the main action takes place.

The relation between BA and N/NP can be further accounted for from the perspective of “structural coding” (Croft 2001: 90). According to Croft (2001: 66), “STRUCTURAL CODING” means “the obligatory presence of additional morpheme in order to use the lexical item in a particular function (predicative, term head, modifier)”. It is common to see the shift of propositional functions via structural coding, as shown by Table 6-2:

\textsuperscript{76} In another section, I will further discuss how this instrument marker (preposition) BA developed into an object marker BA in a different construction.
In particular, Hengeveld (1992) labels Mandarin Chinese as a language of the RIGID\textsuperscript{77} type, in which “there is overt structural coding of the parts-of-speech function, but the same morphosyntax is used for two or more basic semantic classes (objects, properties, actions)” (Croft 2001: 67). In Mandarin Chinese, for example, “action words” (traditionally, i.e. verbs) and “property words” (traditionally, i.e. adjectives) both lack overt STRUCTUAL CODING in predication but require overt relativizers (REL) when modifying a term” (Croft 2001: 67; Hengeveld 1992: 63; Schachter 1985: 181). For example:

(6.22) neige  nvaizi  liaojie
that  girl  understand
‘that girl understands.’

(6.23) liaojie  de  nvaizi
understand  REL  girl
‘a girl who understands’

(Cited from Croft 2001: 67)

When liaojie (in boldface) takes the function of modification as in (6.23), it requires additional measures like a relativizer de as structural coding. Now, let us review the expression [BA-3 N/NP]. In Chinese, unmarked (bare) N/NP is an object word which is prototypically a term head, not a modifier. In order to take the function of modification, a noun should be overtly marked by an “additional morpheme” (Croft 2001: 66) (or, further measure) such as an instrument marker BA. As a consequence,\textsuperscript{77}

\textsuperscript{77} This is in contrast to the FLEXIBLE type.

Based on the above analyses, the form and meaning of [BA-3 N/NP] can be summarized as below:

**Form:** NP1 [**Instrument marker** NP2] VP

**Meaning:** The participant (denoted by NP1) acts in an event (designated by VP) by means of using an instrument denoted by NP2.

This can be further represented as follows:

<table>
<thead>
<tr>
<th>Sem</th>
<th>INST.marker</th>
<th>&lt; instrument&gt;</th>
<th>MAIN ACTION</th>
<th>&lt;agt</th>
<th>pat&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>means</td>
<td>BA-3</td>
<td>&lt; &gt;</td>
<td>MAIN PRED</td>
<td>&lt;</td>
<td>&gt;</td>
</tr>
<tr>
<td>Syn</td>
<td>PREP</td>
<td>OBJx</td>
<td>V</td>
<td>SUBJ</td>
<td>OBJy</td>
</tr>
</tbody>
</table>

Figure 6-8: Constructional representation of the micro-constructions involving prepositional instrument marker BA (BA-3)

As shown above, the main predicate and instrument marker BA (BA-3) are in a head-dependent relation. The preposition/instrument marker BA-3 only takes its instrument N/NP, i.e. OBJx, while the main predicate takes two NPs, i.e. the agent-subject and a different patient-object (OBJy). As a consequence, the connection between BA-3 and NP1 has been lost, and NP1 is no longer a shared subject for BA and the main verb (e.g. *duifu* ‘tackle’ in (6.20)) as in the serial verb construction. Alternatively, the syntactic argument structure of (6.20) can be represented in the style of Word Grammar as follows. This will be compared with the structure of the micro-constructions involving causative verb BA later in §6.1.5.
Furthermore, the phrase [BA-3 N/NP] shows signs of subordination to the main verb as the adverbial modifier: In terms of form, it is attached to the main verb, and thus it is a dependent on the head verb which is the nucleus. For instance, the main predicate *duifu* (‘tackle’) is the center of the predication in (6.20). [BA-3 N/NP] is merely a non-obligatory adverbial modifier. This contrasts with the obligatory serial verb BA-2 in a core-position in the serial verb construction. The subordination constructions are structurally compressed (Croft 2001: 352) as a result of the “desententialization” (Lehmann 1988: 200) and “deranking” (Bril 2004: 27; Stassen 1985). In terms of meaning, it indicates the instrument for taking the main action denoted by the main verb. [BA-3 N/NP] becomes more semantically integrated which contributes to the grammatical integration (Givón 1990). Therefore, the above constructional representation can be viewed as the combination of two subconstructions as below:
The above discussion and diagrams have shown the form and meaning of the micro-constructions involving prepositional instrument marker BA which takes an abstract instrument as in token (6.20).

The following examples from the Middle period and the Late period of Old Chinese exhibit meaning alternation. The post-BA NP displays “facets” of lexical meaning. My following use of the term “facet” is based on Croft and Cruse (2004; see also Cruse 1995, 2000, 2002a, 2002b). On the facet account, a lexical item encompasses two distinct aspects which form a single conceptual gestalt. Consider example (6.24):

(6.24) 行家 把此文章笑杀他
Hangjia ba ci wenzhang xiao-sha ta
Expert with DEM article despise 3SG
‘The experts despise him by (writing the impolite contents of) this article’

(Tai-ping Guang-ji, 1566, the Song period, Middle Chinese)
A special character of (6.24), compared with the previous example (6.20), lies in the lexical semantics of *wenzhang*. In (6.24), the noun after BA, *wenzhang* (‘article’) on the one hand refers to concrete paper material, the visible printed material; on the other hand, it refers to the abstract text (contents or ideas of this article). The facets of *wenzhang* can therefore be designated as [PAPER MATERIAL] and [TEXT], respectively. However, these two facets behave jointly to form a unified gestalt. The construal of *wenzhang* in the context provided by (6.24) includes both the concrete/physical manifestation and the abstract text.

For another example:

(6.25) ‘修净业多年，西方是我世界’,

Xiu-jingye duo-nian, xifang shi wo shijie,
Practice-Buddhism many-years Pure Land BE 1st POSS converted religion
‘(I) have been practicing Buddhism for many years, and the Pure Land will be my ultimate converted religion,’

岂复往海外山中去做神仙耶?
qifu wang haiwai shan-zhong qu zuo shenxian ye?’
why go to overseas mountain to become fairy INTERJECTION
‘why do I go to a (holy) mountain overseas to become a fairy there?’

故此把这两首绝句回答李公

guci ba zhe liang-shou jueju huida Li-gong
therefore with DEM two-CL poem answer NAME
‘(he) therefore answered Mr Li with (the ideas of) these two poems’

*(Chu-ke Pai-an Jingqi, 1628, the Ming period, Late Chinese)*

The context for this sentence is: Mr Li asked a Buddhist monk why not go to the *Penglai* Mountain (a holy mountain in the tales) to become a fairy there. The monk simply cited two poems (as shown in the first line) as a kind of means by which he
answered Mr Li. He was determined to continue his practice in the place where he had been because it actually didn’t matter where he was but what his heart was converted to (i.e. the Pure Land in his mind as the ultimate destination). Therefore, the composition of *zhe liang-shou jueju* (‘these two poems’) also includes two lexical facets: it can be seen as texts on the one hand and refers to the ideas on the other hand.

Instances (6.20) and (6.25) (or, (6.24)) generalize a meso-construction (A) (see Figure 6-10) involving an instrument marker BA. Meso-construction (A) will be represented as [Agt Sub + Inst Marker BA + Inst NP + Action VP] in Figure 6-10. Similar expressions involving other instrument markers JIANG, YI, NA, and YONG in Old Chinese (as have been shown in §4.4) instantiate meso-constructions (B), (C), and (D) (see Figure 6-10). For example, an expression involving JIANG will be illustrated in Figure 6-10 as [Agt Subj + Inst Marker JIANG + Inst NP + Action VP]. Therefore, we can see a set of meso-constructions which are all sanctioned by the highest macro-construction, i.e. the prepositional instrument marking construction. Recall §4.4; I have introduced the Chinese prepositional instrument construction which is now known as macro-construction-3 in this thesis. The prepositional instrument construction is another macro-construction that sanctions micro-constructions involving preposition BA. Since the prepositional instrument construction is known as macro-construction-3, this section is organized according to how micro-constructions are generalized from tokens involving instrument marker BA, and how micro-constructions are sanctioned by meso-constructions in a bottom-up direction. Therefore, I finally mention macro-construction-3 which is positioned on the most superordinate level in the taxonomy and which is instantiated by all lower level constructions. In sum, the organization of my discussion (and the same principle applies to other sections in this chapter) follows the order of constructing the taxonomy, i.e. from micro-constructions through meso-constructions up to macro-constructions. We are now able to construct the taxonomy for the prepositional instrument constructions involving BA, as in Figure 6-10:
Figure 6-10: The taxonomy for the prepositional instrument construction involving BA-3 in Old Chinese
As mentioned above, the micro-construction involving BA was reanalyzed as the prepositional instrument marking construction in the Middle Period of Old Chinese.

### 6.1.5 Micro change, meso and macro constructions involving causative verb BA-4

Recall a general discussion of the Chinese causative construction in §4.5; the Chinese causative construction is labelled as macro-construction-4 in this section. I will explain how the most superordinate macro-constructions involving causative verbs sanction micro-constructions and meso-construction which are presented, in line with the bottom-up direction of constructing the taxonomy.

This section firstly discusses the micro-change from the serial verb construction to the causative construction involving causative verb BA-4. I show that the serial verb construction derives the causative construction independently from the prepositional instrument construction. That is, there are two paths in the development of constructions involving BA (recall §4.4): one is from the serial verb construction involving serial verb BA-2 to the prepositional instrument construction involving preposition BA-3, the other is from the serial verb construction involving serial verb BA-2 to the causative construction involving causative verb BA-4.

I have shown in the previous section (§6.1.4) that there emerge micro-constructions involving instrument marker BA-3. In the Middle Period, BA appeared in a different construction as exemplified below:

(6.26) (吾) 把魏公做右相

Wu ba Wei gong zuo you-xiang

1SG make SURNAME sir serve as assistant minister

‘I made Mr Wei serve as the Assistant Minister.’

(Zhu-zì Yu-lei, the Song period, Middle Chinese)

As shown above, (6.26) is a causative expression involving BA-4, which fits into the Chinese causative construction. The Expression involving BA-4 expresses the causing sub-event. It cannot be analyzed as the serial verb construction, or the
prepositional instrument construction. Here I firstly use the style of Word Grammar to represent syntactic argument structure of the new type of instance involving causative verb BA:

This differs from the structure of the micro-constructions involving instrument marker BA (BA-3), which is repeated below:

As shown above, in the new instances involving causative verb BA (e.g. instance (6.26)), BA takes its subject and object, not only the object as compared with the structure of the micro-constructions involving instrument marker BA (BA-3). Another difference is that NP2 is not only the object of BA, but also the subject of the other verb in the micro-constructions involving BA-4.

Apart from change in the syntactic argument structure, other formal changes include the head-dependent relationship between BA (BA-3/BA-4) and the other verb. In the micro-constructions involving BA-3 as shown above, the BA phrase is a prepositional adjunct to the main verb, such as ba jingshen-zhiqiao (‘with skills and schemes’) in a previous instance (6.20). Accordingly, BA-3 is the dependent (modifier) on the head verb. In the micro-constructions involving BA-4 like (6.26), however, BA and the other VP zuo you-xiang (‘serve as the assistant minister’) form a new relationship in which BA is the dominant causative head and the other predicate is a dependent in the head-dependent relationship. Hence, the above new instance (6.26) witnesses a different head-dependent relationship that holds between BA and the other verb.

Functional changes also occur to the new instance (6.26) compared with the micro-constructions involving instrument marker BA-3:
First, the event structure template has changed. The micro-construction involving BA-3 (such as (6.20)) expresses an action which occurs by employing an instrument marked by BA-3. The BA expression modifies the main event by introducing the instrument. By comparison, the new instance (6.26) expresses causation ‘to cause…to happen’. In (6.26), BA and the other VP zuo you-xiang (‘serve as the assistant minister’) establish a causative frame which assigns the role of CAUSER to the initial NP and CAUSEE to the post-BA NP. In the complement clause, VP zuo you-xiang (‘serve as the assistant minister’) indicates the caused event.

Second\(^\text{78}\), the post-BA N takes dual semantic roles in the new instance (6.26). Wei-gong (‘Mr Wei’) is assigned the role of CAUSEE (for BA-4) and the other role for VP (as AGENT in this case). Recall that the post-BA N only bears the role of INSTRUMENT in the micro-constructions involving instrument marker BA, as in (6.20).

In the discussion above, I have taken instance (6.26) as an example to analyze how it differs from the previous micro-constructions involving instrument marker BA and thus how it represents an idiosyncratic form-meaning pairing. The above instance (6.26) represents causative verb BA (BA-4) micro-constructions. The form and meaning of (6.26) can be illustrated in Figure 6-11:

\(^{78}\) A third functional change could be host-class expansion in the instances involving causative verb BA. This feature is not exemplified in the instance (6.26) but could be shown in the following example:

一句把贾母也怄笑了
yi-ju hua BA Jia-mu ye ou-xiao le
one-CL sentence causative SURNAME-mother even laugh ASP
“One sentence even made Mother Jia laugh”

*(Hong Lou Meng, 1784, Ching Period)*

The above instance also involves causative verb BA. Here the subject yi-ju hua (‘one sentence’) is not animate with high degree of agentivity. This feature contrasts with the previous micro-constructions involving instrument marker BA-3 (and the micro-constructions involving BA-1 and BA-2) in which the Subject must be highly agentive. Therefore, there could be an expansion of inanimate and non-volitional categories in the Subject position, in the micro-constructions involving causative verb BA.
As shown above, the causative verb BA-4 takes two NPs, while the intransitive predicate *qianqu* (‘go forward’) only takes *ta* (3SG) as the agent-subject. Note that the CAUSEE taken by BA-4 is also the agent-subject of the caused predicate *qianqu* (‘go forward’), as marked by the same subscript (OBJ vs SUBJ). In addition, the causative verb BA-4 is the head and the other predicate is the dependent. The micro-construction involving BA-4 thus has a different dependency relation from the micro-construction involving BA-3: in the former construction, the causative verb BA (BA-4) is the head while the other verb is the dependent; in the latter construction, the prepositional instrument phrase involving BA-3 is the dependent while the main verb is the head. To summarize, both changes of form and meaning occur to the micro-construction involving a causative verb BA-4.

As has been discussed in §4.5, I adopt a four-way categorization of causatives for labelling types of meso-constructions involving BA-4, including “inductive”, “volitional”, “affective” and “physical” according to the existing typological work on causatives (Croft 1991; see also Hollmann 2003) based on Talmy’s (1976, 1985, 1988, 2000) force dynamics model. In order to further label subtypes under each category, I rely on a distinction between “implicative” and “non-implicative” (Shibatani 1976) as parameters. In §4.5, I have offered a detailed review of these terms in literature. In this section, I simply use them for categorization and sub-categorization of the BA-4 causative constructions, and show how micro-constructions and meso-constructions are generalized from tokens of BA.

Type 1: [Inductive causative]
Recall §4.5; “inductive causative” features an animate causer and an animate causee. Here I use the term “inductive causative” to label the first type of constructions involving BA-4, which will be known as Meso-construction (A) in Figure 6-12. The following tokens are from the Middle Chinese and the Late Chinese, respectively.

Also recall §4.5; there is a distinction between the “implicative” and the “non-implicative”. Here I use these terms to label two subtypes of BA causatives under the category of inductive Meso-construction (A). The implicative subtype will be shown as Micro-construction (A-a) in Figure 6-12, while the non-implicative subtype will be shown as Micro-construction (A-b). The following tokens represent Subtype (1) implicative and Subtype (2) non-implicative of Type 1 [Inductive], respectively.

Subtype (1): [Implicative]

(6.27) 大尹把许宣一一供招明白
Dayin ba XuXuan yiyi gongzhao mingbai
judge force NAME in detail confess honestly
‘The judge forced XuXuan to honestly confess in detail.’
(Yuan-dai Hua-ben Xuan-ji, the Yuan period, Late Chinese)

In this case, gongzhao (‘confess’) is a punctual action that is caused by Dayin (‘judge’) and done by Xu Xuan. The context is about the trial in the court, where the judge demands Xu Xuan’s confession which is an action that Xu Xuan cannot disobey. Since BA in this case means “force”, the above instance is the implicative causative in which the causing event entails the caused event. It is ungrammatical to say “the judge forced XuXuan to honestly confess in detail, but XuXuan did not confess”.

Subtype (2): [Non-implicative]
Guansi asked his son to have a rest aside.

(Zhuzi Yulei, the Song period, Middle Chinese)

The above instance is the non-implicative causative construction in which the causing event does not entail the caused event. It is grammatical to say “Guansi asked his son to have a rest aside, but his son did not do so”. Similar to (6.28), the following (6.29) and (6.30) are also non-implicatives.

I now request him to go forward.

(Shuo-Tang Quan-zhuang, 1730, the Ching period, Late Chinese)

In (6.29), BA is a causative verb taking a causing event. The NP following the causative verb BA, i.e. ta (3SG) is the object of the causative verb BA (matrix verb), and meanwhile it is the subject of the embedded verb qianqu ('go forward'). The lexical semantics of BA here is ‘request’ which indicates the non-implicative. In other words, the causing event does not entail the caused action; therefore, it is possible to say “I now request him to go forward, but he refuses to go forward”.

The Jin’s couple allowed their daughter to marry a poor student.

(Chu-ke Pai-an Jingqi, 1628, the Ming Period, Late Chinese)

To summarize, both examples (6.27) and (6.28)/(6.29)/(6.30), despite distinctions between implicatives and non-implicatives, form a subgroup of a more general
category, i.e. Meso-construction (A) of [Inducive] type (as will be illustrated in Figure 6-12) which features two animate participants in the causative relation, i.e. [+animate causer, +animate cause].

Type 2: [Volitional causative]

Recall §4.5; the volitional causative features an animate causer and an inanimate causee. Here I use the term “volitional causative” to label the second type of constructions involving BA-4 (which will be shown as Micro-construction (B) in Figure 6-12). The following instances (6.31) and (6.32) are from the Middle Chinese and the Late Chinese, respectively.

(6.31) 手把杖倒竖

shou ba zhang daoshu
hand causative stick stand

‘(One's) hands made the stick stand up.’

(Taiping Guangji, the Song period, Middle Chinese)

In (6.31), a person’s shou (‘hand’) is animate while zhang (‘stick’) is inanimate, i.e. [+animate causer, -animate causee]. Therefore, (6.31) represents the volitional causative, which will be shown in Figure 6-12 as Micro-construction (B).

(6.32) 火灵圣母把金霞冠现出金光来。

Huoling-shengmu ba Jinxia-guan xianchu jin-guang lai
NAME causative NAME-crown radiate golden-light particle

‘Huoling-shengmu made the Jinxia Crown radiate golden shine.’

(Feng-shen Yan-yi, the Ming period, Late Chinese)

Note that there is not a distinction between implicative causatives and non-implicative causatives under the category of the volitional causatives according to my diachronic data of BA. Both instances (6.31) and (6.32) are implicative causatives, as suggested above. As will be shown below, instances of Type 3
(affective causative) and Type 4 (physical affective) are all implicative causatives as well.

Type 3: [Affective causative]

Recall §4.5; the affective causative features an inanimate causer and an animate causee. Here I use the term “affective causative” to label the third type of constructions involving BA-4 (which will be shown as Micro-construction (C) in Figure 6-12). The following tokens are from the Middle Chinese and the Late Chinese, respectively.

(6.33) 几番曾把此心灰
ji-fan ceng ba ci xin hui
\hspace{1em} \text{time used to causative DEM heart feel desperate} \hspace{1em}
\text{‘Time used to make this heart feel desperate.’}

(\textit{Wu-deng Hui-yuan}, the Song period, Middle Chinese)

In (6.33), \textit{ji-fan} (‘time’) is an inanimate causer while \textit{ci xin} (‘this heart’) is an animate causee in an affective causative construction.

(6.34) 原来是一封休书，
yuanlai shi yi feng xiushu,
\hspace{1em} \text{unexpectedly BE one CL a divorce letter} \hspace{1em}
\text{‘Unexpectedly it was a letter from her husband,’}

\hspace{1em} \text{把那小姐气死了。}

\hspace{1em} ba na xiaojie qi si le
\hspace{1em} \text{make DEM lady get annoyed deadly ASP} \hspace{1em}
\text{‘Unexpectedly that was a letter of divorce announcement which made the lady get annoyed to death.’}

(\textit{Qian-nv Li-hun}, 1328, the Yuan Period, Late Chinese)
In (6.34), *na xiaojie* (‘that lady’) is not only the causee, but also the experiencer of the caused event (an effect). The inanimate causer (or, the object) *yi-feng xiushu* (‘a divorce letter’) acts on the animate causee *na xiaojie* (‘that lady’), which results in a volitional causative construction.

Type 4: [Physical causative]

Recall §4.5; the physical causative features an inanimate causer and an inanimate causee. Here I use the term “physical causative” to label the fourth type of constructions involving BA-4 (which will be shown as Micro-construction (D) in Figure 6-12). The following tokens are from the Middle Chinese and the Late Chinese, respectively.

(6.35)  (日落) 把土成金

Riluo   ba   tu   cheng   jin
Sunset  causative  sands  become  gold
‘Sunset made the sands become gold.’

*(Wu-deng Hui-yuan, the Song period, Middle Chinese)*

In (6.35), *riluo* (‘sunset’) is an inanimate situation which acts upon an inanimate causee *tu* (‘sands’). In this physical causative construction, the caused event is that the sands become gold.

All the above instances (6.26) to (6.35) are considered to be sanctioned by the most schematic causative construction which is counted as macro-construction-4 in the constructional network involving BA (see Figure 6-12 for the representation of the taxonomy for the causative construction involving BA). The Chinese causative construction has been discussed in §4.5, and we are now able to construct the taxonomy for the causative constructions involving BA-4, as illustrated in Figure 6-12 and Figure 6-13:
Figure 6-12: A partial taxonomy for the causative construction involving BA-4 in Old Chinese (Part I)
Figure 6-13: A partial taxonomy for the causative construction involving BA-4 in Old Chinese (Part II)
6.1.6 Micro change, meso and macro constructions involving object marker BA-5

In this section I proceed with micro-change involving BA in the Late Period of Old Chinese: Expressions involving BA (BA-5) were recruited for object marking function.

Note that in this thesis I mainly consider object marker BA in the resultative expressions for a case study. However, BA can appear as a general object marker in other non-resultative expressions. A previous example (6.21) is repeated below as (6.36) in which object marker BA-5 participates in the transitive construction:

(6.36) Ba xiangzi yiqi da kai
       BA suitcase together open (v)
       ‘Open all the suitcases’
       (Hongloumeng; the Ching Period, Late Chinese; adapted from Sun 1996: 73)

In line with my focus on object marker BA in resultatives, the following discussion does not include object marker BA in non-resultative expressions.

As argued in §3.3.1 (see Table 3-3 for different combinatorial patterns of parameters), I establish four event types for classifying the BA resultatives in synchrony, i.e. HANDLE, AFFECT, DESIRE, and TRIGGER. In the diachronic part, I use the same model of classification to categorize tokens involving object marker BA. Based on historical data, three types of the BA resultatives are attested, i.e. HANDLE, TRIGGER and DESIRE (I will explain why the AFFECT type is not found later in this section).

As will be discussed in this section, there is correspondence between the diachronic constructions involving object marker BA and the synchronous variants of different event types. The diachronic variations contribute to the synchronous polysemy. This suggests that the BA-5 resultatives which emerge as the end result of constructional change are just the BA resultatives in use in synchrony as discussed in Chapter 3. Therefore, a single, uniform classification is adopted as the background
of both the synchronic and diachronic analyses, leading to a consistent account of the BA resultatives.

Furthermore, different semantic relations are held between the main verb and the resultative element, which gives rise to sub-categorization of the BA resultative constructions. Note that all the sub-categories of the BA resultatives (based on the semantic relations between the main predicate and the resultative) are also firstly suggested by me, and were not seen in previous studies on this topic. Let us start with tokens which instantiate the first type [HANDLE]:

Type 1: [HANDLE]

The BA resultatives of this type in Old Chinese and in Contemporary Chinese have certain properties in common: a volitional agent-subject intentionally and directly acts upon the patient-object which/who undergoes a visible change ([+Volitional Instigator; +Direct Causation; +Intentional Result; +Visible Change]). I assume that this type of the BA resultatives (which will be known as Meso-construction (A), see Figure 6-16) provides the synchronic variants of the HANDLE type with the historical sources. To take the following instance (6.37) as an example:

Sub-type 1: [Action-STATUS]

(6.37) (大郎) 把伤处解开

Da-lang ba shangchu jie kai
NAME OBJ marker wound tear open
‘Da-lang tore the wound open.’
(Ye-sou Pu-yan, 1767, the Ching Period, Late Chinese)

In (6.37), there is an animate and volitional subject, i.e. da-lang (NAME) and wo (1SG), respectively. The subject-agent directly acts upon the object with an intention. As a consequence, the object is entirely under the control of the subject-agent and then undergoes a visible change. The resultative expresses the new state of the object,
as desired by the subject. In a word, (6.37) encode a HANDLE event, as if an object in the control of a volitional subject changes in a certain direction as the subject intends.

Meanwhile, the above (6.37) represents the first subtype under Type 1 [HANDLE] in historical data, i.e. [Action-STATUS] (which will be shown as Micro-construction (A-a) in Figure 6-16). Here, [Action-Status] means that a relation of action-status is held between the main verb and the resultative element in these instances. In (6.37), the adjective kai (‘open’) indicates the state of the wound as a result of tearing it. The resultative part is attached to the main action, and thus the action-result relation holds between the main verb and the resultative element. Different from the general resultative constructions in Old Chinese, (6.37) involves an object marker BA after which the object appears; meanwhile, the action verb jie (‘tear’) and the resultative element kai (‘open’) are bound together in the form of [V-R]. Despite the syntactic difference, the BA resultative construction retains all those essential elements required in the resultative construction, e.g. existence of the resultative verb compound, and the ACTION-RESULT relation.

Generalized from the token (6.37), the form and meaning of Chinese involving object marker BA (BA-5) micro-construction can be represented in Figure 6-14:

<table>
<thead>
<tr>
<th>Sem</th>
<th>THEME marking + Total Affectedness</th>
<th>ARG</th>
<th>CAUSE TO CHANGE &lt; causer result-goal theme&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td>R</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>R: instance, means BA-5</td>
<td>&lt;arg&gt; shangechn</td>
<td>PRED jie-er</td>
<td>Jie-ee &gt; Da-lang</td>
</tr>
</tbody>
</table>

Figure 6-14: Constructional representation of BA-5 micro-constructions in Old Chinese

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79 Since I attempt to present the argument structure of BA and the main verb separately in the style of BA < >, Verb < >, I split the word order to make all arguments of either BA or of the main verb get together.
The above Figure 6-14 summarizes the relationship between the constructional argument roles and lexical participant roles.

The micro-construction involving BA-5 has three **Argument Roles**:

<causer, result-goal, theme>

The Main Predicate *jie* ‘tear’ has three **Participant Roles**:

<Jie-er, Jie-ee, Jie-result>

BA-5 introduces the object to the main predicate, marking the constructional argument role of “theme”. Note that the object of BA-5 is also the object of the main predicate *jie*, i.e. *shangchu*, as marked by the same subscript OBJ. The above Figure 6-14 can also be viewed as a combination of two sub-parts in head-complement relation. This syntactic property contrasts with the micro-construction involving BA-3 which is an adverbial modifier in relation to the head verb (recall Figure 6-9).
From the above instance (6.37), we can also see the correlations among micro-constructions involving BA-3, BA-4 and BA-5:

According to what have been exemplified and argued so far, I find that the concept of CAUSE (‘CAUSE TO CHANGE’) is essential to both the BA causative and the BA resultative. That is, the BA resultative largely originates from the BA causative, and this relationship has not been paid attention to in previous studies (e.g. Sun 1996). Based on the BA data, we can see that semantic similarities facilitate BA to appear into the resultative construction. However, I also notice that these two constructions differ from each other in regard to the constructional properties. For example, the micro-construction involving causative verb BA-4 comprises of two sub-events: the causing event and the caused event. In contrast, the micro-
construction involving object marker BA-5 (in the case of the resultative) requires three constructional roles, i.e. “causer”, “theme” and “result-goal”.

With respect to the micro-construction involving BA-5 and BA-3, either instrument marker BA-3 or object marker BA-5 takes only one N/NP. Therefore, I assume that the prepositional instrument construction motivates BA to appear in the object marking construction in which BA remains taking one N/NP only. In the former micro-construction, [BA_inst.marker N/NP] is subordinated to the main predicate modifying the main predicate with an ‘instrument’; in the latter micro-construction, [BA_OBJ marker N/NP] marks the general object which is the complement of the main predicate. Compared with the micro-constructions involving BA-3, the micro-constructions involving BA-5 are more tightly integrated to the head verb, i.e. the main predicate.

In addition, according to Goldberg and Jackendoff (2004), resultative constructions can be classified by syntactic or semantic properties. For instance, there are distinctions between “transitive resultatives” and “intransitive resultatives”. Due to the existence of the object marker BA, the object position is always occupied by a nominal and thus the BA resultative construction is always a TRANSITIVE resultative.

Let us return to the first subtype [Action-Status] involving object marker BA, which is exemplified by another instance (6.38) below:

(6.38) 咱们做奴才的人跟着官府，
Zan-men zuonucai-de-ren gen zhe guanfu,
1PL servant follow ASP official
‘We servants followed the officials,‘

官府若下了马，
Guanfu ruo xia le ma,
Official if get off ASP horse
‘if the officials got off their horses,’
咱们把马拉去，

Zan-men ba ma la qu,

1PL OBJ marker horse pull far away

‘we would pull the horses far away,’

好生拴着。

Haosheng shuan zhe.

Properly tie ASP

‘(and) properly tie (these horses).’

‘We servants (just) follow the officials; if the officials got off their horses, we would pull the horses far away (and) properly tie (these horses).’

(Lao Qi-da Xin Shi, the Yuan Period, Late Chinese)

As in (6.38), the verb la (‘pull’) denotes an action, while qu (‘far away’) expresses the state. The Expression involving BA in (6.38) is analyzed as an object marking expression. As an Object marker, BA-5 takes the function of “marking semantic roles” (Eifring 1995: 56) of the nominal object ma (‘horse’). The above instance (6.38) cannot be the causative construction: BA is no longer a causative verb, and the post-BA NP ma (‘horse’) is no longer the subject of a caused event as in the causative construction. The instance (6.38) cannot be the prepositional instrument construction, either: ma (‘horse’) is not used as an instrument, and BA is not an instrument marker here. It seems that the instance (6.38) could be the serial verb construction, i.e. “we would grab the horses and pull them far away”. However, this interpretation is less appropriate than the resultative reading, according to the context: in the clause after the BA clause, the object of shuan (‘tie’) is omitted because it (ma, ‘horse’) has appeared in the earlier clauses. Obviously, ma (‘horse’) is the object of xia (‘get off’) and the object of shuan (‘tie’); therefore, ma (‘horse’) which emerges in the BA clause is very likely to be an object of the main verb la (‘pull’) as well.

The above instances (6.37) and (6.38) are canonical instances of the micro-constructions involving BA-5, since qu (‘far away’) and kai (‘open’) describe the
typical resultative meaning, i.e. the resultant state. However, there are more subtypes under the [HANDLE] type, as exemplified below:

Sub-type 2: [Action-DESTINATION]

(6.39) (叔宝) 把犯人带到衙门

(Shubao) BA fanren dai dao yamen

NAME OBJ marker prisoner take to government office

‘Shubao took the prisoner to the government office.’

(Shuo-Tang Quan-zhuan, 1730, the Ching Period, Late Chinese)

In this sentence, fanren (‘prisoner’) is the object that Shubao takes to the government office. In other words, the prepositional resultative here is the DESTINATION. The sub-type 2 will be counted as Micro-construction (A-b) in Figure 6-16.

Sub-type 3: [Action-PATH]

(6.40) (樊虎) 把人犯带过岗子

Fan Hu ba renfan dai guo gangzi

NAME OBJ marker prisoner take across hillock

‘Fan Hu took the prisoner across a hillock.’

(Shuo-Tang Quan-zhuan, 1730, the Ching Period, Late Chinese)

The PATH result in this instance is suggested by the prepositional phrase guo gangzi (‘across a hillock’). The sub-type 3 will be counted as Micro-construction (A-c) in Figure 6-16.

Sub-type 4: [Action-REACTION]

(6.41) 这个和尚蒙吃蒙喝, ……

Zhe-ge heshang meng-chi-meng-he,

DEM-CL monk cheat for eating and drinking without paying bills

‘This monk cheated for eating and drinking without paying bills,’
掌柜的把和尚打跑了。

zhangguide  ba  heshang  da  pao  le
shopkeeper  OBJ marker  monk  beat  escape  ASP
‘The shopkeeper beat the monk who then escaped.’

/ ‘The shopkeeper caused the monk to escape by beating him.’

(Ji-gong Quan-zhuan, 1759, the Ching Period, Late Chinese)

This type is special because it expresses a resultant action rather than a resultant state. In (6.41), the result is expressed by a verb pao (‘ran’) which indicates the reaction of the monk in response to the shopkeeper’s action of ‘beating’.

The main action is ‘the shopkeeper beat him’, and the result of this action is that ‘the monk escaped’. Thus, he shang (‘monk’) is the object of the main verb da (‘beat’), and it is also the subject of the resultant action (as I termed in the above texts) pao (‘escape’).

Here are the reasons why I think pao (‘escape’) denotes a resultant action rather than a serial action: In terms of syntax, the serial verb construction features the identical subject shared by both predicates. However, in the above instance, the subject of the second verb pao (‘escape’) is heshang (‘monk’) rather than zhangguide (‘shopkeeper’). In terms of semantics, the serial verb construction expresses serial actions (or, events) – either serial action constitutes a part of the whole event. However, in the above example, the second verb pao (‘escape’) denotes the result of the main action, rather than a consecutive part of an entire event. In addition, if zhangguide (‘shopkeeper’) didn't beat heshang (‘monk’), he would not escape. That is, the shopkeeper’s beating caused the monk to escape. In this sense, pao (‘escape’) results from the action da (‘beat’). As a consequence, I suggest that pao (‘escape’) here is not a serial verb but a resultant verb, although pao (‘escape’) denotes an action rather than a state. The sub-type 4 will be counted as Micro-construction (A-d) in Figure 6-16.

Sub-type 5: [ACTION-FACTIVE THEME]
(6.43) 二更天，他又到家里来一探，
   Er-geng-tian, ta you dao jia-li lai yi tan,
   Mid-night 3SG again arrive home to once have a look
   ‘(In the) mid-night, he got back home to have a look again,’

就听他妻子屋中，有男女欢笑之声。
jiu ting ta qizi wu zhong, you nan nv huanxiao zhi sheng.
just hear 3SG wife room inside there be man woman laugh REL sound
‘(he) just hear that there was sound of a man and a woman’s laughing,’

沈国栋把窗户捅了一个窟窿，
Sheng Guodong ba chuanghu tong le yi-ge kulong
NAME OBJ marker window-paper stab ASP one-CL hole
‘Shen Guodong stabbed the window-paper leaving a hole,’

往屋中一瞧。
wang wu zhong yi qiao
toward room inside once see
‘(in order to) have a look at the inside of the room.’

(Ji-gong Quan-zhuan, 1759, the Ching Period, Late Chinese)

The context for this given sentence is: The husband Shen Guodong was suspicious of his wife’s being not loyal to him, so he returned home in the mid-night to have a look. When he heard the laughter from a stranger, he was alert and stabbed the paper window open with a hole to see who was in his wife’s room. Therefore, yi-ge kulong (‘a hole’) was not there at the beginning; instead, it was newly made by Shen Guodong as a result of tong (‘stabbing’) in the process of his private detection. The instance (6.43) below is another example of this sub-type:
(6.43) (冯保) 把海瑞养成一个胖子

Feng Bao ba Hairui yangcheng yi-ge pangzi
NAME OBJ marker NAME raise/feed one-CL a fat person

‘Feng Bao fed Hairui to be a fat man.’

(Haigong Da-hongpao Zhan, 1893, the Ching Period, Late Chinese)

The context for this sentence is: Feng Bao imprisoned Hairui in a good condition, feeding him with lots of good food. Hairui then became a fat man, different from how he looked like before. So, yi-ge pangzi (‘a fat man’) is an emerging result achieved by Feng Bao’s efforts over a course of time.

The above tokens from (6.37) to (6.43) instantiate five micro-constructions, including [Action-STATUS], [Action-DESTINATION], [ACTION-PATH], [Action-REACTION], and [Action-FACTIVE THEME]. These micro-constructions form a subgroup which is licensed by a higher category, i.e. Meso-construction (A) [HANDLE], as will be shown in Figure 6-16. Meso-construction (A) is sanctioned by the resultative construction, one of the latest macro-constructions (macro-construction-5) into which an Expression involving BA is recruited in Old Chinese (recall §4.5 on the Chinese resultatives).

Let us move on to the second type (Type 2) of the BA resultatives, as represented below:

Type 2: [TRIGGER]

(6.44) (一阵怪风) 把帘子都吹开

Yi-zhen guai feng ba lianzi dou chui kai
One-burst strange wind OBJ marker curtain even blow away
‘A burst of strange wind even blew the curtain away.’

(Qi-jian Shisan-xia, 1896, the Ching Period, Late Chinese)

The above construct (6.44) relates to the Expression involving BA of the TRIGGER type in Contemporary Chinese while comparing the values of parameters for semantic composition, i.e., [-Volitional Instigator; +Direct Causation; -Intentional
Result; +Visible Change]. Here, the adverb kai (‘away’) expresses the resultative state of lianzi (‘curtain’) which is affected by a non-volitional and inanimate natural force, i.e. a burst of strange wind. Since the above instance also involves an element of TRIGGER, i.e. a non-volitional instigator triggers a direct causation in a non-intentional manner leading to a visible change, we come to the conclusion that the TRIGGER type in diachronic data derives the TRIGGER variant of the BA resultatives in synchrony.

The above type will be known as Meso-construction (B) (see Figure 6-16) which sanctions not only the BA resultatives but also some cases without BA. Both the BA resultatives and the non-BA resultatives contribute to the same over-arching schema.

(6.45) (雷电) 果震柏粉碎。

(Leidian) guo zhen bo fensui.
‘Lightning really shock Cypress broken into pieces.’

(Modified from Shi (2002: 49))

The above instances (6.44) and (6.45) of the [TRIGGER] type are similar: the subject NP is the force that triggers the object NP, i.e. the theme, to result in a status.

There is a third type of the BA resultatives, i.e., [DESIRE] which will be shown as Meso-construction (C) in Figure 6-16. This is the same event type of [DESIRE] as discussed in §3.3, as exemplified and discussed below:

Type 3: [DESIRE]

(6.46) (太学) 把盼奴的话牢牢记在心里了

Taixue ba Pannu de hua laolao ji zai xin-li le
‘Taixue store Pannu's words into his mind’

(Modified from Shi (2002: 49))
In (6.46), \textit{taixue} is the experiencer, while \textit{Pannu de hua} (‘Pannu’s words’) is the source. The prepositional phrase \textit{zai xin-li} (‘into one’s mind’) denotes the resultative effect. As discussed in §3.3, the [DESIRE] event type features [+Volitional Instigator; -Direct Causation; +Intentional Result; -Visible Change]. We can see the same values of these parameters in the instance (6.46). In (6.46), the volitional instigator \textit{taixue} intentionally memorizes the words, which does not directly act upon the object. The object is not directly caused by the instigator to be changed (e.g. in terms of properties), and there is not a visible change. The instigator desires to memorize the words in order to store them into his mind (designated by resultative adjective \textit{zai xin-li}), which is an intentional result (goal). The above set of similarities suggests that the DESIRE type of the BA resultatives is the DESIRE variant in Contemporary Chinese, which forms a consistent account.

Likewise, the [DESIRE] type does not only licence the BA resultatives but also some non-BA resultatives, as exemplified in (6.47). As will be shown in Figure 6-16, the non-BA resultatives without BA (Micro-construction (C-b)) contributes to the emergence of an over-arching schema, i.e. Meso-construction (C).

(6.47) 宫女将《清夜游》曲诵得滚瓜烂熟。

\textbf{Maid} \textbf{OBJ marker} \textbf{NAME} lyrics \textbf{read} \textbf{DE} thoroughly familiar

‘The maid read the lyrics of \textit{Qing-ye-you} until it is thoroughly familiar (to her).’

\textit{(Sui-dai gongwei qu, the Sui period, Middle Chinese, from the PKU-CCL corpus)}

As have been analyzed above, three out of four event types (except AFFECT) have been attested in historical data of BA. However, there is a fourth synchronic event type, i.e. AFFECT (§3.3.1): why does the synchronic variant AFFECT not have a diachronic counterpart? Recall that the AFFECT event type (irrespective of Direct AFFECT and Indirect AFFECT) features an intransitive verb as the main predicate (see §3.3.1 for examples); this is quite different from the other three synchronic variants in which the main predicates are all transitive verbs. As shown in my diachronic analysis, all the main predicates in the micro-construction involving object marker
BA-5 are transitive; hence, there is not a diachronic variant leading to the AFFECT type in Contemporary Chinese. In other words, the AFFECT type in Contemporary Chinese suggests further host-class expansion attracting intransitive verbs into the position of the main predicate in resultatives.

To summarize, in this section I have shown the micro-constructions and meso-construction involving object marker BA-5. Recall §4.6; I have discussed the resultative construction in Chinese. The resultative construction is identified in this thesis as macro-construction-5 in the constructional network involving object marker BA. Since I have presented the reanalysis process in which micro-constructions and meso-constructions involving object marker BA-5 emerge, we are now able to construct the taxonomy for the constructions involving BA-5, as in Figure 6-16 and Figure 6-17, in order to see how macro-construction-5 is generalized in the most superordinate level in a constructional taxonomy.
7 The object marker is not necessarily present in the resultative construction. Here, a set of meso-constructions involving an object marker BA only represent a type of the Chinese resultative constructions.
Figure 6-17: A partial taxonomy for the resultative construction involving BA-5 in Old Chinese (Part II)
In this section I discussed the Chinese resultative construction which sanctions the lower-level constructions involving object marker BA-5. In the following section I summarize the whole section §6.1.

6.1.7 Section summary

Now I review and summarize what have been proposed in this section: I tracked the constructionalization process involving BA. I also explored how a network of constructions involving BA is built up, i.e. how micro-constructions are generalized from tokens, how lower-level constructions are sanctioned by more schematic higher-level constructions.

One advantage of a constructional approach is to take a holistic view of each tiny step of cumulative change (recall §2.3.1), including two inseparable aspects, i.e. form and meaning. Since an Expression involving BA is taken as a unit that has undergone historical change, a sequence of reanalyses of form-meaning pairings involving BA constitutes the process of grammatical constructionalization.

The micro-constructions involving verb BA (including single verb BA-1, and serial verb BA-2) used to be relatively specific; they appear in the transitive construction and the serial verb construction. As new form-meaning pairings involving BA are created and developed, the micro-constructions involving BA are recruited into other constructions, which in turn involves the acquisition of more grammatical function, i.e. the prepositional instrument construction, the causative construction, and the resultative construction in Old Chinese. In other words, the micro-constructions involving BA are combined with more abstract schemas and are associated with more schematic higher-level constructions. Constructionalization occurs when a micro-construction involving BA is no longer sanctioned by one host construction but may be more appropriately analyzed as an instance of another one. During the process of constructionalization, five constructions at the macro-level are implicated to form a network. In the following Table 6-3, I summarize these macro-constructions in which the micro-constructions involving BA are reanalyzed:
Macro-constructions | The micro-constructions involving BA
---|---
The transitive construction | Transitive verbal phrase
The serial verb construction | Serial verbal phrase
The prepositional instrument construction | Instrument marking expression (Modifying adjunct)
The causative construction | Causing head expression
The resultative construction | Object marking expression

Table 6-3: Recruitment of the micro-constructions involving BA into five macro-constructions

Grammatical constructionalization occurs only when form and meaning changes are both observed. For example, the micro-construction involving instrument marker BA is attested not only because of meaning change, i.e. post-BA N/NP relates to an instrument, but also according to formal change, e.g. the initial NP is no longer the subject of BA (but solely the subject of the main verb) and the instrument marker BA-3 only takes one instrument NP. In a word, it is the whole pattern that undergoes change (Bybee, Perkins, and Pagliuca 1994; Traugott 2008a).

To revisit the constructional network involving BA, there are multiple inheritance links. Macro-constructions are on the highest level, more productive than meso-constructions. The lower-level constructions involving BA inherit properties from the higher ones. To put it in another way, constructions at the lower levels are licensed by constructions at higher levels in a structured network. Likewise, the constructs are the specific tokens based on which micro-constructions are generalized via abstraction. Micro-change originates from the construct-level, which contributes to generalization of an overarching schema. As a consequence, we can see the accumulation of schematicity of generality from the bottom to the top in an individual constructional taxonomy. To take the Transitive Construction as an example, as in Figure 6-2, there are four micro-constructions which are generalized from the instances (constructs) in use, including [GRASP action], [HOLD action], [CARRY action] and [CONTROL action]. These micro-constructions correspond to variants of the BA expressions, and they are sanctioned by meso-construction (A) in
which the form-meaning pairing is generalized as [AgtNP ActionVerb PatNP]. The micro-construction involving [KNOW experience] BA and other non-BA constructions of the [Exp-Sou] type are sanctioned by meso-construction (B) ([ExpNP ExpVerb SouNP]). Again, meso-construction (A) and meso-construction (B) instantiate the superordinate macro-construction which is represented as [TrnSubj TrnVerb TrnObj].

Beyond individual construction taxonomy, inheritance links may also hold between constructions ranging from 1 to 5. For example, the micro-construction involving instrument marker BA-3 provides a syntactic source for the micro-construction involving object marker BA: the BA phrases [BA N/NP] in both constructions involve the coverb BA (albeit with a slight difference). The difference between two micro-constructions is: the prepositional instrument phrase [BA-3 N/NP] is in a head-dependent relationship with the main verb, while the object marking phrase [BA-5 N/NP] is the complement to the main verb. Another inheritance from the micro-construction involving BA-3 to the micro-construction involving BA-5 is: the initial NP in either construction is the subject of the main verb only, not the subject of BA. The micro-construction-5 is connected with the micro-construction involving BA-4 mainly in terms of semantics, i.e. the CAUSE element which is shared by the causative and the resultative constructions.

The constructional approach to diachronic study of Expressions involving BA gives insights into ways in which the whole process of grammatical change (with gradualness, Lichtenberk 1999) can be analyzed in a consistent manner. Each individual construction is representative of a “cluster-point” in the process of change (Hopper and Traugott 2003 [1993]: 6; Traugott 2008: 33; Noël 2005), and new constructs specify the emerging constructions which are conventionalized. Due to the layering effect, the emerging constructions co-exist with the existing ones in a family of constructions.

In conclusion, it is the whole Expression involving BA rather than the individual BA that has undergone grammatical change. In a network of constructions, there was a dynamic process where the Expression involving BA had participated from relatively substantive constructions to more schematic constructions. In the light of a constructional model, diachronic change in Expressions involving BA
could be sketched as a process of reorganizing an inventory of “constructions”. This is how Expressions involving BA as form-meaning pairings are “motivated” (Goldberg 2003 a: 120; cf. Lakoff 1987) in the process of diachronic change over time.

**6.2 Expansions in constructionalization involving BA**

In this section I address the role of expansion in constructionalization involving BA, in order to present how an Expression involving BA is more widely used (Himmelmann 2004; cf. Brinton and Traugott 2005; §2.3.5.1). Also in this section, I examine directionality in grammatical constructionalization involving BA, since constructionalization is usually associated with directional increase in schematicity, productivity and decreased compositionality (e.g. Traugott 2007; Traugott and Trousdale forthcoming).

Himmelmann (2004) propose three types of expansion in constructionalization: host-class expansion, syntactic expansion, and semantic-pragmatic expansion.

In the development of Expressions involving BA I find evidence of Himmelmann’s (2004) three types of context expansion. To take the micro-constructions involving BA-3 and BA-5 as examples, I explain how the grammatical change in Expressions involving BA spread in more contexts:

i) The host-class expansions in the case of Expressions involving BA:

The host-class expansion allows a wider range of elements to enter into a syntactic position. In the micro-construction involving prepositional instrument marker BA-3, the post-BA nominal position is restricted to an instrument noun. However, this position does not resist a noun denoting any other general objects in the micro-construction involving object marker BA. Hence, there is a host class expansion (see Croft 2001 on extension of function) in that what can occur in post-BA NP position is expanded as follows:

\[ N/NP_{\text{inst}} \rightarrow N/NP_{\text{general obj}} \]
Accordingly, there is an extension of the whole Expression involving BA as below:

\[ \text{[BA-3 + N/NP} \ _{\text{inst}} \rightarrow [\text{BA-5 + N/NP} \ _{\text{general obj}}] \]

Instrument expression \hspace{1cm} Object marking expression

This means that the micro-constructions involving object marker BA-5 sanctions a wider range of objects, due to a semantic extension from the micro-constructions involving instrument marker BA.

There is also host class expansion of the type of N that can occur in the subject position and the types of V in the predicate position. For example, considering using an instrument, the subject in the prepositional instrument construction is volitional and animate. In contrast, the subject in the object marking expression could be non-volitional and inanimate bearing the semantic roles such as ambient and experiencer (see §6.1.6). The bleached object marker BA is no longer constrained collocationally in the way that it has to co-occur with a volitional subject. Likewise, more types of verbs appear in the slots of the main predicate. A wider cluster of verbs come to collocate with BA while participating into the object marking expression: apart from action verbs, we see other types of verbs such as perception verbs (e.g. 计算 ‘memorize’) in the predicate position. These context expansions lead to a wider range of variants at the micro-level in the constructional network involving object marker BA. In this sense, there is an interaction between constructions and verbs. In a word, the micro-constructions involving object marker BA can be employed in a larger set of contexts (e.g. possibilities of collocating with more types of nouns, and verbs). The host-class expansion results in extensions to less restrictive syntactic environment and more collocational possibilities.

In addition, we can see the host-class expansion in the micro-construction involving instrument marker BA compared with the micro-construction involving verb BA. In the micro-constructions involving verb BA-1 (or, BA-2), BA generally collocates with a concrete object which can be physically grasped/held/carried. By comparison, BA in the prepositional instrument marking micro-constructions collocates with abstract entities. In this sense, the micro-construction involving instrument marker BA becomes more generalized (Langacker 2005).
ii) Semantic-pragmatic context expansion in the case of Expressions involving BA:

In addition to host-class expansion, Himmelmann (2004: 32) points out that “the semantic and pragmatic context in which the construction is used is expanded”. The micro-construction (in the case study of the resultative) involving the object marker BA develops a new function of marking a definite object. Moreover, the presence of BA highlights the object in a preverbal position to fuse with the constructional argument role of theme. In addition, the micro-construction involving object marker BA implies total affectedness of the object. BA prior to the object implies that the object is completely under the control of the subject. This total affectedness can be interpreted in combination with ‘cause-to-change’ meaning represented by the main predicate. That is, in the BA resultative construction, ‘cause-to-change’ affects the object in resultatives totally and radically; in contrast, in the canonical construction, the object generally undergoes “partial affectedness”. The object is no longer physically grasped/ held/ carried, but it is still affected in an abstract manner. In short, more semantic and pragmatic contexts accommodate Expressions involving BA. An Expression involving BA in the resultative construction is “extended to a new function” which becomes entrenched and then contributes to the constructional polysemies (Croft 2001: 127; cf. Lehmann 2008).

To sum up, the object marking construction involving BA takes more grammatical function. Therefore, Expressions involving BA are more widely used, which can be evidenced by a broader range of the micro-constructions involving BA-5. As illustrated in the constructional network, the micro-constructions involving BA-5 have the most types of variants (micro-polysemy) in use.

Now let us see a third type of context expansion, i.e. syntactic expansion, in the reanalysis of Expressions involving BA in the prepositional instrument construction:

iii) Syntactic expansion:
In the serial verb construction, post-BA NP is an object of the serial verb. However, when the micro-construction involving BA is reanalyzed in the prepositional instrument construction, [BA-3 N/NP] constitutes a modifier of the main verb. That is, this BA NP undergoes a shift from the core-position into the non-core position. Here we can see more syntactic configurations involving BA through syntactic expansion.

To summarize, the micro-constructions involving BA spread in use and appear in more contexts. Context expansion contributes to a larger range of uses of Expressions involving BA at the micro-level and allows greater collocational freedom.

6.3 Directionality in constructionalization involving BA

Now let us look at directionality in grammatical constructionalization (e.g. Traugott 2007; Traugott and Trousdale Forthcoming; see also §2.3.5.4) involving BA. One important sign of constructionalization involving BA is an increase in schematicity and generality. The micro-construction involving a single verb BA-1 (e.g. ‘grasp/hold’) is relatively specific, and instantiates the transitive construction. Form-meaning pairings involving serial verb BA are less substantive since the serial verb generally BA means ‘carry’, a less concrete action compared with ‘grasp/hold’.

Serial verb BA is a complex predicate, which is not the same as instantiating the transitive construction. When a form-meaning pairing involving BA is reanalyzed as a new micro-construction involving instrument marker BA-3 (‘with’), it develops a more general and abstract meaning. Moreover, as shown in §6.1.4, instrument marker BA-3 primarily takes an abstract instrument, which suggests that BA has lost lexical meaning and cannot be associated with a concrete action. Therefore, the micro-construction involving BA-3 gains more grammatical function. A micro-construction involving causative verb BA-4 is a different form-meaning pairing through reanalysis into the causative construction. That is, BA-4 constructions instantiate a causative construction type. A micro-construction involving BA-5 comes to serve the grammatical function of object marking (a glue-like function, see Traugott and Trousdale forthcoming) and can appear in the resultative construction.
(but can take the general object marking function in other constructions as well). To take the resultative construction involving object marker BA as an example:

```
NP [BA NP] V Adj
    General object Action Resultative
```

This more schematic pattern is represented with mainly abstract grammatical categories. The micro-construction involving object marker BA sanctions an increasing number of instances: BA can take any categories of NP which denote an object in a resultative event, without restrictions to instrument or an entity that can be physically grasped/ held (as a result of host-class expansion).

As constructions involving BA change over time, they tend to occur with more abstract meanings and increased schematicity. During the whole process, we can see the gradual loss of specificity and gain of generality. This can be regarded as a kind of compensation which results from a “loss-and-gain” process (Brems 2010).

In what follows, I will also provide quantitative data (only as supplementary material without statistical testing) to show that increased schematicity as mentioned above in a qualitative approach can be associated with increase in token frequency. As there are more micro and meso constructions involving BA, the construction becomes more token frequent and thus a more schematic BA-X construction emerges.

Before this discussion, I have two points to clarify. First, my investigation is not in the tradition of quantitative research; instead, I mainly take a qualitative approach. Here, relevant quantitative discussion is only used as supplementary evidence for my above qualitative arguments. The quantitative/statistical approach has its advantages for other research in terms of e.g. categorization and calculation. However, according to my research question in the thesis, the quantitative part only provides evidence for supporting my qualitative discussion in terms of demonstrating how increased schematicity relates to changes in token frequency and percentage (see also §1.1.2 for similar clarification which has been made). Second, I am aware that productivity is normally defined by, and associated with, type frequency (e.g. Bybee 2003a; Barðdal 2006, 2008). Barðdal’s (2008) study establishes productivity as a function of type frequency. Directionality in diachronic change is also reflected
in terms of increase in type frequency from a constructional perspective. As mentioned in §2.4.6.2, token frequency (e.g. Bybee 2003; Goldberg 2006: 93) refers to the number of times all Expressions involving BA occur in historical texts. Type frequency refers to the number of different types of expressions in historical texts, and it is considered to be a key factor in the system of change while thinking about productivity in grammatical constructionalization. Nonetheless, I do not intend to examine productivity in relation to type frequency in detail, since this would call for quantitative discussion which requires statistical significance testing beyond the scope of this thesis. My discussion is limited to token frequency in relation to increased schematicity.

Now I present token frequency and percentage of BA expressions. Based on the BA corpus, I provided the relative token frequency of Expressions involving BA of different types in Table 6-4. Based on Table 6-4, I further sketched Figure 6-18 to have an overview of the changing frequency of each type of Expressions involving BA. Since the frequency of Expressions involving BA involving BA-5 is far beyond other types, I also sketched Figure 6-19 in order to examine the frequency of Expressions involving BA 1-4. These tables and diagrams are intended to measure how change in the frequency is relative to the grammatical change in Expressions involving BA.
<table>
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<th>Category</th>
<th>Total number of words</th>
<th>Instances involving BA-1 (normalized: Per 10K words)</th>
<th>Instances involving BA-2 (Per 10K words)</th>
<th>Instances involving BA-2/BA-3 (Per 10K words)</th>
<th>Instances involving BA-3 (Per 10K words)</th>
<th>Instances involving BA-4 (Per 10K words)</th>
<th>Instances involving BA-5 (Per 10K words)</th>
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<td>0</td>
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<tr>
<td></td>
<td>12,926,625</td>
<td>7.28</td>
<td>37 (0.03)</td>
<td>102 (0.08)</td>
<td>0</td>
<td>239 (0.18)</td>
<td>419 (0.32)</td>
</tr>
</tbody>
</table>

Table 6-4: Relative frequencies of Expressions involving BA during all periods (per 10,000 words)
Figure 6-18: Changing frequency of each type of Expressions involving BA 1-5 (normalized frequency ranging from 0 to 8).
(Note: The red line on the right marks the frequency of the micro-constructions involving BA 1-5 by the final temporal point in the Ching Period, in order to compare how much frequency each type ends with.)
Figure 6-19: Changing frequency of each type of Expressions involving BA 1-4 (normalized frequency ranging from 0.001 to 1.400)
The above diagrams reflect the increase in token frequency of Expressions involving BA. In the following discussions, I am concerned with how change in frequency relates to diachronic change in Expressions involving BA, particularly in terms of increased schematicity.

As shown in Table 6-4, Figure 6-18 and 6-19, the token frequency of all Expressions involving BA generally increases. Increase in total frequency is attributed to wider use of Expressions involving BA and contextual expansions (see §6.3). This was associated with increase in schematicity over time. As tokens involving BA become more frequent, schematicity of Expressions involving BA increased gradually.

In the light of the usage-based model, the increased token frequency of the micro-constructions involving BA-5 contributes to the entrenchment of the new grammatical function to some extent. Due to sufficient repetition and high frequency, constructions tend to become crystalized. As the process of change unfolds, a micro-construction involving BA develops new functions with the retention of the old forms, such as the micro-construction involving BA-1 in use. This could be explained by the layering effect (e.g. Hopper 1991: 22) that the old forms do not necessarily vanish immediately when new forms emerge; instead, new and old forms might co-exist for a period of time.

Increase in the frequency of more schematic/grammatical constructions involving BA can also be evidenced by the changing percentage of each type construction in each period. The proportion of the more schematic micro-construction involving BA-5 has been increasing over time, as shown in the following tables and charts:
<table>
<thead>
<tr>
<th>Period</th>
<th>Percentage of the micro-constructions involving BA-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhou</td>
<td>0</td>
</tr>
<tr>
<td>Qin-Han and Six Dynasties</td>
<td>0</td>
</tr>
<tr>
<td>Sui and Tang</td>
<td>0</td>
</tr>
<tr>
<td>Five Dynasties</td>
<td>16.55%</td>
</tr>
<tr>
<td>Song</td>
<td>23.20%</td>
</tr>
<tr>
<td>Yuan</td>
<td>63.19%</td>
</tr>
<tr>
<td>Ming</td>
<td>76.60%</td>
</tr>
<tr>
<td>Ching</td>
<td>91.52%</td>
</tr>
</tbody>
</table>

Table 6-5: Proportion (percentage) of the micro-construction-5 among five/six constructions in each period

The above Table 6-5 is based on the following Tables and Charts which show the percentage of each type of the micro-construction involving BA in each period.

Let us first look at the percentage of each type of the micro-construction involving BA in the Zhou Period as in the following Table 6-6.
**Zhou Dynasty:**

<table>
<thead>
<tr>
<th>Types of the micro-constructions involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>12</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 6-6: Percentage of each type of the micro-construction involving BA among all types in the Zhou Period.
The following Table 6-7 represents the percentage of each type of the micro-construction involving BA, and the proportion of each type of the micro-construction involving BA in the Qin-Han and Six Dynasties.
### Qin-Han and Six Dynasties:

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>32</td>
<td>50.79%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>26</td>
<td>41.27%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>5</td>
<td>7.93%</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Table 6-7: Percentage of each type of the micro-construction involving BA among all types in the Qin-Han and Six Dynasties*
The following Table 6-8 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Sui and Tang Period.
### The Sui and Tang Period:

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>41</td>
<td>39.80 %</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>40</td>
<td>38.83 %</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>5</td>
<td>4.85 %</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>11</td>
<td>10.68 %</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>6</td>
<td>5.82 %</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 6-8: Percentage of each type of the micro-construction involving BA among all types in the Sui and Tang Period
The following Table 6-9 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Five Dynasties:
**The Five Dynasties:**

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>32</td>
<td>23.02%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>47</td>
<td>33.81%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>1</td>
<td>0.72%</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>32</td>
<td>23.02%</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>4</td>
<td>2.88%</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>23</td>
<td>16.55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>139</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Table 6-9: Percentage of each type of the micro-construction involving BA among all types in the Five Dynasties*
The following Table 6-10 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Song Period.
The Song Period:

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>119</td>
<td>14.76%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>221</td>
<td>27.42%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>4</td>
<td>0.50%</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>122</td>
<td>15.14%</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>153</td>
<td>18.98%</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>187</td>
<td>23.20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>806</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 6-10: Percentage of each type of the micro-construction involving BA among all types in the Song Period
The following Table 6-11 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Yuan Period.
The Yuan Period:

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>42</td>
<td>8.94%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>26</td>
<td>5.53%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>49</td>
<td>10.43%</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>56</td>
<td>11.91%</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>297</td>
<td>63.19%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>470</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 6-11: Percentage of each type of the micro-construction involving BA among all types in the Yuan Period
The following Table 6-12 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Ming Period.
### The Ming Period:

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>74</td>
<td>2.03%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>102</td>
<td>2.80%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>362</td>
<td>9.94%</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>314</td>
<td>8.62%</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>2,789</td>
<td>76.60%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,641</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 6-12: Percentage of each type of the micro-construction involving BA among all types in the Ming Period.
The following Table 6-13 shows the percentage of each type of the micro-construction involving BA, and the proportion of the micro-construction involving BA in the Ching Period.

**The Ching Period:**

<table>
<thead>
<tr>
<th>Type of the micro-construction involving BA</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The micro-construction involving BA-1</td>
<td>37</td>
<td>0.39%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2</td>
<td>102</td>
<td>1.08%</td>
</tr>
<tr>
<td>The micro-construction involving BA-2/3</td>
<td>1</td>
<td>0.02%</td>
</tr>
<tr>
<td>The micro-construction involving BA-3</td>
<td>239</td>
<td>2.54%</td>
</tr>
<tr>
<td>The micro-construction involving BA-4</td>
<td>419</td>
<td>4.45%</td>
</tr>
<tr>
<td>The micro-construction involving BA-5</td>
<td>8,610</td>
<td>91.52%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,408</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Table 6-13: Percentage of each type of the micro-construction involving BA among all types in the Ching Period*
According to the above tables and figures, I sketch the following Figure 6-20. It represents how the percentage of each type of the micro-construction involving BA has changed over time.

![Figure 6-20: Changing proportion of each type of the micro-construction involving BA over time](image-url)
As shown above, the percentage of the micro-construction involving BA-1 has been decreasing over time. In contrast, the percentage of the micro-construction involving BA-5 has been increasing. This suggests that the more schematic micro-construction-5 gradually occupies more proportion among all types in each period in Old Chinese. Again, the percentage change as illustrated by above diagrams shows the gradual increase in schematicity of Expressions involving BA.

To summarize, constructionalization involving BA is associated with increased schematicity: micro-constructions involving BA have become more and more general in meaning and developed grammatical and more grammatical functions. Henceforth, the micro-construction involving BA is incorporated into higher-level constructions with increased schematicity. Apart from mainly qualitative discussion, increase in schematicity can also be evidenced by increase in token frequency and percentage change according to supplementary quantitative data. For example, we can see general increase of token frequency, particularly in the more grammatical micro-constructions involving object marker BA compared to the less grammatical ones. Increase in schematicity/generality suggests that constructionalization involving BA is a directional process.

To conclude, this chapter discussed how the micro-construction involving BA is reanalyzed and recruited in more schematic constructions in Old Chinese. During the process of constructionalization, Expressions involving BA are reanalyzed as different form-meaning pairings with increased schematicity and generality in a constructional network. On the basis of the reanalysis in this chapter, I further discussed the role of expansion in constructionalization involving BA. I also discussed directionality in a constructional account of diachronic change involving BA; I summarized how the grammatical constructionalization involving BA is accompanied by increased schematicity.
CHAPTER 7: CONCLUDING REMARKS AND OUTLOOK

7.1 Conclusion and implications

The present research has examined Expressions involving BA in terms of synchrony and diachrony, within the framework of Cognitive Construction Grammar (Goldberg 1995, 2006). In the synchronic part, the entire Expression involving BA is treated as a form-meaning pairing with constructional representations. The diachronic analysis is conducted based on the BA corpus (as part of the Center for Chinese Linguistics (PKU-CCL) Corpus). I have explored how a constructionalization approach can incorporate and enhance previous work on the grammaticalization of BA. Now I summarize the contents of each chapter in this thesis:

In Chapter 1, I introduced the topic of this thesis and offered an overview of the whole structure of this thesis. In Chapter 2, I outlined the framework adopted. I introduced how constructions are defined in Cognitive Construction Grammar, and how a constructional approach can be used in diachronic research. I also discussed issues which are particularly relevant to this thesis, such as constructionalization, a network of constructions, and directionality in diachronic change from the constructional perspective.

Chapter 3 concerned a synchronic analysis of the resultative Expressions involving BA. In §3.1 I discussed the syntax and semantics of the resultative Expression involving BA, in terms of the main predicate and the syntactic arguments, the [BA NP] phrase (including the Coverb BA and the BA object in the light of the Giveness Hierarchy), and the adjunct-resultative. I also compared the main differences between Expressions involving BA and transitive expressions. In §3.2 I further investigated the semantics of the resultative Expressions involving BA. I showed the existence of the strong resultative Expressions involving BA and the weak resultative Expressions involving BA. I argued that a range of semantic properties are also found in the resultative Expressions involving BA, such as the (non-) volitional instigator, collocational constraints, end of scale, the unique path constraint, change of state via the BECOME operation, windowing and gapping, and
subjectivity. In addition, I discussed the aspectual constraints on the resultative Expressions involving BA in terms of telicity and perfective viewpoint. In §3.3 I showed four event types of the resultative Expressions involving BA based on the Compulsive Force Schema. These event types are HANDLE, AFFECT, DESIRE and TRIGGER. In §3.4 I gave constructional representations of Expressions involving BA of all event types based on arguments in previous sections.

Chapter 4 reviewed the grammaticalization of BA based on some of the previous accounts which focused on the categorial change of BA. I summarized the categories of BA as the lexical verb BA-1, the serial verb BA-2, the instrument marker BA-3, the causative verb BA-4, and the object marker BA-5. The conventional approaches took the categorial change as the basis of the diachronic study of BA. I showed some problems in the existing literature, thereby giving the reasons why a constructional account is desired to rethink diachronic change of Expressions involving BA as grammatical constructionalization. In this chapter I also offered a review of relevant typological work on the Chinese transitive construction, the serial verb construction, the prepositional instrument construction, the causative construction, and the resultative construction.

In Chapter 5, I introduced the method I used to conduct the diachronic research in this thesis. In order to create the BA corpus as part of the PKU-CCL Corpus (§5.1), I proposed the linguistic criteria for my own periodization of the Chinese language. This solved the problems in the existing ones of the Chinese language. I also introduced the text types and varieties in the BA Corpus. In §5.2, I introduced the procedures and the results of building up the BA Corpus. In §5.3, I discussed a couple of relevant issues about the BA Corpus, including the categorization of BA, the false positives, and data selection in the final two periods. In §5.4, I evaluated the BA Corpus in terms of benefits and potential improvements.

In Chapter 6, I discussed the constructionalization involving BA. I showed that it is the whole Expression involving BA rather than an individual BA that has undergone grammatical evolution, in the process of which the constructional network is implicated and established. In §6.1, I presented some of the small steps of the reanalysis process in which the form-meaning pairings involving BA participate in a network of constructions. Changes occur to Expressions involving BA, which allow
Expressions involving BA to appear in a network of constructions which are different in form and meaning with constructional status. As the micro-constructions involving BA change, they are recruited into more schematic higher-level constructions. From the constructional perspective, therefore, diachronic change in Expressions involving BA involves a process of constructionalization. With this research, the understanding of Expressions involving BA goes beyond a single word BA into a broader context in association with a range of constructions. I focused on the role of expansions in constructionalization in §6.2 and showed the symptoms of directionality in a constructional account of diachronic change involving BA in §6.3. I discussed how the grammatical constructionalization involving BA is accompanied by increased schematicity.

I have concluded above what have been argued in this thesis, and I show what could be expected in the future research in §7.2.

7.2 Future prospects

The present thesis leaves space for future research, either on Expressions involving BA or beyond. From my findings so far, I propose the following topics which might be pursued in the future:

1. Improvement to the BA corpus

Considering the relatively small size of the current BA Corpus, I expect to develop the corpus by expanding the scale and improving the organization. Although the current version of the BA Corpus is sufficiently large for my analysis, it would be ideal to enlarge it with more data in order to conduct more fine-grained analysis and to yield more fruitful results. As mentioned in Chapter 5 (§5.3.3), the unfinished exhaustive searching of texts in the final two periods (the Ming period and the Ching period) in Old Chinese could be completed. Besides, a wider range of corpora could be referred to. That is, apart from the PKU-CCL corpus, I could make use of some other Old Chinese corpora (e.g. the Sheffield Corpus of Chinese for Diachronic Linguistic Study, and the Beijing Language and Culture University Corpus) as
parallel references for data collection of Expressions involving BA. For example, the frequency counts currently conducted with the BA Corpus can be compared with these corpora. Moreover, the limitations of data are recognized. Data in the BA Corpus are representative of how Expressions involving BA were used historically. However, text sources in the BA Corpus might differ from each other in the writing style considering the differences among authors, periods, regional variation, and variables from dialects which are subsumed under the notion of Mandarin Chinese.

2. More fine-grained analysis of data in the existing BA Corpus

In future research, historical data of Expressions involving BA in the BA Corpus could be classified and thus examined according to the varieties and the text types. For example, I could make frequency counts of Expressions involving BA in colloquial registers and written texts, respectively; consequently, I might have a chance to know which style of context and which text type/ register an Expression involving BA favours, and to reveal the stylistic variation. This could relate to research on Expressions involving BA in the fields like discourse analysis and contextual use.

It is also possible to count the frequency of various types of verbs in the predicate position in Expressions involving BA, in order to reveal what types of verbs most/least frequently co-occur with BA. For example, I have already noticed different frequency of transitive/intransitive verbs in collocation with BA-2 in the serial verb construction (see Table 6-1). Likewise, distribution of NP in the post-BA position and the head position could be further examined in the future. Such analysis could help explore the types of words in collocation with BA, at both diachronic and synchronic levels.

3. Frequency and prototypicality

The prototypical micro-constructions tend to have higher token frequency due to occurrences in more contexts (Geeraerts 1997). This could be evidenced in the future by more detailed quantitative analysis (e.g. counting the frequency of each micro-
construction involving BA). For example, I intend to see how different types of the micro-constructions involving serial verb BA, such as [consecutive events], [simultaneous events], and [circumstance-main event] vary in terms of frequency.

4. To model the diachronic development of other patterns in Chinese grammar

A diachronic investigation of Expressions involving BA in this thesis suggests the potential advantage of a constructional approach to grammaticalization: it is the pattern as a whole that has gone through change. Following the spirit of this case study, it is possible to model diachronic change in other constructions in Chinese, such as expressions involving JIANG ‘take’ (which I have briefly discussed in §4.4). As far as I know, the existing literature (see also §4.4 for references) only focuses on the lexical change of JIANG. From the constructional perspective, however, it is not only the word JIANG that grammaticalizes, but the whole expression.

Also, the relationship between Expressions involving BA and expressions involving JIANG in historical development could be further explored. As mentioned in Chapter 4, most previous research agreed that it was via replacing JIANG that BA developed, which is based on the lexical grammaticalization theories. However, it is not clear what the relationship between BA and JIANG is. For one thing, since it is not only BA or JIANG that changes, interaction should be beyond these two words. For another thing, there has not been robust evidence to prove that expressions involving JIANG indeed occurred much earlier than Expressions involving BA, which should be an essential condition for the replacement hypothesis to make sense. As a matter of fact, Expressions involving BA were attested in the very early period according to what I have found from the BA Corpus. Hence, it is arguable whether the replacing relation is really possible.

In brief, further research could investigate how these two expressions involving JIANG and BA interacted in the historical development in Old Chinese, based on quantitative research. Presumably, an expression involving JIANG is a rivalry for propelling the grammaticalization of Expressions involving BA, considering their similar origin, the transitive expressions involving a verb (JIANG/BA) meaning ‘take/hold’. In other words, Expressions involving BA might
In order to investigate the potential competition between Expressions involving BA and expressions involving JIANG, one could compare their respective frequency counts and distribution in different historical periods. Based on quantitative data, one could ask the question to what extent these two expressions are interchangable, and under which circumstances they are considered as the only options. In a word, expressions involving JIANG and Expressions involving BA might have undergone similar, yet construction-specific changes which have enabled them to obtain their unique construction-specific properties.

Let us move to another two expressions involving NA and YONG, and see what one could do with them in the future. As mentioned in Chapter 4 (§4.4), both NA and YONG can be used as full verbs and instrumental prepositions in Contemporary Chinese. As for further research, one could consider the frequency of both words as a full verb and as a preposition, and predict whether they might follow the path of development of Expressions involving BA in the future. Since expressions involving JIANG are no longer in use, one might ask whether Expressions
involving BA could be abandoned in the future, in which case expressions involving NA/YONG might take over the function of object marking?

A constructional approach could also shed light on the grammatical change in expressions involving BEI. Similarly, research could be conducted on grammatical change of the whole expression rather than a single BEI, a passive marker in Modern Chinese (Li and Thompson 1981: 506; cf. Li and Thompson 1974c). Moreover, I assume that the TRANSFER schema could be the conceptual source of an expression involving BEI. The TRANSFER schema typically implies a flow of passing a concrete or an abstract entity from one to another. Presumably based on this TRANSFER schema (as illustrated in Figure 7-1), the expression involving an originally verb BEI ‘receive’ grammaticalized to be a passive construction. Consider the following Figure 7-1 which is created by me:

![Figure 7-1: Conceptualization of expressions involving BEI](image)

In the concrete source domain, a transfer verb BEI (‘receive’) implies an actual flow of a concrete entity in a directional motion, from the source (sender) to the destination (recipient). In the target domain via metaphorical extension, there is an abstract flow (e.g. energy) implied by the expression involving a passive marker BEI. The Theme/Experiencer Subject metaphorically ‘receives’ the energy flown from the Agent/Source Subject so that the Subject is ‘affected’. In brief, the grammaticalization of an expression involving BEI might involve semantic extension and conceptualization, in a similar way to Expressions involving BA.

In a word, diachronic research of other expressions in Chinese can be envisioned in construction grammar terms. This will further understanding of the history of Chinese grammar. More importantly, based on these case studies, it will be compelling to identify whether there is a general path of diachronic change for a range of constructions in Chinese.
5. The Serial Verb Construction as a source of change in Chinese

I have discussed the role of the serial verb construction for grammaticalization typologically (see §4.3). However, the serial verb construction as the source of grammaticalization in Chinese has not yet been sufficiently explained (cf. Sun 1996; Li and Thompson 1974c, 1981; Huang 1986). I touched upon this issue and traced back to the origin and development of the serial verb construction with brief remarks in this thesis, but did not include discussion in more detail. There is still the potential to undertake more profound studies on grammaticalization of similar patterns (such as expressions involving JIANG and CONG) which are derived from the serial verb construction. Future research could explore how the serial verb construction serves as a source of change in Chinese. For example, why and how does the form of the serial verb construction facilitate diachronic change? How does the function of the serial verb construction press towards change? Why is the serial verb construction, rather than other patterns, more likely to provide the source? These questions could be answered based on more data from Old Chinese.

6. To compare Expressions involving BA with other Resultative Constructions in Chinese

Another prominent topic in future research could be the resultative construction, given that Expressions involving BA emerged in the resultative construction as macro-construction-5 in Old Chinese (§4.5). Some work has been done on the Chinese resultative construction, such as Li, Chao (2008). Future research could compare the resultative construction involving BA with other types of the resultative constructions in Chinese, such as expressions involving DE (e.g. Zhang 2000). The aim is to discover how the resultative construction involving BA fits into the big picture of the resultative in Chinese grammar.
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