12 Chinese *Ba*

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1   Introduction

In Mandarin Chinese,[1] there is a construction sometimes referred to as simply the *ba* construction: *ba zi ju* (sentence with *ba*). It is one of the most famous constructions in the grammar of Chinese and has attracted the attention of almost every linguist interested in the grammar of Chinese. However, it has also consistently eluded a satisfactory analysis. The construction is complex and seems to be subject to a myriad of difficult-to-characterize, fuzzy constraints. It is generally one of the most difficult constructions for foreign language learners of Chinese. Yet it is an extremely prominent pattern in Chinese, very commonly used in daily speech. In fact, it seems to be gaining even more prominence in so-called Taiwan Mandarin (Mandarin spoken in Taiwan) because of influence from the even more extensively used corresponding *ka* construction in Taiwanese.[2]

It would be impossible, within the limits of this chapter, to do justice to the complexity of this construction and the rich, endless literature on this topic if we aim for a comprehensive presentation of the properties, problems, and past analyses, and also present a detailed and extensive review of published works. In order to at least provide an understanding of the complexities, we will, therefore, devote much space to the properties of each of the components of the structure which must be considered when analyzing this construction. Moreover, with an aim to setting an appropriate direction for a more satisfactory analysis, we will bring more empirical generalizations from a closely related structure, providing a new perspective to this study: a comparative dimension based on contrasts between the *ba* construction in Mandarin and the corresponding *ka* pattern in Taiwanese. Phrase structures for both *ba* and *ka* constructions will be proposed to reflect the similarities and differences between the two constructions. In addition, a substantial part of this chapter will focus on the constraints on the usage of the *ba* construction, the aspect of the construction which has been the most controversial in the literature. We will review the recent, important analyses of the various constraints – approaches from the perspective of event structures, aspectual structures, and pragmatics – and discuss the strengths and weaknesses of each of these analyses. We will show that all these different approaches accommodate the typical or canonical cases of the *ba* construction. However, there are many 'non-canonical' instances of the *ba* construction which elude any precise structural account. More specifically, the accounts based on aspectual structures and event structures are both too weak and too strong empirically. An account based on pragmatic constraints is vague and uncertain. Nonetheless, vagueness and uncertainty are in the nature of the constraints on this construction. There also exist many minimal pairs of sentences which are structurally identical (including identical aspectual and event structure) but differ in acceptability as a *ba* sentence. Accordingly, we suggest that it is important to distinguish form from usage. Form can be represented precisely by syntactic phrase structure. Usage, however, is influenced by pragmatic factors which cannot be accommodated solely by clearly defined grammatical accounts.

We first characterize in section 2 the syntactic properties of the *ba* construction by describing each component of the *ba* construction in turn, including a *ba* sentence and a non-*ba* counterpart, *ba*, the types of NPs which can follow *ba*,[3] and the possible following verbal constituents. We then turn, in section 3, to the *ka* construction in Taiwanese, comparing the similarities and differences between *ba* and *ka* constructions, which leads to the establishment of an analysis of the syntactic structure of both of these constructions in section 4. Section 5 discusses constraints on the usage of the *ba* construction. The main proposals in the literature will be discussed in detail, revealing the strengths and weaknesses of each of them. We show why precise structural accounts cannot capture the complex constraints on the usage of the *ba* construction and why it is important to distinguish form from usage.

2   Properties

Schematically, a *ba* sentence always has the form in (1a–b), disregarding optional elements.[4] That is, a *ba* sentence has a subject (NP* in (1a–b)), followed by *ba* and 'the *ba* NP' (the NP directly following *ba*), followed by a verb and something else before or after the verb, i.e., the X (X is non-null) in (1a–b):

(1)   a.   NP* + *ba* + NP + V + X
      b.   NP* + *ba* + NP + X + V

In addition to the uncertainty of whether a *ba* sentence always has a non-*ba* counterpart,[5] controversy exists with respect to the proper description of almost every component of this construction: (i) the categorial status of *ba*; (ii) the types of NPs allowed in this construction; (iii) the types of Vs allowed; and (iv) what the X is. There have also been substantial and endless debates on whether the *ba* construction carries a special interpretation: whether the *ba* construction expresses some notion of 'affectedness' and whether all the constraints on this construction are reducible to this notion. To begin to understand the controversies, we attempt to describe in the following subsections the important syntactic properties of each component of the *ba* construction.

2.1   **Ba** *sentences and their non-***ba** *counterparts*

We begin with the overall pattern. We claim that a *ba* sentence always has a non-*ba* counterpart. The first component of a *ba* sentence is the subject, which is also the subject of the corresponding non-*ba* sentence. The following two examples illustrate some straightforward cases:

(2)   a.   wo ba ta   sha-le
           I   BA him kill-Le[6]
           'I killed him.'
      b.   wo sha-le   ta-le.
           I   kill-Le him-Le
           'I killed him.'

(3)   a.   wo ba yaoshi wang-le.
           I   BA key   forget-Le
           'I forgot the key.'
      b.   wo wang-le   yaoshi-le
           I   forget-Le key-Le
           'I forgot the key.'

These two types of sentences differ only in where the thematic object of the verb occurs: in a non-*ba* sentence, it occurs postverbally, whereas in a *ba* sentence, it occurs between *ba* and V (see note 6).

In less straightforward cases, it is still possible to state that a *ba* sentence has a non-*ba* counterpart with an identical subject. For instance, in a case like (4a), where it is not immediately obvious that the subject 'this bottle of wine' is directly related to the verb *zui-dao* 'be drunk and fall' thematically, there is still a non-*ba* counterpart with the same subject (4b):

(4) a. zhe-ping jiu   ba ta   zui-dao-le.
         this-bottle wine BA him drunk-fall-Le
         'This bottle of wine made him very drunk.'
     b. zhe-ping jiu   zui-dao   ta le.
         this-bottle wine drunk-fall him Asp
         'This bottle of wine made him very drunk.'

Zui-dao is a compound verb used causatively in (4b).[7]

There are also cases where a verb is followed by a complement, such as a resultative complement or a locative complement, initially complicating the assessment of whether or not there is a non-*ba* counterpart. When a resultative or locative complement occurs, it is generally the case that an object cannot occur postverbally because, independently, Chinese restricts the number of elements that can occur postverbally (the postverbal constraint): generally only one constituent is allowed in postverbal position[8] (see, for instance, Chao 1968; Huang 1982a; Koopman 1984; Travis 1984; Li 1985, 1990; Tang 1990; Sybesma 1992).[9] Under such circumstances, a non-*ba* counterpart is generated by placing the *ba* NP in some preverbal position (such as pre-subject as a topic or post-subject as a preposed object). (5a), for instance, has a non-*ba* counterpart in (5b) by topicalization and (5c) by object-preposing. In addition, verb-reduplication, as in (5d), is another mechanism to create a non-*ba* counterpart without violating the general postverbal constraint of only one postverbal constituent:

(5) a. wo ba zhe-shi   xiang-de hen ziji.
         I   BA this-matter think-De very carefully
         'I have thought about the matter carefully.'
     b. zhe-shi,   wo xiang-de hen zixi.
         this-matter I   think-De very carefully
         'The matter, I have thought about carefully.'
     c. wo zhe-shi   xiang-de hen zixi.
         I   this-matter think-De very carefully
         'I, the matter, have thought about carefully.'
     d. wo xiang zhe-shi   xiang-de hen ziji.
         I   think this-matter think-De very carefully
         'I have thought about the matter carefully.'

Alternatively, a non-*ba* counterpart may also be generated by placing the *ba* NP counterpart in the subject position of a resultative complement or a locative complement:

(6) a. haizi ba wo ku-de tou-teng.
        child BA me cry-De head-ache
        'The child cried so much that my head ached.'
     b. haizi ku-de wo tou-teng.
        child cry-De me head-ache
        'The child cried so much that my head ached.'

(7) a. zhe-ping jiu   ba   ta zui-dao-zai di-shang.
        this-bottle wine drunk-De him fall-at   ground-on
        'This bottle of wine made him drunk and fall on the ground.'
     b. zhe-ping jiu   zui-de   ta dao-zai di-shang.
        this-bottle wine drunk-De him fall-at ground-on
        'This bottle of wine made him drunk and fall on the ground.'

The examples above show that a *ba* sentence always has a non-*ba* counterpart. They only differ in the presence/absence of the morpheme *ba* and word order: the *ba* NP corresponds to an NP in postverbal position in a non-*ba* counterpart or in some other position when necessary to avoid violating the general constraint on the number of postverbal NPs possible. The subject of a *ba* sentence and its non-*ba* counterpart stays constant.

Following the subject in a *ba* construction is the key word *ba*, which we turn to next.

2.2 *Ba*

Let us begin with some clear facts about the nature of *ba* and then turn to the analyses of *ba* that have been proposed in the literature.

2.2.1 *The categorial status of* ba

Historically, *ba* was a lexical verb meaning 'take, hold, handle' (see L. Wang 1954; H. Wang 1957; Bennett 1981, for instance). It also occurred in the so-called serial verb construction [V1 + NP + V2 + XP],[10] with *ba* as V1 [*ba* + NP + V + XP]. The pattern can mean 'to take NP and do [V XP] (to it)'. Such a historical origin seems to still be detectable in many contemporary *ba* sentences.[11] For instance, the following question-and-answer pairs in modern Chinese look like serial verb constructions:

(8) a. ni ba juzi   zenmeyang-le?
        you BA orange how-Le
        'What did you do to the orange?'
     b. wo ba juzi   bo-le   pi-le.
        I   BA orange peel-Le skin-Le
        'I peeled the skin off the orange.'

(9) a. ni   yao   ba ta[12] zenmeyang?
         you want BA him   how?
         'What do you want to do to him?'
    b. wo yao   ba ta   da-duan   tui.
         I   want BA him hit-broken-Le leg
         'I want to break his leg.'

These sentences bear great similarity in form to the serial verb construction [Subject + V1 + NP + V2 + XP]. They are interpreted as 'Subject takes NP and does [V + XP] to it; what the subject does to NP is [V+XP]': (8b) means what I did to the orange was peel its skin and (9b) means that what I want to do to him is break (his) leg.

   Ba in modern Chinese, however, has lost standard verbal properties, according to most of the works on this construction (see Zou 1995 for an extensive review of relevant works). It has become 'grammaticalized'[13] and does not behave like a verb according to traditional verbhood tests: (i) it cannot take an aspect marker (10b); (ii) it cannot form an alternative V-not-V question (10c); and (iii) it cannot serve as a simple answer to a question (10d) (see, e.g., Chao 1968; Li and Thompson 1981):[14]

(10) a. ta ba ni   hai-le.
         he BA you hurt-Le
         'He hurt you.'
    b. *ta ba-le   ni   hai(-le).
         he BA-Le you hurt(-Le)
    c. *ta ba-mei/bu-ba ni   hai(-le).[15]
         he BA-not-BA   you hurt-Le
    d. *(mei/bu-)ba.
         (not-)BA

Such morphosyntactic tests, however, are not quite satisfactory. There are a very small number of verbs in Chinese that simply do not behave like standard verbs according to these tests; nonetheless, they are clearly verbs. *Shi* 'make, cause' is such an example. It behaves like *ba* with respect to verbhood tests; yet no linguist has raised doubts as to the verbal status of *shi*:

(11) a. ta shi   ni   hen kuaile.
         he make you very happy
         'He made you happy.'
    b. *ta shi-le   ni   hen kuaile.
         he make-Le you very happy
    c. *ta shi-mei/bu-shi ni   hen kuaile.
         he make-not-make you very happy
    d. *(mei/bu-)shi.
         (not-) make

What is clear, however, is that the NP following *ba* (referred to as the *ba* NP henceforth) can simply be the object of the following verb, as in (10a). When the *ba* NP is understood as the object of the following verb (V), the object position of the V must be empty. It cannot be occupied by a pronoun or a reflexive coreferential with the *ba* NP, as in (12a–c). These properties of *ba* and the *ba* NP are not true for any other verbs and their objects:

(12) a.   *ta ba Zhangsan$_i$ hai-le   ta$_i$.
           he BA Zhangsan hurt-Le him
           'He hurt Zhangsan.'
      b.   *ta ba Zhangsan$_i$ hai-le   ziji/taziji$_i$.
           he BA Zhangsan hurt-Le self/himself
           'He hurt Zhangsan.'

(12b) should be contrasted with (12c), which allows *shi* 'make, cause' to be followed by a verb and a reflexive:

(12) c.   ta shi   Zhangsan$_i$ hai-le   ziji/taziji$_i$.
           he make you   hurt-Le self/himself
           'He made Zhangsan hurt himself.'

The contrast between (12a–b) and (12c) shows that *ba* in modern Chinese is different from lexical verbs.

2.2.2   *The analysis of* ba

Although *ba* has become 'grammaticalized' and hence does not behave like a lexical verb, questions arise as to what it means to be grammaticalized. What morphosyntactic properties does the 'grammaticalized' *ba* have? There have been so many proposals that the logical possibilities have almost been exhausted:

(13) a.   as a lexical verb (Hashimoto 1971);
      b.   as a preposition (Li and Liu 1955; Chao 1968; Lü 1980; Travis 1984; Cheng 1986; Li 1990);
      c.   as a dummy Case assigner (Huang 1982a; Koopman 1984; Goodall 1987a);
      d.   as a dummy inserted to fill the head of a CAUSE phrase when verb raising does not take place (Sybesma 1999);[16]
      e.   as the head of a base-generated functional category (Zou 1995).

The lack of lexical verbal properties in modern Chinese makes the first option less attractive. (13b–c) on the one hand and (13d–e) on the other can be distinguished by one major difference: constituency. For a *ba* construction of the form [*ba* NP VP], the analyses in (13b–c) take *ba* and the *ba* NP as a constituent. For a preposition analysis (13b), *ba* should form a constituent with its object, the *ba* NP. As a dummy Case assigner (13c), *ba* should form a constituent with the *ba* NP. That

is, according to (13b) and (13c), the *ba* NP alone (without *ba*) and the VP should not form one constituent. In contrast, according to (13d–e), which view *ba* as the head of a CAUSE Phrase or some other functional projection, the *ba* NP should form one constituent with the VP, not with *ba*. The fact is that the *ba* NP and the VP can form one constituent, as illustrated by the coordination test (see Wu 1982):[17]

(14)   ta ba [men xi-hao],   [chuanghu ca-ganjing]-le.
          he Ba door wash-finish window   wipe-clean-Le
          'He washed the door and wiped the windows clean.'

This suggests that (13d–e) are more adequate. However, there is a subset of *ba* sentences which indicates that *ba* can form a constituent with the *ba* NP, suggesting the inadequacy of solely relying on the (13d–e) analyses.[18] This subset of sentences is the type of sentence that Sybesma (1999: chapter 6) refers to as "canonical *ba* sentences" (in contrast to his 'causative *ba* sentences') – those sentences whose subject is an animate agent, not an inanimate causer,[19] such as (14). Let us use another simpler example, such as (15a). It allows *ba* and the *ba* NP to be preposed as a unit to the sentence-initial position (15b). That is, such 'canonical *ba* sentences' not only allow the *ba* NP to form a constituent with the following VP but also allow *ba* and the *ba* NP to form a constituent:[20]

(15)   a.   ni   xian ba zhe-kuai rou   qie-qie ba!
              you first BA this-Cl   meat cut-cut Par.
              'Cut the meat first.'
          b.   ba zhe-kuai rou, ni   xian qie-qie ba!
              BA this-Cl   meat you first cut-cut Par.
              'Cut the meat first.'

cf.:

          c.   ni   ba [zhe-kuai rou   qie-qie], [na-xie cai   xixi]-ba!
              you Ba this-Cl   meat cut-cut   that-Cl vegetable wash-Par.
              'You cut the meat and wash the vegetable.'

Sentences like (15a–b) show that it is not always sufficient to just take *ba* as the head of a CAUSE phrase or the head of some other functional projection not forming a constituent with the following NP. It is also doubtful that it is adequate to claim that *ba* is an inserted Case assigner. If it were, it is not clear why, for instance, (15b), with *ba*, and (15d), without *ba*, are both acceptable. A case marker should not be able to be inserted optionally:

(15)   d.   zhe-kuai rou, ni   xian qie-qie ba!
              this-Cl   meat you first cut-cut Par.
              'Cut the meat first.'

Summarizing, *ba* in modern Chinese does not behave like a lexical verb. The coordination test illustrated in (14) and (15c) shows that the structure [*ba* NP VP] can be analyzed as [*ba* [NP VP]]. In addition, when a *ba* sentence is of the 'canonical' type, the constituent structure seems to have the possibility of behaving like [[*ba* NP] VP], since *ba* and the *ba* NP can be preposed as a unit (15b). The former observation is in line with the approaches that treat *ba* as the head of a projection, taking [NP VP] as its complement, such as (13d–e). The latter observation goes along with a preposition analysis (13b).

2.3   *The* **ba** *NP*[21]

It has been widely noted in the literature that the *ba* NP is sensitive to a myriad of semantic and syntactic restrictions. In this subsection, we focus on the syntactic properties of the *ba* NP and discuss what a *ba* NP is syntactically.

2.3.1   *V-object*

First of all, it is quite common for a *ba* NP to correspond to the direct object of the verb in its non-*ba* counterpart. That is, a *ba* NP is simply the object of a verb, as illustrated in (2–3). In fact, the *ba* NP in the cases we have seen so far is mostly the (direct) object of the verb. However, it can also be an indirect object:

(16) a. wo ba ta   wen-le yi-da-dui   hen-nan-de   wenti.
          I   Ba him ask-Le one-big-pile very-difficult-De question
          'I asked him many difficult questions.'

cf.:

      b. wo wen-le ta   yi-da-dui   hen-nan-de   wenti.
          I   ask-Le him one-big-pile very-difficult-De question
          'I asked him many difficult questions.'

(17) a. wo ba ta   fa-le   henduo qian.
          I   Ba him fine-Le much   money
          'I fined him a lot of money.'

cf.:

      b. wo fa-le   ta   henduo qian.
          I   fine-Le him much   money
          'I fined him a lot of money.'

There are also cases which seem to take an instrument or locative NP as a *ba* NP, rather than taking an object. (18a–b) illustrate an instrument as a *ba* NP, and (18c–d) a locative NP:

(18) a. ta yong shou wu-zai erduo-shang.
          he use   hand cover-at ear-on
          'He covered his ears with his hands.'
      b. ta ba shou wu-zai erduo-shang.[22]
          he Ba hand cover-at ear-on
          'He covered his ears with his hands.'
      c. ta zai lian-shang tu-(man-)le   hui.
          he at face-on   cover-full-Le ash
          'He covered his face with ash.'
      d. ta ba lian(-shang)[23] tu-man-le   hui.
          he Ba face(-on)   cover-full-Le ash
          'He covered his face with ash.'

These cases, however, may actually be better regarded as a direct object, since an instrument and locative NP can clearly become the object of a verb:

(19) a. ta wu   shou wu-zai erduo-shang.
          he cover hand cover-at ear-on
          'He covered his ears with his hands.'
      b. ta tu   hui tu-man-le   lian.
          he cover ash cover-full-Le face
          'He covered his face with ash.'

The instrument NP 'hand' functions as the object of the verb 'cover' in (19a), and the locative NP 'face' in (19b) also functions as the object of the verb 'cover-full'. The occurrence of 'full' with 'cover' in (19b) when the locative NP functions as an object can be used as a test showing that the *ba* NP 'face' in (18d) originates as an object: *man* 'full' must occur with the verb in such a *ba* construction, in contrast to the non-*ba* sentence which does not need *man* 'full' (20):

(20) ta zai lian-shang tu-le   hui.
      he at face-on   cover-Le ash
      'He covered his face with ash.'

In brief, the *ba* NP can be a direct or indirect object of the verb. The cases that seemingly are non-V-objects such as instruments or locatives can actually be regarded as V-objects.

2.3.2 *Non-V-objects*
There are cases where the *ba* NP cannot be a direct or indirect object of the V. It can be a possessor of the object NP (21a–b) or in a part–whole relation with the object NP (21c–d):

(21) a. tufei   sha-le tade fuqin.
          bandit kill-Le his   father
          'The bandit killed his father.'

    b.   tufei   ba ta   sha-le fuqin.
          bandit Ba him kill-Le father
          'The bandit killed his father.'
    c.   shuiguo, ta chi-le yi-ban.
          fruit   he eat-Le one-half
          'The fruit, he ate half.'
    d.   ta ba shuiguo chi-le yi-ban.
          he Ba fruit   eat-Le one-half
          'He ate half of the fruit.'

It can also be the subject of a clause expressing the result of an action (22):

(22) a.   ta ku-de women dou fan-si-le.
          he cry-De we   all   annoy-dead-Le
          'He cried so much that we were all extremely annoyed.'
    b.   ta ba women ku-de dou fan-si-le.
          he Ba we   cry-De all   annoy-dead-Le
          'He cried so much that we were all extremely annoyed.'

Indeed, Sybesma (1999: chapter 6) claims that a *ba* NP is always the subject of a result clause. He quotes Goodall's (1987a) study and claims that a *ba* NP is derived by NP movement. Because of the locality conditions on NP movement, a *ba* NP must always be the subject of the result clause, not the object (Specified Subject Condition; Chomsky 1977b, 1981). The following examples are from Goodall 1987a: 234 and Sybesma 1999: 157–158):

(23) a.   na-ge nuhai ku-de Zhangsan nian-bu-xia na-ben shu.
          hat-Cl girl   cry-De Zhangsan read-not-on that-Cl book
          'That girl cried so that Zhangsan could not continue reading that book.'
    b.   na-ge nuhai ba Zhangsan ku-de nian-bu-xia na-ben shu.
          that-Cl girl   Ba Zhangsan cry-De read-not-on that-Cl book
          'That girl cried so that Zhangsan could not continue reading that book.'
    c.   *na-ge nuhai ba na-ben shu ku-de Zhangsan nian-bu-xia.
          that-Cl girl   Ba that-Cl book cry-De Zhangsan read-not-on
          'That girl cried so that Zhangsan could not continue reading that book.'

According to Goodall (1987a: 234), agreed upon by Sybesma (1999: 158), these examples show that it is only possible to raise the subject out of the embedded clause to become the *ba* NP, and not the object, a pattern "typical of movement to an A-position."

    We will return to the analysis by Sybesma in section 5.3. For present purposes, we would like to point out that it is not quite true that the *ba* NP cannot be the object of an embedded clause. The *ba* NP in the following instances must be interpreted as the object of the embedded clause:

(24) a. na-ge nuhai ba shoupa   ku-de meiren gan mo.
          that-Cl girl   Ba handkerchief cry-De nobody dare touch
          'That girl cried so that nobody dared to touch the handkerchief.'

This sentence is quite acceptable in the contexts where the girl kept crying and using the handkerchief to wipe off her tears. She cried so much that the handkerchief was completely wet and filthy. Even a sentence like (23c) can be made acceptable in appropriate contexts. For instance, the girl kept crying, with tears continuously falling on the pages of the book, to the extent that the pages become illegible. Under such circumstances, the following sentence is quite acceptable:

(24) b. na-ge nuhai ba na-ben shu ku-de meiren neng kan-de-qingchu.
          that-Cl girl   Ba that-Cl book cry-De nobody can   read-able-clear
          'That girl cried so that nobody could read that book clearly.'

What is important is that a relation is established between the *ba* NP and the following verb phrase. To put it more concretely, the *ba* NP is an 'outer object' or the object of V' in these cases, related to the subject or object of an embedded clause, as further elaborated on next.

2.3.3   *Outer object/V'-object*

The *ba* NP in (21–24) can be subsumed under the concept of the so-called V'-object, which is the object of a complex predicate consisting of a verb and its complement (Huang 1982a, 1987, 1988). Alternatively, in the terminology of Thompson (1973), the *ba* NP is an 'outer object' of the verb, in contrast to a V-object which is an 'inner object'.[24] That is, a *ba* NP can either be a V-object (inner object) as shown in section 2.3.1 or a V'-object (outer object) as shown in section 2.3.2.[25] An outer object (V'-object) receives an 'affected' theta-role (V' assigns an 'affected' theta-role to the V'-object, in Huang's terms). The affected object of 'father-killing' is 'him' in (21b); the affected object of 'eating a half' is 'the fruit' (21d); in (22b), 'we' were affected by the crying and got annoyed. Similarly, in (24a–b), the *ba* NP is affected by the crying to such an extent that it cannot be touched or read any more. Some other commonly used examples illustrating an outer object/V'-object are those in (25a–c) below. In (25a), *juzi* 'orange' is the outer object of *bo-pi* 'peel skin'. In (25b), 'the clothes' is the outer object of 'packing into a bundle'; in (25c), 'sadness' is the outer object of 'changing into power':

(25) a. ta ba juzi   bo-le   pi.
          he Ba orange peel-Le skin
          'He peeled the skin off the orange.'
     b. wo ba yifu   bao-le   yige   xiaobao.
          I   Ba clothes pack-Le one-Cl bundle
          'I packed the clothes into a bundle.'
     c. Lisi ba beitong hua-cheng   liliang.
          Lisi Ba sadness change-become power
          'Lisi changed his sadness into power.'

An outer object (V'-object) can become an inner object (V-object) if the V and its complement can be combined (compounded) to become a V (V' reanalyzed as V; see Huang 1983 for the distinction between phrasal and word categories; also see Larson 1988b for V'-reanalysis):

(26) a. Lisi ku-de shoupa   hen shi.
          Lisi cry-De handkerchief very wet
          'Lisi cried and got the handkerchief wet.'
      b. Lisi ba shoupa   ku-de hen shi.
          Lisi Ba handkerchief cry-De very wet
          'Lisi cried and got the handkerchief wet.'
      c. Lisi ba shoupa   ku-shi-le. (compounding of V-V)
          Lisi Ba handkerchief cry-wet-Le
          'Lisi cried-wet the handkerchief.'
      d. Lisi ku-shi-le   shoupa. (compound V + object)
          Lisi cry-wet-Le handkerchief
          'Lisi cried-wet the handkerchief.'

(27) a. na-ping   jiu   zui-de   Lisi dao-xiaqu-le.
          that-bottle wine drunk-De Lisi fall-down-Le
          'That bottle of wine made Lisi get drunk and fall.'
      b. na-ping   jiu   ba Lisi zui-de   dao-xiaqu-le.
          that-bottle wine Ba Lisi drunk-De fall-down-Le
          'That bottle of wine made Lisi get drunk and fall.'
      c. na-ping   jiu   ba Lisi zui-dao-le. (compounding of V-V)
          that-bottle wine Ba Lisi drunk-fall-Le
          'That bottle of wine made Lisi get drunk and fall.'
      d. na-ping   jiu   zui-dao-le   Lisi. (compound V + object)
          that-bottle wine drunk-fall-Le Lisi
          'That bottle of wine made Lisi get drunk and fall.'

(28) a. zhejian shi   ku-de Zhangsan lei-le.
          this-Cl matter cry-De Zhangsan tired-Le
          'This thing got Zhangsan tired from crying.'
      b. zhejian shi   ba Zhangsan ku-de lei-le.
          this-Cl matter Ba Zhangsan cry-De tired-Le
          'This thing got Zhangsan tired from crying.'
      c. zhejian shi   ba Zhangsan ku-lei-le. (compounding)
          this-Cl matter Ba Zhangsan cry-tired-Le
          'This thing got Zhangsan tired from crying.'
      d. zhejian shi   ku-lei-le   Zhangsan. (compound V + object)
          this-Cl case cry-tired-Le Zhangsan
          'This thing got Zhangsan tired from crying.'

In brief, the following generalization can be put forward:

(29) A *ba* NP corresponds to a V-object (inner object) or a V'-object (outer object) in its non-*ba* counterpart.

A V-object can be a direct object, an indirect object, an instrument NP, or a locative NP, all occurring in the structure [V___]. A V'-object can be an NP holding a possession or part–whole relation with the V-object or an NP identified with the subject or object of an embedded result clause, which may well be a pro/PRO (see Huang 1982a for conflating pro and PRO in Chinese).[26] According to the works referred to earlier by Huang and Thompson, a V'-object is assigned an 'affected' theta-role by a V' consisting of a V and its complement.

   A question arising out of (29) is how the *ba* NP is derived and specifically how and if the *ba* NP is derivationally related to its non-*ba* counterpart. It corresponds to a V-object or V'-object. However, it no longer is in the typical V-object position [V___], although it is likely that a *ba* NP is in the V'-object position (Huang 1982a). We will return to this issue in section 5. For the moment, we simply note that a *ba* NP can form an idiom with the verb, which suggests a movement relation between the non-*ba* V-object position and the *ba* NP position. For instance, the O part of some [V + O] idioms can occur as a *ba* NP: *zhan-pianyi* 'occupy-advantage = take advantage' in (30), *kai-dao* 'open-knife = operate, perform operation' in (31), and *kai-wanxiao* 'open-joke = joke' in (32):

(30) a. ta ba pianyi   zhan-jin-le.
          he Ba advantage take-exhaust-Le
          'He took full advantage.'
      b. ta zhan-jin-le   pianyi
          he take-exhaust-Le advantage
          'He took full advantage.'

(31) a. ta ba dao   kai-wan-le.
          he Ba knife open-finish-Le
          'He finished the operation.'
      b. ta kai-wan   dao-le.
          he open-finish knife-Le
          'He finished the operation.'

(32) a. ta ba wanxiao kai-de-guohuo-le.
          he Ba joke   open-De-excessive-Le
          'He overdid the joking.'
      b. ta kai   wanxiao kai-de-guohuo-le.
          he open joke   open-De-excessive-Le
          'He overdid the joking.'

If the components of an idiom ([V + O] in these cases) need to be generated together as a unit, these examples suggest that a *ba* NP can be derived by NP movement.

2.4   The X factor

The examples we have seen so far show the verb following the *ba* NP always occurs with some additional elements. As stated in (1a–b), there is always an X preceding or following the V in a *ba* sentence. A bare verb is not acceptable. The question is why the verb cannot be bare and what additional elements are required; i.e., what the X in (1a–b) is. This topic has been one of the main concerns throughout the literature on the *ba* construction. Various accounts have been provided. Descriptively, Lü's (1948, 1955, 1980) classification of the X into 13 patterns has been the foundation of most of the subsequent works. For instance, Sybesma (1999: 135–139) combined them into 10 classes. Liu (1997: 68–71) listed nine patterns on the basis of Lü's work. In the spirit of these classifications, we discuss in the following subsections important options for such an X.

2.4.1   Result expressions

A typical element for the X in (1) is a resultative complement following V, expressing the result of an activity. Other constructions such as motion-directional complements or certain dative/double object structures may also be regarded as result expressions, as described in the following subsections.

2.4.1.1   Resultative complements

Let us first consider a resultative complement, which may appear as a clause preceded by the marker *de* cliticized to a verb.[27] This is illustrated by the examples in (33a–b), with the resultative complement boldfaced. In these instances, *cai* 'vegetable' is interpreted as the object of the verb *chao* 'stir-fry' and the subject of the resultative clause *hen lan* 'very mushy', as supported by the acceptability of sentences like (33c). Such an NP is a very common type of *ba* NP:

(33) a.   ta chao   cai   chao-**de-hen-lan**.
           he stir-fry vegetable stir-fry-De-very-mushy
           'He stir-fried the vegetable mushy.'
      b.   ta ba cai   chao-**de-hen-lan**.
           he Ba vegetable stir-fry-De-very-mushy
           'He stir-fried the vegetable mushy.'
      c.   cai   hen lan.
           vegetable very mushy
           'The vegetable is mushy.'

The main verb and the verb of the resultative clausal complement can generally be compounded into a single verb: [V + Result] (see (26–28) in the previous section).[28] After compounding, the *ba* NP generally keeps the interpretation of being object of the V and subject of the result V:

(34) a. ta ba cai   chao-lan-le.
          he Ba vegetable stir-fry-mushy-Le
          'He stir-fried the vegetable mushy.'
      b. ta bu-gan   ba cai   chao-lan.
          he not-dare Ba vegetable stir-fry-mushy
          'He dare not stir-fry the vegetable mushy.'

However, a *ba* NP need not always be an object of the main V (the first part of the compound [V + result] or [V + resultative clause]). The main V can be intransitive, as in (26–28). In these cases, the *ba* NP is a V'-object related to the complement resultative clause (or more precisely, related to the complex predicate consisting of a V and its resultative complement). A *ba* NP need not always be the subject of the resultative clause either. Indeed, although many of the so-called 'aspectual' or 'phrase' expressions attached to a verb (to form a complex verb) were originated as the predicate of the resultative clause and taking a *ba* NP as its subject, they no longer function like a predicate of the resultative clause in modern Mandarin Chinese. We briefly discuss the cases where a *ba* NP is not the subject of a resultative clause below.

   The [V + result] compounding process is quite pervasive. Some compounded [V + Result] expressions have been so commonly used that the result part has become a very productive 'suffix-like' element forming a complex verb with a wide range of verbs. For instance, *wan* 'finish' can be combined with any activity verb to mean finish doing something, and a *ba* sentence with V-*wan* is generally acceptable:

(35) rang wo xian ba zhexie dongxi/shiqing zuo/kan/ting/da-**wan**.
      let   I   first Ba these things   do/watch/listen/hit-finish
      'Let me first finish doing/watching/listening to/typing these things.'

The same is true with *guang* 'empty' used with many activity verbs:

(36) ta hui ba dongxi chi/he/yong/na-**guang**!
      he will Ba thing   eat/drink/use/take-empty
      'He will eat up/drink up/use up/take up all the things.'

Wan 'finish' or *guang* 'empty' in the complex verb [V + *wan/guang*] does not necessarily retain its verbal status. That is, the result part of such [V + Result] compounds has become grammaticalized and reduced to a suffix. After grammaticalization, such a 'suffix-like' expression has become more like an aspect marker than a verb of result. That is, it is not always identical to the verb of a resultative complement clause in the sense that it can take the *ba* NP as its subject, as in (33c). For instance, in contrast to (33c), the sentence in (37) below containing *wan* 'finish' as the main verb is not acceptable (cf. the V-*wan* expressions in (35)). *Wan* in such instances has become more like an aspect marker indicating completion of an activity:

(37) *zhexie dongxi/shiqing wan-le.
      these things   finish-Le
      'These things finished.'

Similarly, *guang* 'empty' in (38a) below expresses the completion of reading, and the corresponding sentence (38b) with *guang* as a main verb is not acceptable, showing that the *ba* NP cannot be the subject of a resultative clause with *guang* as its predicate (the importance of such a generalization will be revisited in section 5.3 concerning an event structural approach to *ba* constructions):

(38) a. ta hui yixiazi jiu ba suoyou-de shu kan-**guang**.
          he will a while then Ba all-De   book read-empty
          'He will read all the books in a short while.'
      b. *suoyou-de shu   dou guang-le
          all-De   book all   empty-Le
          'All the books are empty.'

In such instances, it makes more sense to analyze the *ba* NP as the object of a single verb which is complex morphologically (containing two morphemes, a verb, and a suffix) than to analyze the *ba* NP as the object of the first morpheme and the subject of the second morpheme of a compound verb.

2.4.1.2 Directional complements

Another type of 'result' complement is a directional complement, indicated by the boldfaced expression in the following examples:[29]

(39) a. qing ni na shu **lai/qu**.
          please you take book come/go
          'Please bring/take the book.'
      b. qing ni ba shu na-**lai/qu**.
          please you Ba book take-come/go
          'Please bring/take the book.'

(40) a. qing ni jiao ta   **jin-lai/shang-lai/xia-qu**
          please you ask him enter-come/up-come/down-go
          'Please ask him to come in/come up/go down.'
      b. qing ni ba ta   jiao **jin-lai/shang-lai/xia-qu**
          please you Ba him ask enter-come/up-come/down-go
          'Please ask him to come in/come up/go down.'

Just like the compounding of [V + Result], a motion-directional complement can also be compounded with the V. (39b) and (40b) are examples. That the compounding has taken place can be shown by the fact that the verbal aspect *-le* follows the directional expression, not the V, as would be expected if the V and motion-directional complement were two distinct lexical items:

(41) a. wo ba shu   na-**lai/qu**-*le*   san-ci-le.
         I   Ba book take-come/go-Le three-times-Le
         'I brought/took the books three times.'
    a'. *wo ba shu   na-*le*-**lai/qu**   san-ci-le.
         I   Ba book take-Le-come/go three-times-Le
         'I brought/took the book three times.'
    b. ta yijing   ba hua   gua-**shang(qu)**/qu-**xia(lai)**-*le*   hen-jiu-le.
         he already Ba painting hang-up(go)/take-down(come)-Le very-long-Le
         'He has already hung up/taken down the painting for a long time.'
    b.' *ta yijing   ba hua   gua-*le*-**shang(qu)**/qu-*le*-**xia(lai)**   hen-jiu-le.
         he already Ba painting hang-up(go)/take-down(come)-Le very-long-Le
         'He has already hung up/taken down the painting for a long time.'

The directional complement/compound has also been extended, has become grammaticalized, and can combine with other non-motion verbs, indicating the success or completion of an action or event, such as the verb *ji* 'memorize' in (42) and *ai* 'love' in (43):

(42) wo dei   ba zhexie-shi   **ji-xia(lai)**.
      I   need Ba these-matter memorize-down(come)
      'I need to memorize these matters.'

(43) ni qianwan bie   ba ta   **ai-shang**, ni   hui hen tongku-de.
      you absolutely don't Ba him love-up   you will very painful-De
      'You absolutely cannot fall in love with him; you will be in great pain.'

We see then that directional complements can be subsumed under resultative complements, taking directional complements to express the result of a location change. They can also become grammaticalized and simply denote completion of an action or event.

2.4.1.3   Other 'result' expressions

There are other cases which may not have been classified as a resultative complement traditionally but behave like one with respect to interpretation and acceptability of a *ba* NP. These are cases involving verbs subcategorized for more than the direct object, such as dative/double object verbs or placement verbs (*put something somewhere*). One of the objects becomes a *ba* NP and the other stays in the postverbal position. The postverbal complement is very much like a resultative complement. For instance, (44a) below indicates that the book will be at the table upon successful completion of the event; (44b) expresses that the book is given to (*gei*) him:

(44) a. qing ni   ba shu   fang **zai zhuo-shang**.
         please you Ba book put   at table-on
         'Please put the book on the table.'

  b. qing ni   ba shu   song **(gei) ta**.
      please you Ba book give to   him
      'Please give him the book.'

In addition to dative/double object or placement verbs, certain 'semi-double object structures' behave alike. Such structures refer to sentences like the following, where there seem to exist two object NPs but the verb cannot take both objects in postverbal position. One of the objects is preposed or is a *ba* NP:

(45) a. *ta bao yifu   yi-ge   xiao-bao.
          he pack clothes one-Cl small-bundle
          'He packed clothes into a small bundle.'
      b. ta yifu   bao **yi-ge   xiao-bao**.
          he clothes pack one-Cl small-bundle
          'He packed clothes into a small bundle.'
      c. ta ba yifu   bao **yige   xiao-bao**.
          he Ba clothes pack one-Cl small-bundle
          'He packed clothes into a small bundle.'

The postverbal complement in (45c), again, looks like a resultative complement: the clothes becomes a small bundle after the (clothes-)packing.

   Purposive complements also behave like result expressions. They indicate the purpose of the action, which is similar to a result, and can occur in a *ba* pattern: [30]

(46) a. wo na   shu (lai/qu) **gei ta   kan**.
          I   take book come/go for him read
          'I brought a book for him to read.'
      b. wo ba shu   na   (lai/qu) **gei ta   kan**.
          I   Ba book take come/go for him read
          'I brought a book for him to read.'

(47) a. wo mai shu (lai/qu) **rang ta   yong**.
          I   buy book come/go let   him use
          'I bought the book for him to use.'
      b. wo ba shu   mai lai/qu **rang ta   yong**.
          I   Ba book buy come/go let   him use
          'I bought the book for him to use.'

The discussions so far show that the X in (1a) can be a result or result-like expression in most cases.

2.4.2 Duration/frequency phrases

Another expression that commonly serves as the X in (1a) is a postverbal duration or frequency phrase. (48a–b) are examples of duration phrases, and (48c–d) frequency phrases:

(48) a.   ni   ba ta   da **yi-zheng-tian** ta ye bu-pa.
           you Ba him hit one-whole-day he also not-afraid
           'You hit him for a whole day and he still will not be intimidated.'
     b.   qing ni   ba ta kan   yi-xia.
           please you Ba it watch a while
           'Please watch it for a while.'
     c.   ni   ba ta   da **shi-ci**,   ta ye bu-pa.
           you Ba him hit ten-times he also not-afraid
           'You hit him ten times and he still will not be intimidated.'
     d.   qing   nimen ba zhe-pian kewen xie   **san-bian**.
           please you   Ba this-Cl   text   write three-times
           'Please write this lesson three times.'

2.4.3   *V-*(yi-)*V*

Quite similar to the cases with a duration phrase, especially the expression *yi-xia* 'a bit, a while' (cf. (48b)), some verbs, especially activity verbs, can occur in the form V-*yi*-V 'V-one-V (V a bit)', creating an acceptable *ba* sentence:[31]

(49) women dei   xian ba zhe-wenti   **xiang-yi-xiang/kan-yi-kan**.
      we   should first Ba this-question think-one-think/read-one-read
      'We should first think about/read this question a bit.'

Alternatively, the verb can simply be reduplicated to render the 'a bit' reading; that is, *yi* 'one' in the above pattern need not occur:[32]

(50) women dei   xian ba zhe-wenti   **xiang-xiang/kan-kan**.
      we   should first Ba this-question think-think/read
      'We should first think about/read this question a bit.'

2.4.4   *Verbal measurement*

Another similar pattern is the use of measure expressions indicating the extent of the action:

(51) a.   ta hui ti   ni   **haoji-jiao**.
           he will kick you many-foot
           'He will give you many kicks.' (or kick you many times)
     b.   ta hui ba ni   ti   **haoji-jiao**.
           he will Ba you kick many-foot
           'He will kick you many kicks.' (see above)

(52) a.   wo bu da ta   **liang-quan** bu zou.
           I   not hit him two-fist   not leave
           'I won't leave without giving him two punches.'
     b.   wo bu ba ta   da **liang-quan** bu zou.
           I   not Ba him hit two-fist   not leave
           'I won't leave without giving him two punches.'

2.4.5   *V-object*

The postverbal X elements discussed so far, which make an acceptable *ba* sentence, mostly are not subcategorized for by the verb. Instead, the *ba* NP is the subcategorized object of the verb in most cases. However, it is also possible to find a postverbal element X in a *ba* sentence which is simply the direct object of the verb. That is, the X in (1a) can simply be a direct object. As noted in section 2.3.2, a *ba* NP can be an 'outer object', the object of a complex verb consisting of a verb and its complement (inner object). In that section, the examples used all contain an aspect marker suffixed to the (compound) verb (see the next section on an aspect marker alone making a *ba* sentence acceptable; i.e., an aspect marker by itself can be the X in a *ba* pattern). Nonetheless, such an aspect marker is not necessary. A single inner object as the X is sufficient to make a good *ba* sentence:

(53)   a.   ta zhi   ba shuiguo chi yi-ban.
           he only Ba fruit   eat one-half
           'He only ate half of the fruit.'
       b.   jide   ba juzi   bo   pi.
           remember Ba orange peel skin
           'Remember to peel the skin off the orange.'

The same generalization is true for double object structures such as those discussed in sections 2.3.2 and 2.4.1.3, where we saw that a direct object can be grouped with a result expression. There are also double object cases occurring in a *ba* pattern whose postverbal object, which cannot be grouped with postverbal result expressions, is simply the direct object of the verb. No aspect markers are necessary, either (see the next section on aspect markers). That is, similar to (16–17) in section 2.3.1, the following cases are acceptable:

(54)   a.   wo dasuan ba ta   wen yi-da-dui   hen-nan-de   wenti.
           I   plan   Ba him ask one-big-pile very-difficult-De question
           'I plan to ask him many difficult questions.'
       b.   wo hui ba ta   fa   henduo qian.
           I   will Ba him fine much   money
           'I will fine him a lot of money.'

2.4.6   *Aspect markers*

The cases discussed so far are generally clearly grammatical to native speakers: they generally accept such *ba* sentences more readily. Next, let us consider the less clear cases, i.e., those *ba* sentences whose VPs only require an aspect marker after the verb.

2.4.6.1   *-Zhe*

Among the cases using an aspect marker to fill the role of X in (1a), the durative marker *-zhe* is a common one and quite easily accepted with certain verbs. Some examples are given below:

(55)   qing   ba ta   bao/na/qian/fang/gua-**zhe**.
       please Ba it(him) hold/take/hold-in-had/put/hang-Zhe
       'Please hold (in hand)/put (it) down/hang it(him).'

(54) should be contrasted with (55), unacceptable as a *ba* sentence:

(56)   *qing   ba ta   da/chang/he/ca/nian/gai-**zhe**.
       please Ba it(him) hit/sing/drink/wipe/read/build-Zhe
       'Please hit/sing/drink/wipe/read/build it(him).'

Why is there such a contrast? This has to do with the types of verbs used in these examples. The first type involves verbs which have the interpretation of an end-state realized. The clearest example is *gua* 'hang': hanging is hanging up something and then it is hung up there. There is an end-state as a result of the action. The other verbs in the first type have the same interpretation. The first action of *fang* 'put' is putting something at some place and then the result is that this something ends up being at some place. *Qian* 'hold in hand', *na* 'take', and *bao* 'hold' also have the initial action and a result end-state: the first activity is to get something/somebody to be held in the hand and then the something/somebody ends up being in the state of being held by hand. Adopting the insight of Chen (1978a, 1978b), we assume that these verbs contain the notion of 'transition' or 'path' of motion, resulting in an end-state. Let us call this interpretation a resultative interpretation. The 'durative' marker *-zhe* marks an end-state that continues. That is, there is an inception and an end-state that continues. Such a resultative interpretation, however, is not available to (56). The verbs *da/chang/he/ca/nian/gai-zhe* 'hit/sing/drink/wipe/read/build-Zhe' do not have the 'path–end-state' interpretation. They only have the progressive interpretation when suffixed with *-zhe*; *-zhe* in such cases is a progressive marker. The distinction between these two types of verbs can be further illustrated by the following contrasts. One contrast is that the first type of verb can be more easily compounded with a directional complement (the notion of path is relevant) than the second type (lack of path):

(57)   a.   bao-lai   qian-lai   fang-xia na-xia   gua-shang
            hold-come hold-come put-in   take-down hang-up
       b.   *da-shang *he-lai   *ca-qu   *nian-xia   *ting-xia   *gai-shang
            hit-up   drink-come wipe-go read-down listen-down build-up

Another contrast is that the first type of verb, not the second type, can be combined with *zhu* 'stay' to mean that an end-state holds:

(58)   a.   bao-zhu   na-zhu   qian-zhu fang-zhu gua-zhu
            hold-stay take-stay hold-stay put-stay hang-stay
       b.   *da-zhu *chang-zhu *he-zhu   *ca-zhu   *nian-zhu *gai-zhu
            hit-stay sing-stay   drink-stay wipe-stay read-stay build-stay

In brief, the durative marker *-zhe* generally can be suffixed to the 'path–end-state' type of verb to express that the end-state continues or holds and a *ba* pattern is available. On the other hand, verbs not expressing 'path–end-state' only express progressive actions when suffixed with *-zhe* and a *ba* pattern is not available.[33]

2.4.6.2   *Le*

In addition to *-zhe*, the completive aspect marker *-le* (the verbal *-le*) may also make a *ba* sentence acceptable.[34] The effect of *-le* on the availability of a *ba* pattern, however, is inconsistent. Some predicates are quite ready to occur with *-le* to make a *ba* sentence and others are not. For instance, the sentences in (59) are acceptable but those in (60) are much worse:

(59) a.   ta ba Lisi pian-le.
           he Ba Lisi cheat-Le
           'He cheated Lisi.'
      b.   ta jingran   ba wo da-le.
           he unexpectedly Ba I   hit-Le
           'Unexpectedly, he hit me.'
      c.   wo ba shu   mai-le.
           I   Ba book sell-Le
           'I sold the book.'
      d.   wo yijing   ba men guan-le.
           I   already Ba door close-Le
           'I already closed the door.'

(60) a.   *ta ba na-difang likai-le.
           he Ba that-place leave-Le
           'He left that place.'
      b.   *ta jingran   ba qiu-sai   canjia-le
           he unexpectedly Ba ball-game participate-Le
           'Unexpectedly, he played the ball game.'
      c.   *ta ba na-ge   canting   baifang-le.
           he Ba that-Cl restaurant visit-Le
           'He visited that restaurant.'
      d.   *ta ba wode mingling fucong-le.
           he Ba my   order   obey
           'He obeyed my order.'

Moreover, this seems to be an area where speakers disagree significantly on the judgment. Take the examples in (61–62), for example. Sentences like (61a) and (62a) are more or less acceptable for some speakers but sound terrible to others, who prefer to have the expressions discussed in sections 2.4.1–2.4.4. following the verb: [35]

(61) a. ??wo ba ge   ting-le.
          I   Ba song listen-Le
          'I listened to the song.'
      b. wo ba ge   ting-wan-le.
          I   Ba song listen-finish-Le
          'I finished listening to the song.'

(62) a. ??wo ba ta   kuajiang-le.
          I   Ba him praise
          'I praised him.'
      b. wo ba ta   kuajiang-le ji-bai-bian-le.
          I   Ba him praise-Le   several-hundred-times-Le
          'I praised him several hundred times.'

2.4.7   *Preverbal modifiers*

In addition to the postverbal elements discussed so far, a *ba* sentence can also be made acceptable by the addition of certain preverbal adverbials (the X in (1b)):

(63) a. bie   ba ta **luan**-reng.
          don't Ba it disorderly-throw
          'Don't throw it around.'
      b. qing   ba zhuozi **wang   ta   nabiar** tui.
          please Ba table   towards him there   push
          'Please push the table towards him.'
      c. ba ta **haohaor-de** zhaogu, ta jiu   hui zhang-de-hao.
          Ba it good-De   care   it then will grow-De-well
          'Take good care of it and it will grow well.'
      d. ni   bu ba wenti   **zixi-de**   yanjiu, zen hui zhao-chu daan?
          you not Ba problem carefully study   how will find-out answer
          'If you don't study the problem carefully, how can you find an answer?'
      e. ni   bu ba zhe-wenzhang **zixi-de**   nian, zenme keneng dong-ne?
          you not Ba this article   carefully read how   can   understand-Q
          'If you don't read the article carefully, how can you understand (it)?'
      f. ta ba jiu   **bu-ting-de** he.   (from Chao 1968: 348)
          he Ba wine not-stop-De drink
          'He drank without stop.'
      g. wo ba ta **yi**-tui,   ta jiu   dao-le.
          I   Ba it one-push it then fall-Le
          'It fell as soon as I pushed it.'

Note that some such adverbials may be related to the *ba* NP. For instance, *luan* 'disorderly' in (a) may describe the end-state of the stuff that is being thrown as disorderly. However, this is not the case with all such adverbials. For instance, *zixi-de* 'carefully' in (d) and (e) cannot describe the *ba* NP: the problem in (d)

cannot be careful, neither can the article in (e) be careful. It is the studying and the reading that are careful. We will return to such differences in section 5.

2.4.8 Summary

Summarizing the types of X in (1a–b), we note that a very common one is that the X is a result expression (64a). Other possibilities are listed in (64b–h):

(64) a. V + result
     b. V + duration/frequency
     c. V + (*yi* +) V
     d. V + measure phrases
     e. V + object
     f. V + *le*
     g. V + *zhe*
     h. Adv + V

(64b–d) are similar because they all contain a number expression [number + classifier + noun]: duration/frequency phrases are expressed by a number expression; *yi* 'one' + V is also a number expression ('one' is a number, the V may be taken as a classifier-like element) and measure phrases are number expressions as well. (64a–h), therefore, may be restated as follows:

(65) a. V + result
     b. V + quantified/number expression
     c. V + object
     d. V + *le*
     e. V + *zhe*
     f. Adv + V

(65a–e) include almost all types of elements that can occur postverbally in Chinese. The only one that can occur postverbally in this language but does not make a *ba* sentence acceptable is a descriptive complement (a postverbal manner expression modifying the V), illustrated below:

(66) a. ta jintian-de gongke   xie-de   hen kuai.
         he today-De homework write-De very fast
         'He wrote today's homework fast.'
     b. *ta ba jintian-de gongke   xie-de   hen kuai.
         he BA today   homework write-De very fast
         'He wrote today's homework fast.'

2.5 Verbs

We have so far discussed almost all the individual components of the *ba* construction listed in (1a–b) except the V. Because the V interacts closely with the

co-occurring preverbal or postverbal X, and because, when types of verbal properties are considered (such as the classification by Vendler 1967a; Dowty 1979; Smith 1991), it is the verb phrase rather than the verb itself that is significant, we therefore will not further elaborate on the properties of Vs alone, except by bringing up the issue of transitivity regarding the types of verbs. A common observation is that a resultative complement can make a *ba* sentence acceptable, regardless of the transitivity of Vs. That is, the V in a *ba* pattern as in (1) can be intransitive as noted in section 2.3.3, in which case the *ba* NP can be interpreted as the subject of a resultative complement. This is illustrated below:

(67) a. ta ku-de women dou bu-gan   xiao-le.
          he cry-De we   all   not-dare laugh-Le
          'He cried so much that we did not dare to laugh.'
      b. ta ba women ku-de dou bu-gan   xiao-le.
          he Ba we   cry-De all   not-dare laugh
          'He cried so much that we did not dare to laugh.'

(68) a. ta zou-de   tui hen suan.
          he walk-De leg very sore
          'He walked so much that his legs were sore.'
      b. ta ba tui zou-de   hen suan.
          he Ba leg walk-De very sore
          'He walked so much that his legs were sore.'

(69) a. tianqi   re-de   gou dou bu-jiao-le.
          weather hot-De dog all   not-bark-Le
          'The weather is so hot that the dogs are not barking.'
      b. tianqi   ba gou re-de   dou bu-jiao-le.
          weather Ba dog hot-De all   not-bark-Le
          'The weather is so hot that the dogs are not barking.'

(70) a. tianqi   leng-de wo zhi   duosuo.
          weather cold-De I   continue shiver
          'The weather is so cold that I keep shivering.'
      b. tianqi   ba wo leng-de zhi   duosuo.
          weather Ba I   cold-De continue shiver
          'The weather is so cold that I keep shivering.'

These sentences seem to be good examples demonstrating that an intransitive V with a resultative complement can make an acceptable *ba* sentence, with the *ba* NP interpreted as the subject of the resultative complement. Closer examination of a wider range of data, however, reveals that the generalization may not be quite true. There are many instances where a result expression does not make a *ba* sentence with an intransitive verb acceptable. For instance, the following

sentences contain a resultative complement after an intransitive verb;[36] yet a *ba* sentence is still not acceptable:[37]

(71) a. ta yansu-de   women dou bu-gan   xiao-le.
          he serious-De we   all   not-dare laugh
          'He was so serious that we did not dare to laugh.'
      b. *ta ba women yansu-de   dou bu-gan   xiao-le.
          he Ba we   serious-De all   not-dare laugh
          'He was so serious that we did not dare to laugh.'

(72) a. ta-de shengyin xiao-de   women dou ting-bu-jian.
          he-De voice   small-De we   all   listen-not-receive
          'His voice was so soft that we could not hear him.'
      b. *ta-de shengyin ba women xiao-de   dou ting-bu-jian.
          he-De voice   Ba we   small-De all   listen-not-receive
          'His voice was so soft that we could not hear him.'

Why does a resultative complement make a *ba* sentence acceptable in cases like (67–70) but fails to do so in cases like (71–72)? This contrast is especially puzzling in light of the fact that, with a lexical causative matrix verb, the two sets of sentences are equally acceptable:

(67) c. ta ku-de shi   women dou bu-gan   xiao-le.
          he cry-De make we   all   not-dare laugh-Le
          'He cried so much that we did not dare to laugh.'

(71) c. ta yansu-de shi   women dou bu-gan   xiao-le.
          he serious-De make us   all   not-dare laugh-Le
          'He was so serious that we did not dare to laugh.'

(72) c. ta-de shengyin xiao-de shi   women dou ting-bu-jian.
          he-De voice   small-De make we   all   listen-not-receive
          'His voice was so soft that we could not hear him.'

(67c), (71c), and (72c) are the lexical causative counterpart of (67b), (71b), and (72b) respectively. While the *ba* sentence in (67b) is acceptable, (71b) and (72b) are not, even though their lexical causative counterparts are equally acceptable. Such contrasts indicate that the unacceptability of (71b) and (72b) cannot be due to some reason of interpretation.[38] Why, then, are they unacceptable? We would like to suggest that a *ba* sentence does not allow a truly intransitive verb. A complement expressing a result is not sufficient to make an acceptable *ba* sentence. The verb of a *ba* sentence must at least be able to be linked to the *ba* NP in the sense that the verb takes the *ba* NP as its semantic object, though not necessarily in typical syntactic object positions. To clarify this point, let us first consider the following contrast and then return to clarify the above remarks:[39]

(73) a.   ta ku-zai women shen-shang, rang women sui-xin.
           he cry-at we   body-on   let   us   broken-heart
           'He cried at us, making us broken-hearted.'
      b.   tianqi   leng-zai women shen-shang, rang women zhi duosuo.
           weather cold-De we   body-on   let   us   still shiver
           'The (cold) weather made us cold, giving us continuous shivers.'
      c.   *ta yansu-zai women shen-shang.
           he serious-at we   body-on
      d.   *ta-de shengyin xiao-zai women shen-shang.
           he-De voice   small-at we   body-on

Even though all the relevant verbs (including the adjectival ones) are intransitive,
the contrast between (73a–b) and (73c–d) indicates that these verbs differ in the
possibility of having a goal/recipient of the action/event. There is a recipient of
the crying or the coldness of the weather, as indicated by the acceptability of
(73a–b). On the other hand, the seriousness and a small voice do not have a
recipient, as indicated by the unacceptability of (73c–d). What the contrast
between (73a–b) and (73c–d) shows is that there are 'pseudo-intransitive' verbs,
in contrast to 'real intransitive' verbs. (73c–d) contain real intransitive while
(73a–b) involve pseudo-intransitive verbs. The latter can take an implicit object
(goal/recipient), but not the former. That this distinction may be on the right
track can be supported by a minimal contrast between the following sentences:

(74) a.   xiaohai wan-de fumu   kaixin/shangxin-si-le.
           child   play-De parents happy/sad-dead-Le
           'The children played so much that the parents were extremely happy/
           sad.'
      b.   xiaohai bing-de fumu   danxin-si-le.
           child   sick-De parents worried-dead-Le
           'The children were so sick that the parents were extremely worried.'

The (b) sentence can have a goal/recipient but not the (a) sentence, as shown by
their contrast in the acceptability of a co-occurring location/recipient phrase:

(74) a′. *xiaohai wan-zai fumu   xin-shang.
           child   play-at parents heart-on
      b′. xiaohai bing-zai fumu   xin-shang.
           child   sick-at parents heart-on
           'The children's sickness is in the parents' hearts.'

Not surprisingly, a contrast exists between these two cases in acceptability as a
ba sentence, even though both allow a lexical causative:

(74) c.   *xiaohai ba fumu   wan-de kaixin/shangxin-si-le.[40]
           child   Ba parents play-De happy-dead-Le
           'The children played so much that the parents were extremely happy.'

cf. lexical causative:

> c′. xiaohai wan-de shi   fumu   kaixin/shangxin-si-le.
>   child   play-De make parents happy/sad-dead-Le
>   'The children played so much that the parents were extremely happy.'
> d. xiaohai ba fumu   bing-de danxin-si-le.
>   child   Ba parents sick-De worried-dead-Le
>   'The children were so sick that the parents were extremely worried.'

cf. lexical causative:

> d′. xiaohai bing-de shi   fumu   danxin-si-le.
>   child   sick-De make parents worried-dead-Le
>   'The children were so sick that the parents were extremely worried.'

In other words, contrary to the claim in the literature, truly intransitive verbs cannot occur in the *ba* pattern. The fact that *ku* 'cry', *leng* 'cold', *bing* 'sick', etc. can appear in the *ba* pattern is due to the fact that these verbs are only 'pseudo-intransitive' or 'quasi-transitive' in the sense that the existence of a goal or recipient argument is implied. The distinction is manifested in the (im)possibility of a postverbal *zai* locative phrase which expresses the goal/recipient of the action/event. We may therefore conclude that a postverbal result expression itself is not sufficient to license a *ba* pattern. The *ba* NP must be related to the verb. Because such a *ba* NP is not a true direct object of the V, it may be subsumed under the notion of an 'affected object' or 'outer object', 'V′-object', along the lines of the observation stated in (29) in section 2.3.3, repeated below, that a *ba* NP always thematically related to the verb:

(29)   A *ba* NP corresponds to a V-object (inner object) or a V′-object (outer object) in its non-*ba* counterpart.

Viewing this along the lines of a V′-object, we may clarify the nature of a V′-object: it is not the case that any V′ can take an object. A thematic relation must still exist between such an object and the V. Such a thematic relation requirement distinguishes the acceptable and unacceptable *ba* sentences discussed above. More generally, it may also distinguish cases like the following, which differ only in the use of Vs:

(75)   a.   tufei   ba ta   sha-le fuqin.
>   bandit Ba him kill-Le father
>   'Bandits killed his father.'
>   a′. tufei   sha-le ta   fuqin.
>   bandit kill-Le he father
>   'Bandits killed his father.'
>   b.   *tufei ba ta   baifang-le fuqin.
>   bandit Ba him visit-Le   father
>   'Bandits visited his father.'

    b′. tufei   baifang-le ta fuqin.
         bandit visit-Le   he father
         'Bandits visited his father.'

An outer V′-object may bear a possession relation with an inner V-object, which
is true with both (75a) and (75b). Despite the same thematic relation between the
two objects, the former, with the verb *sha* 'kill', is acceptable as a *ba* sentence, but
not the latter, with the verb *baifang* 'visit'. Were any V′ able to take an outer
object, the contrast between (75a) and (75b) would not exist. The minimal differ-
ence between the two choices of verbs and the resulting contrast in acceptability
as a *ba* sentence, again, points to the close relation between the outer object and
the V.
    This generalization has important implications for how a *ba* NP is derived. For
instance, it has bearings on the debate between Goodall (1989) and Huang
(1992a), which was revisited by Sybesma (1999), concerning whether a *ba* NP
should be derived by movement or base generation. The crucial data used in
these works are instances like (76) where the *ba* NP corresponds to the subject of
a resultative complement. The works mentioned debated whether the *ba* sentence
in (76a) is derived from (76b) and (76a′) from (76b′) by the raising of the subject
of the resultative complement to become the *ba* NP (see Sybesma 1999: 158–159
for relevant examples, and section 2.2.2 for relevant discussions):

(76) a.   ta ba tieshu   ku-de kai-le   hua.
           he Ba iron-tree cry-De open-Le flower
           'He cried such that the iron trees blossomed (something very unusual
           happened).'
      a′. ta ba huli wen-de luchu-le   yiba.
           he Ba fox ask-De reveal-Le tail
           'He interrogated such that the fox revealed its secrets.'
      b.   ta ku-de tieshu   kai-le   hua.
           he cry-De iron-tree open-Le flower
           'He cried such that the iron trees blossomed (something very unusual
           happened).'
      b′. ta wen-de huli luchu-le   yiba.
           he ask-De fox reveal-Le tail
           'He interrogated such that the fox revealed its secrets.'

The proponents of the raising analysis, such as Goodall and Sybesma, argue for
raising on the basis of the fact that *tieshu kai hua* 'iron tree open flower' and *huli
luchu yiba* 'fox reveal tail' are idiomatic expressions indicating that a highly
unlikely event has happened and that the truth has come out respectively. In
contrast, Huang argues that the relevant *ba* sentences involve a control structure
and the seemingly idiomatic expressions actually just involve figurative speech,
with 'iron tree' possibly referring to an 'iron-hearted father' and 'fox' referring
to a sly person.

One needs to be cautious of what conclusion can be drawn from these data. Such data only bear on the issue of whether the *ba* NP can be raised from the subject of a complement clause, rather than a more general issue of whether the *ba* NP can be derived by a raising process. It is quite conceivable that a *ba* NP can be derived by movement, but the data in (76) do not provide any positive or negative evidence, because of the independent consideration of whether a *ba* NP can originate as the subject of a complement clause at all.

Our generalization in (29), in principle, prohibits the derivation of a *ba* NP raised from within a resultative complement, because a *ba* NP must be a V-object or a V'-object. (29), however, does not preclude the possibility of a *ba* NP being derived by a raising process. It is just that the raising must apply to a V-object or a V'-object and not the subject of a resultative complement; otherwise, sentences such as (71b), (72b), and (74c) would be acceptable. The analysis of (76a–b) should, then, not be the one proposed by Goodall, according to which the *ba* NP is raised from the subject of the complement clause. Instead, Huang's analysis is more adequate, according to which the idiom-like expressions are not true idioms but figurative expressions. That this conclusion is correct is supported by the fact that *tieshu* 'iron tree' and *huli* 'fox' can occur independent of their predicate (and retain the figurative interpretation), as in (76c–c'), unlike true idiomatic expressions whose components are not allowed to be generated independently without losing their idiomatic interpretation, such as (76d–d'):

(76) c.   ta ba tieshu   shuifu-le ma?
           he Ba iron-tree persuade Question
           'Did he persuade the iron tree (the iron-hearted one)?'
       c'. ta ba huli wen-wan-le   ma?
           he Ba fox   ask-finish-Le Question
           'Has he finished interrogating the fox (the sly one)?'

cf.:

       d.   ta xihuan chi doufu.
           he like   eat tofu
           'He likes to flirt.' (idiomatic reading: *chi-doufu* 'eat-tofu = flirt')
           'He likes to eat tofu.' (non-idiomatic reading)
       d'. ta xihuan doufu.
           he like   tofu
           'He likes tofu.' (non-idiomatic reading only)

On the other hand, the fact that (76a, a') cannot be derived by directly raising the subject of the complement clause to the *ba* NP position does not argue against a general raising analysis, which raises a *ba* NP raised from a V-object or V'-object position. We will show in section 4 that our proposal for the structure of the *ba* construction forces us to allow such a raising process, which will be supported by facts involving true idiomatic expressions of the structure [V + O].

Having discussed the syntactic properties of each of the components of a *ba* construction as in (1a–b), we should be able to establish appropriate syntactic structures for the *ba* construction. Before we proceed, however, we would like to bring in one more set of data – comparisons with the Taiwanese counterpart, the *ka* pattern, which will help with the characterization of the relevant *ba* structure in Mandarin because of their close similarities and important differences.

3   Cross-dialectal comparison with Taiwanese *ka*

A Mandarin *ba* sentence has a counterpart in Taiwanese, with *ba* replaced by *ka*, illustrated by the Mandarin example in (77a) and its counterpart in Taiwanese in (77b):[41]

(77) a. ta ba wo ma   san-ci   le.
          he Ba me scold three-times Le
          'He scolded me three times.'

cf.:

      b. i   ka gua meN saN-pai   a.
          he Ka me scold three-times Particle
          'He scolded me three times.'

The two constructions share the form [Subject + *ba/ka* + NP + VP] and most of the important constraints. A *ba* sentence in Mandarin can always be translated into a *ka* sentence in Taiwanese. However, the reverse is not true. A *ka* sentence is allowed in more contexts than a *ba* sentence.

There are three major differences between the Mandarin *ba* construction and the Taiwanese *ka* construction.[42] The first major difference is that, in contrast to the prohibition against a bare verb in Mandarin *ba* sentences (i.e., the X-factor, a postverbal or preverbal element required to accompany a bare verb, such as those listed in (64–65)), Taiwanese easily allows a bare verb to occur in the *ka* construction when the verb takes an affected object (see section 5.1). The following perfectly acceptable *ka* sentences, for instance, use only a bare verb after the *ka* NP:

(78) i ka gua pha/peN/meN.
      I Ka me hit/cheat/scold
      'He hit/cheated/scolded me.'

The second difference is that it is not always possible for a *ka* sentence in Taiwanese to have a non-*ka* counterpart, in contrast to Mandarin which always has a non-*ba* counterpart for a *ba* sentence. For instance, the following *ka* sentences do not have a non-*ka* counterpart:

(79) a. li   m-hoN ka gua the-tsa ha-ban.
          you don't   Ka me earlier off work
          'Don't get off work earlier (than you should) on me.'
      b. li   na kaN ka gua tsao, gua teo ho li   ho-khuaN.
          you if dare Ka me leave I   then let you good-look
          'If you dare to leave on me, I will show you the consequence.'

In these cases, *ka* is necessary to give an interpretation to the *ka* NP, which is not at all related to the thematic structure of the verb. In other words, one difference between *ka* and *ba* is that the former, but not the latter, can assign a thematic role to the *ka* NP independently.

   Finally, in contrast to the possibility in Mandarin of preposing *ba* together with the *ba* NP in some cases, it is clearly unacceptable to prepose *ka* with the *ka* NP in any *ka* sentence in Taiwanese:

(80) *ka tsit-te ba, li   siN tshe-tseh-le.
       Ka this-Cl meat you first cut-cut-Particle
       'Cut the meat first.'

   In brief, although the Taiwanese *ka* construction and the Mandarin *ba* construction are quite similar, they do differ significantly in several respects:

(81)   ***ba* structures**   ***ka* structures**
      a. Bare verbs are disallowed.   Bare verbs are allowed.
      b. A non-*ba* counterpart is   A non-*ka* counterpart is sometimes
          always available.   unavailable.
      c. A *ba* NP is thematically   A *ka* NP need not be thematically
          related to the following V or   related to the following V or V'. *Ka* is
          V' (a V-object or V'-object).   sufficient for a *ka* NP to be interpreted.
      d. *Ba* and the *ba* NP are   *Ka* and the *ka* NP are not preposable
          preposable as a unit.   as a unit.

The comparisons between *ba* and *ka* constructions will help us determine appropriate syntactic (phrase) structures for these constructions.
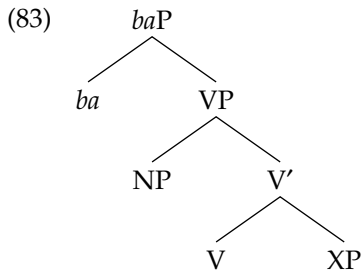

4 Structures

The important syntactic facts that need to be captured by an adequate phrase structure for the *ba* construction are as follows:

(82) a. A *ba* sentence has a non-*ba* counterpart.
      b. *Ba* and the *ba* NP normally do not form a unit syntactically, but they do so in some cases.
   c. No element can intervene between *ba* and the *ba* NP.

d.   What follows *ba* is a VP that contains an X and a V.

e.   A *ba* NP is a V-object or a V'-object.

4.1   A preliminary analysis

There is evidence that at least, in some cases, *ba* should head its own projection (see the discussions in section 2.2). When *ba* heads its own projection, its complement should be a maximal category (the bare phrase structures in the Minimalist Program; see Chomsky 1995c). (83) is therefore a potential partial structure for a *ba* sentence, where the NP in the Spec of VP is the *ba* NP. It is an object of V'. In the case where the *ba* NP is a V-object, it is raised to the Spec of VP position:

(83)

```
         baP
        /   \
      ba     VP
            /  \
          NP    V'
               /  \
              V    XP
```

This structure resembles very much the vP structure discussed extensively in Chomsky (1995c) or the VP-shell structure proposed by Larson (1988b) for double object structures, if *ba* is the head of a higher vP or VP. Indeed, if the label *ba*P is replaced by vP or VP, the structure is a regular verb phrase like Chomsky's vP structures or Larson's VP-shell structures. For simplicity, let us just use Chomsky's vP structures in the representations (if Larson's VP-shell structures are adopted, all vPs will be replaced by VPs and vs by Vs):

(84)

```
         vP
        /  \
       v    VP
            /  \
          NP    V'
               /  \
              V    XP
```
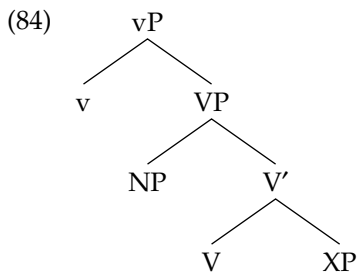
When *ba* appears in the v position, the verb is in the V position and a *ba* sentence is derived:

(85)   wo ba beizi na   gei-ta.
       I   Ba cup   take to-him
       'I gave the cup to him.'

Alternatively, *ba* need not appear in the v position. In that case, the verb moves up to the v position, deriving a non-*ba* sentence:

(86)   wo na   beizi gei-ta.
       I   take cup   to-him
       'I gave the cup to him.'

In other words, *ba* may be taken as the spell-out of a small v in Chomsky's sense (or a higher V in Larsonian VP-shell structures). When v is spelled out as *ba*, V-to-v-raising does not apply, deriving [*ba* NP V XP]. When *ba* does not occur, V-to-v-raising takes place, deriving [V NP XP].

4.2   Revision

The structure in (83) seems to capture the properties in (82). We saw how the *ba* and non-*ba* counterpart are derived. *Ba* heads a projection and nothing can intervene between *ba* and the *ba* NP if *ba* assigns Case to the *ba* NP and Case assignment obeys an adjacency condition (Stowell 1981). However, this structure is not quite adequate. It is especially problematic with respect to the placement of adverbials. Take a manner adverb for illustration. In a *ba* sentence, a manner adverb can occur before or after *ba*:
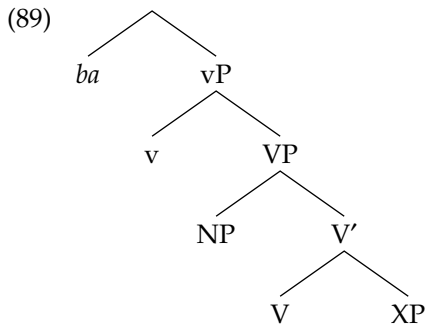
(87)   a.   wo xiaoxin-de ba beizi na-gei-ta.
            I   carefully   Ba cup   take-to-him
            'I gave the cup to him carefully.'
       b.   wo ba beizi xiaoxin-de na-gei-ta.
            I   Ba cup   carefully   take-to-him
            'I gave the cup to him carefully.'

If (83)/(84) is the structure, it means that a manner adverb should be able to adjoin to either V' or some node higher than the *ba*P in (83) or vP in (84). Such adverb placement possibilities predict that the non-*ba* counterpart, after V raised to v, such as (88a–b) below, should be acceptable. However, (88b) is not acceptable.[43] An adverb must precede a verb:

(88)   a.   wo xiaoxin-de na   beizi gei-ta.
            I   carefully   take cup   to-him
            'I gave the cup to him carefully.'
       b.   *wo na   beizi xiaoxin-de gei-ta.
            I   take cup   carefully   to-him
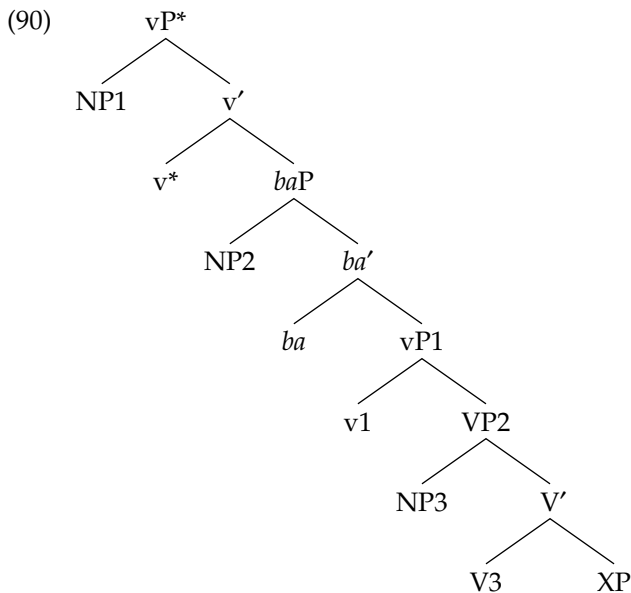   'I gave the cup to him carefully.'

The contrast between (87b) and (88b) casts doubt on the adequacy of a structure like (83)/(84), with v spelled out as *ba* or as the landing site of V-to-v raising.

The distribution of adverbs illustrated in (87) and (88) indicates that *ba* must be higher than the landing site of the raised main verb; i.e., higher than vP in (84):

(89)

```
            ┌──────────┴──────────┐
           ba                    vP
                          ┌───────┴───────┐
                          v              VP
                                  ┌───────┴───────┐
                                 NP              V′
                                          ┌───────┴───────┐
                                          V              XP
```

In such a structure, an adverb is adjoined to vP (or an intermediate projection v′, or some other node higher than vP). For a non-*ba* sentence, an adverb appears on the left of the main verb after the main verb is raised from V to v. For a *ba* sentence, an adverb may appear to the right of *ba* (as well as to the left if the adverb is adjoined to a node higher than the *ba* projection).

The structure in (89) solves the problem with adverb placement. However, it raises the question of where the *ba* NP must be positioned. It certainly cannot be the NP in (89). The *ba*-NP and *ba* can never be separated by any element. The structure in (89) would wrongly allow the main verb to occur between *ba* and the *ba* NP. There needs to be an NP position above the raised verb to host the *ba* NP. That is, there should be more structures above vP, such as the one below:[44]

(90)

```
          vP*
     ┌─────┴─────┐
    NP1         v′
          ┌──────┴──────┐
         v*            baP
                ┌───────┴───────┐
               NP2             ba′
                         ┌───────┴───────┐
                        ba             vP1
                                ┌───────┴───────┐
                               v1             VP2
                                        ┌───────┴───────┐
                                       NP3             V′
                                                ┌───────┴───────┐
                                               V3              XP
```

In this structure, vP1 is the verb phrase that follows the *ba* NP; NP2 is the most likely candidate to host a *ba* NP and NP1, the external argument of the sentence. To derive the correct word order, *ba* is raised to v*, V3 is raised to v1. (A non-*ba* sentence only has the projection up to vP1.) This structure spells out the relation between a *ba* construction and its non-*ba* counterpart, their minimal difference being in the projection of a *ba*P shell for a *ba* construction, and accommodates the facts regarding the distribution of adverbials in a *ba* construction and a non-*ba* counterpart. This structure, however, seems to suggest that *ba* is very much like a verb in the sense that both are dominated by a v (v1 for V and v* for *ba* in (90)). On the other hand, we mentioned earlier in section 2.2 that *ba* is not a verb. Do these two facts contradict each other? They do not, when we consider the behavior of *ka* in a *ka* construction, the Taiwanese counterpart of the Mandarin *ba* construction. Recall that, in contrast to a *ba* sentence which always has a non-*ba* counterpart, a *ka* sentence need not have a non-*ka* counterpart. Correspondingly, *ka* can assign a thematic role to a *ka* NP, but a *ba* NP is always related to the following V or V′ thematically. The thematic assigning property of *ka* reflects the origin of the *ba* and *ka* constructions, which were serial verb constructions. The structure in (90) reflects such properties faithfully. (90), thus, should be adopted for the *ka* construction:

(91)
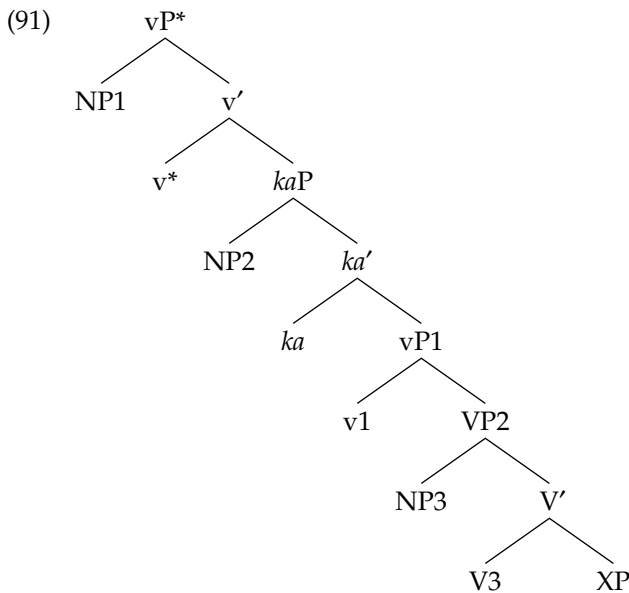
The question is whether this structure still describes the *ba* construction appropriately. Moreover, adopting the same structure for both *ka* and *ba* constructions fails to capture the differences between these two constructions, as listed in (81).
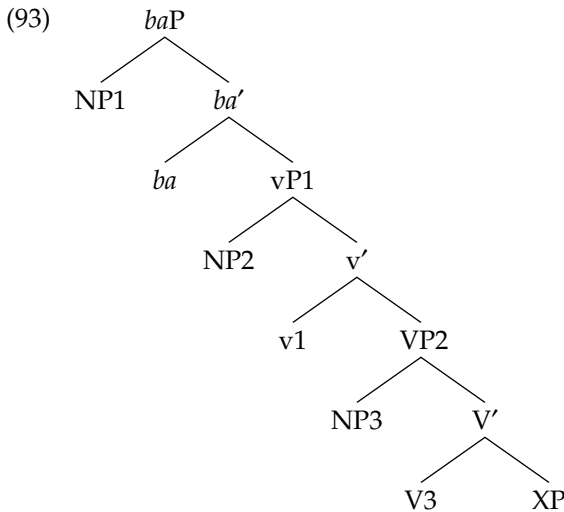
The facts that *ka* can assign an independent theta-role and that a *ka* sentence does not always have a non-*ka* counterpart indicate that *ka* in Taiwanese has a

more independent status than *ba* in Mandarin. We suggest that the minimal difference between the two constructions is that *ka* is 'more lexical' than *ba*: *ka* can directly assign a thematic role (an affected theta-role) to the *ka* NP. *Ba*, on the other hand, does not assign a thematic role. A *ka* NP can be base generated but a *ba* NP always originates from within the verb phrase.[45] *Ba* in Mandarin is more 'empty' than *ka* in Taiwanese.

The independent theta-assigning capability of *ka* should predict that the prohibition against the V in a Mandarin *ba* sentence being a true intransitive should not apply to a Taiwanese *ka* sentence (cf. section 2.5). This is correct. The unacceptable cases with true intransitive verbs in the Mandarin *ba* sentences discussed in section 2.5 are acceptable as *ka* sentences, as illustrated below (cf. (71–72)):

(92)   li-e   syaNim na ka gua se-ka   molang thiaN-u, gua e   ka li
       your voice   if Ka me small-extent nobody hear-have I   will Ka you
       si   taolo.
       fire job
       'If your voice is so small that nobody can hear you (at my cost), I will fire you.'

Such differences between *ka* and *ba* make it possible to surmise that *ba* has lost more lexical properties and is more grammaticalized than *ka*. Structurally, because of the grammaticalization process, v* disappears in (90) and the external argument NP1 occupies the Spec of *ba*P position, with the *ba* NP occupying the Spec of vP1:

(93)   baP
       /   \
     NP1   ba′
           /   \
         ba   vP1
               /   \
             NP2   v′
                    /   \
                  v1   VP2
                        /   \
                      NP3   V′
                             /   \
                           V3   XP

Adverbials are placed at the v level (for instance, adjoined to v′). A *ba* NP (NP2) in this structure is not within the maximal projection of *ba*, and therefore not assigned a thematic role by *ba*. The relation between *ba* and the *ba* NP is not

thematic, but *ba* still assigns Case to the *ba* NP (exceptional Case marking; Chomsky 1981). It is also possible that the weakening of the lexical properties of *ba* (grammaticalization) makes it possible to cliticize *ba* to the *ba* NP, making the two behave as a unit (82b), which, if true, also accounts for why *ka* + NP do not behave as a single unit in Taiwanese (81d).

In brief, the *ba* construction in Mandarin can be viewed as a more grammaticalized version of the *ka* construction in Taiwanese. The two minimally differ in their thematic-assigning capability. This difference is reflected in the presence of a v projection for *ka*, but not for *ba*. The two structures, (91) for *ka* sentences and (93) for *ba* sentences, accommodate the generalizations in (81).

Note that the structure in (93) assumes that the *ba* NP, NP2 in Spec of vP1, can be raised from a lower position. Such a raising analysis is supported, as shown next.

4.3   *The* **ba** *NP*

As mentioned, a *ba* sentence always has a non-*ba* counterpart and a *ba* NP is an inner object (object of V) or an outer object (assigned a theta-role by V and its complement). In other words, the *ba* NP is generated in either NP3 (V'-object) or XP (V-object) position in (93). On the surface, a *ba* NP occurs in NP2 position in (93). This indicates that a *ba* NP must be derived by a raising process (see the discussion regarding (76) in section 2.5). The raising, however, can only originate from a V-object or V'-object position; it cannot originate from the subject position of a complement clause. Note that the *ba* NP, NP2, is still within the extended maximal projection of V (vP). That is, it is within the thematic domain of V/V'. Raising the subject of an embedded clause to the *ba* NP position would be like raising an embedded subject to the object position of a higher clause, a process generally possible only if the subject is raised to the Agreement of Object position, not the position within the extended maximal projection of V (see Hornstein 1994).[46]

A raising analysis to derive the *ba* NP is supported by the fact that an object NP of a verb + object [V + NP] idiomatic expression, as in (94a–d), can become a *ba* NP, as in (95a–d):

(94)   a.   ta zhan-qu-le pianyi.
            he take-go-Le advantage
            'He took advantage.'
       b.   ta kai-wan-le   dao.
            he open-finish-Le knife
            'He finished the operation.'
       c.   bie   you-huai-le mo.
            don't hu-bad-Le   -mor
            'Don't humor badly (humorous in the wrong way).'
       d.   ni   gankuai xiao-le   bian-ba,   buyao zai   wan-le.
            you hurry   small-Le convenience-Par. don't   again play-Le
            'Hurry up peeing; don't fool around any more.'

(95) a. ta ba pianyi   zhan-qu-le.
         he Ba advantage take-go-Le
         'He took advantage.'
     b. ta ba dao   kai-wan-le.
         he Ba knife open-finish-Le
         'He finished the operation.'
     c. bie   ba mo   you-huai-le.
         don't Ba -mor hu-bad-Le
         'Don't humor badly (humorous in the wrong way).'
     d. ni   gankuai ba bian   xiao-le-ba,   buyao zai   wan-le.
         you hurry   Ba convenience small-Le-Par. don't again play-Le
         'Hurry up peeing; don't fool around any more.'

4.4   A bare verb?

The proposal discussed so far accounts for almost all the syntactic properties of the *ba* construction in Mandarin, in contrast to the *ka* construction in Taiwanese, as listed in (81). What is left is the contrast between the acceptability of a bare verb for a *ka* sentence and the unacceptability of such a form for a *ba* sentence. Why is it, then, that a *ba* sentence in Mandarin cannot allow a bare verb? It is possible to trace this constraint to a more general phenomenon: in Mandarin, when an object is preposed (i.e., not occurring in the postverbal position), it is generally unacceptable to have a bare verb, as illustrated by the contrast in the following pairs of sentences:

(96) a. *wo zuotian   zhe-ge zhuozi ca.
         I   yesterday this-Cl table   wipe
         'I, this table, wiped yesterday.'

cf.:

     b. wo zuotian   zhe-ge zhuozi ca-le.
         I   yesterday this-Cl table   wipe-Le
         'I, this table, wiped yesterday.'
     c. *zhe-ge zhuozi, wo zuotian   ca.
         this-Cl table   I   yesterday wipe
         'This table, I wiped yesterday.'

cf.:

     d. zhe-ge zhuozi, wo zuotian   ca-le.
         this-Cl table   I   yesterday wipe-Le
         'This table, I wiped yesterday.'

Why is it, then, that the focus of the literature has been on the unacceptability of a bare verb in a *ba* sentence, and attention has not been paid to the parallelism

between the *ba* sentences and the object-preposing cases? This probably is due to the fact that we do see some object-preposing cases where bare verbs are allowed:

(97) a. wo zhe-ge zhuozi bu-ca.
          I   this-Cl table   not-wipe
          'I, this table, won't wipe.'
      b. wo zhe-ge zhuozi hui-ca.
          I   this-Cl table   will-wipe
          'I, this table, will wipe.'

Crucially, however, the bare verb in these cases occurs with a negation or modal word. Phonologically, they form a unit. In a corresponding *ba* sentence, however, a modal or a negation must occur before *ba.* The inability of a negation or modal word to follow *ba* and directly precede the V makes it impossible to test if, indeed, a *ba* sentence has different constraints than a non-*ba* sentence concerning the acceptability of bare verbs. There is, however, a context where the sharpness of the contrast between a *ba* sentence and a non-*ba* sentence with respect to the acceptability of a bare verb is greatly reduced: the context of listing:

(98) a. ta yi-zheng-ge   zaoshang zhe-ge zhuozi ca,   na-ge   yizi
          I   one-whole-Cl morning this-Cl table   wipe that-Cl chair
          mo-de,   mang-si-le.
          wipe-De busy-dead-Le
          'He has been wiping this table, cleaning that chair and what not for the whole morning. He is very busy.'
      b. ta yi-zheng-ge   zaoshang ba zhe-ge zhuozi ca,   (ba) na-ge   yizi
          I   one-whole-Cl morning Ba this-Cl table   wipe Ba   that-Cl chair
          mo-de,   mang-si-le.
          wipe-De busy-dead-Le
          'He has been wiping this table, cleaning that chair and what not for the whole morning. He is very busy.'

Moreover, there are some two-morpheme verbs which are difficult to decompose into an [activity + result] compound but which can occur in a *ba* pattern without an X:

(98) c. ta keneng ba ta   fang-qi   ma?
          he can   Ba she abandon-abandon Question
          'Was it possible that he abandoned her?'
      d. ta shi hui ba taitai hu-lue   de ren   ma?
          he is   will Ba wife   neglect-omit De person Question
          'Is he a person that will neglect his wife?'
      e. ta bu ba wo ying-bi   cai   kuai!
          he not Ba me force-force then strange
          'It would be strange if he doesn't force me!'

f.   wo bu hui ba ta yi-wang   de!
     I   not will Ba it miss-forget De
     'I won't forget it!'

Typical [activity + result] compound verbs, including those with the result part grammaticalized to become an aspect-like suffix (cf. section 2.4.1.1), allow a positive potential infix *de* 'able' or a negative potential infix *bu* 'not' [activity + *de/bu* + result]. However, verbs such as *fang-qi* 'abandon-abandon', *hu-lue* 'neglect-omit', *ying-bi* 'force', and *yi-wang* 'forget' in (98c–f) do not allow such an infix. (98c–f) seem to demonstrate that bare verbs can occur in a *ba* pattern, just like (98b).

Despite these examples, it is in general still marginal for a bare verb to appear in a *ba* pattern. In addition, (98b) is not consistently accepted among native speakers, and the verbs in (98c–f) still consist of two morphemes. These considerations are in sharp contrast to Taiwanese, which readily allows a single-syllable bare verb in a *ka* construction. One may propose subsuming the strong tendency to avoid a bare verb in a *ba* pattern to some more general phenomenon, such as certain interactions between prosody and syntax as suggested by Feng (1995), which may be specific to Mandarin but not Taiwanese. We will not speculate further on a solution here for lack of a better understanding of the contrast, except by pointing out that such a contrast cannot be a difference of interpretation: both *ba* and *ka* sentences have an 'affectedness' interpretation (see further discussion in section 5.1).

4.5   *Over-generation*

The investigation of each of the components of a *ba* sentence (1a–b), coupled with the cross-dialectal comparison between a *ba* sentence in Mandarin and a *ka* sentence in Taiwanese, suggested the structure in (91) and (93). They capture the properties of *ba* sentences as in (82a–d) and the relation between a *ba* sentence and a *ka* sentence, in contrast to their non-*ba*/non-*ka* counterpart, when available, as in (81a–d).

Our proposal provides an answer to the question of what structure adequately represents the *ba* construction. However, it has not addressed the issue that has been the focus of attention of most linguists interested in this construction: the conditions on when a *ba* sentence can be used. Note that the structure proposed in (91) or (93) greatly over-generates. The following are just some of the many unacceptable *ba* sentences that can be generated by the structure proposed:

(99) a.   *ta ba dong da-po-le.
           he Ba hole hit-break-Le
           'He broke the hole.'
      b.   *Lisi ba ta xihuan-de hen gaoxing.
           Lisi Ba he like-De   very happy
           'Lisi likes him so much that he is very happy.'

c. *ta ba na-difang dao-le.
    he Ba that-place arrive-Le
    'He arrived at that place.'
d. *wo ba jiu   he-zui-le
    I   Ba alcohol drink-drunk-Le
    'I got drunk from drinking.'
e. *ta yijing   ba mei-jian-shi   dou zhidao-le
    he already Ba every-Cl-matter all   know-Le
    'He already knows everything.'
f. *tufei ba ta   baifang-le fuqin.
    bandit Ba him visit-Le   father
    'The bandit visited his father.'

There have been many interesting accounts for the relevant constraints. Proposals have been made from the perspective of information structure (topic-comment, presupposition-focus; see, for instance, Mei 1978; Hsueh 1987; Tsao 1987), interpretation/pragmatics (transitivity, disposal, affectedness; see L. Wang 1945, 1947; H. Wang 1957; Chao 1968; Hashimoto 1971; Thompson 1973; Li 1974; Hopper and Thompson 1980; Li and Thompson 1981; etc.), aspectual structure (Szeto 1988; Yong 1993; Liu 1997), and event structure (Sybesma 1992, 1999). We will show in the next section that, although all these approaches accommodate the core cases of *ba* sentences fairly well, the structurally formulated solutions fail to adequately account for the range of data that contain minimal pairs with identical structures but different acceptability as a *ba* sentence.

5   Constraints

Among the approaches based on information structure, interpretation/pragmatics, and aspectual and event structures, we will concentrate on the last three and show how each of them accounts for the constraints on the core instances of *ba* sentences, but attempts at precise grammatical formulations inevitably fail.[47]

5.1   *An interpretation/pragmatic account*

5.1.1   *The notion of 'affectedness/disposal'*
The majority of the literature on the *ba* construction centers on the notion of 'disposal' or 'affectedness'. That is, a *ba* sentence is a construction denoting 'disposal' or 'affectedness'. This special meaning is related to the original lexical meaning of *ba*, 'handle, manipulate'. It is responsible for the many constraints on the choice of verbs, the choice of *ba* NPs, and the use of other postverbal or preverbal elements (the X in (1)) in a *ba* construction. For instance, even though in many cases the *ba* NP is the object of the main verb in preverbal position,[48] as illustrated in (100), the 'special meaning' of the *ba* construction prevents all transitive verbs from preposing their object as a *ba* NP, such as (101):

(100) a. wo ba juzi   bo-le.
           I   Ba orange peel-Le
           'I peeled the orange.'

cf.:

       b. wo bo-le   juzi.
           I   peel-Le orange
           'I peeled the orange.'

(101) a.   *wo ba ta   xihuan-le.
           I   Ba him like
           'I like him (now, became fond of him).'

cf.:

       b. wo xihuan ta-le.
           I   like   him-Le
           'I like him (now, became fond of him).'

The intuition regarding the unacceptability of sentences like (101a) is that such sentences do not express the handling or manipulation of something (recall the original meaning of *ba*); 'he' is not manipulated or dealt with by 'my liking him'. The *ba* NP is not affected by 'my liking him'. This contrasts with (100a), which expresses the notion that the *ba* NP 'the orange' was manipulated: it was peeled.

   Such an intuition is behind the terms for this construction that have been quite widely used in the literature: the 'disposal' or 'executive' construction (*chuzhi shi*; see Wang 1954). These terms are to capture the intuition that the *ba* construction, ideally, is to describe something being 'disposed of' or some action being taken on the *ba* NP. In Wang's words: "The disposal form states how a person is handled, manipulated, or dealt with; how something is disposed of; or how an affair is conducted" (translated in Li 1974: 200–201). According to Teng (1974b), this interpretation property accounts for why it is most common for the *ba* NP to be a Patient (affected) NP. Frei (1956/1957) and Teng (1974b) refer to this construction as the ergative or accusative construction, to highlight the fact that the 'object' of *ba* generally is a patient (affected). In a word, *ba* is a marker of the thematic role 'patient'. Alternatively, the *ba* construction can be viewed as a 'highly transitive' construction. The construction describes the particular action made upon its object or a high degree of affectedness of the verb exerted upon the object (see, for instance, L. Wang 1954; H. Wang 1957; Chao 1968; Hashimoto 1971; Thompson 1973; Li 1974; Li and Thompson 1981; Tiee 1990; M. Wang 1987; for a recent work, see Li 1995). The 'affectedness' interpretation can be better understood by the contrast between the following two sentences, which have similar argument NPs. Depending on which NP becomes the *ba* NP, the sentences are interpreted differently. They differ in expressing which NP is affected: (102a) expresses that the pot is affected, and (102b) the water:

(102) a. wo ba guozi zhuang-le shui.
           I   Ba pot   fill-Le   water
           'I filled the pot with water.'
     b. wo ba shui   zhuang-zai guozi-li.
           I   Ba water fill-at   pot-in
           'I filled the water into the pot.'

5.1.2 *Extension – non-physical affectedness*

However, it is not always easy to understand a *ba* NP as some entity that is 'affected', 'manipulated', or 'dealt with'. Extensions have been made to accommodate more *ba* cases.

It has been suggested that 'affectedness' need not be physical. It can be psychological or even imaginary. For instance, Li and Thompson (1981: 469–470) explain that sentences such as (103–104), which contain emotive or psychological (stative) verbs normally not occurring in a *ba* pattern, are acceptable when the postverbal intensifier is added. The intensity of the emotion can imply disposal. In (103), the presence of the postverbal expression greatly exaggerates the degree of his missing you. "It is as if one cannot help thinking that you are affected in some way when he misses you to such an extent that he can't even eat" (1981: 469). The added expression *yao si* 'want to die' in (104) "hypothetically creates an image that such intense love must have some effect on the 'small cat'. Thus, the disposal idea . . . is implied by the verb together with the added expression. An implication of disposal is, therefore, sufficient to warrant the use of the *ba* construction" (1981: 469):

(103) ta ba ni   xiang-de fan   dou bu-ken   chi.
       he Ba him miss-De food even not-willing eat
       'He misses you so much that he won't even eat his meals.'

(104) Lisi ba xiao-mao ai-de   yao   si.
       Lisi Ba small cat love-De want die
       'Lisi loves the kitten so much that he wants to die.'

Such an image must be in the speaker's mind only, because the *ba* NP, the one that is missed in (103), need not even know that he is missed. Thus, (103) can be followed by (105a). The subject, the one that misses the *ba* NP in (103), need not know the extent, either, as illustrated by the acceptability of (105b):

(105) a. ni   keneng   bu zhidao-ba!
          you probably not know-Par
          'Probably you don't know.'
     b. ta keneng   bu zhidao   ta yijing   ba ni   xiang-de feng-le.
          he probably not know-Par he already Ba you miss-De crazy-Le
          'Probably he doesn't know that he already missed you so much that
          he went crazy.'

In brief, among all the different terms to label the *ba* construction, there seems to be an intuition expressed in the majority of works that this construction expresses some loose notion of 'affectedness' – the *ba* NP being affected in some way. The 'affectedness' need not be physical: it can be emotional or simply imaginary.

Such a special meaning is so typical of the *ba* construction that it can make a distinction in interpretation between a *ba* sentence and its non-*ba* counterpart. This can be illustrated by the behavior of idiomatic expressions. The following examples show that an object part of a [V + O] idiomatic expression can become a *ba* NP:

(106) a. ta ba pianyi   zhan-qu-le.
           he Ba advantage take-go-Le
           'He took advantage.'
       b. ta ba dao   kai-wan-le.
           he Ba knife open-finish-Le
           'He finished the operation.'
       c. bie   ba mo   you-huai-le.
           don't Ba -mor hu-bad-Le
           'Don't humor badly.'
       d. ta ba wanxiao kai-de-guohuo-le.
           he Ba joke   open-De-excessive-Le
           'He overdid the joking.'
       e. ni   gankuai ba bian   xiao-le-ba,   buyao zai   wan-le.
           you hurry   Ba convenience small-Le-Par. don't   again play-Le
           'Hurry up peeing; don't fool around any more.'

The use of the *ba* construction in these sentences seems to favor an understanding that something is affected or disposed of (in a very loose sense). For instance, (106a) states that the advantage has been taken by him (abstractly). (106b) says that the operation has been performed. In a way, *dao* 'knife' is equated to 'operation' and *kai* 'open' to 'perform (operation)'. In (106c), even though *youmo* is a transliteration of the English word *humor*, it seems possible to understand the sentence as this: the humorous stuff that he will be telling/acting (i.e., the -mor that he hu-ed) goes bad. In (106d), the joke that he made has gone overboard. (106e) can be interpreted as the pee gets peed fast. All of them imply a very loose notion of 'affectedness/disposal'.

In addition to the effect on the general interpretation of this pattern, the notion of 'affectedness/disposal' provides some understanding of the constraints on the types of *ba* NPs and predicates, which include a V and an X in (1a–b).

5.1.3 *Constraints on* ba *NPs*
Because a *ba* NP is an affected one, it generally should exist before an event occurs in order to be affected (existence condition), it generally cannot be non-specific (specificity condition), and it generally must be something/someone that can be affected by the event (affectedness condition).

5.1.3.1 Existence

There is a strong tendency for the entity denoted by the *ba* NP to exist in the speaker's conceptual world before the activity/event takes place. If it does not exist, generally a *ba* NP is not acceptable. Let us clarify these remarks with the following pairs of examples:

(107) a.   *ta ba zhuyi xiang-dao-le.
            he Ba idea   think-arrive-Le
            'He thought of the idea.'
       b.   ta ba diannao   mai-le.
            he Ba computer sell-Le
            'He sold the computer.'

The contrast between (107a) and (107b) can be accounted for in the following manner: an idea does not exist before it is thought of but a computer must exist before it is sold.

The existence can simply be a conceptual existence, rather than a physical one. For instance, the concept of what a hole should be can exist before the hole is dug and takes the desired shape. In contrast, if one breaks a hole, one normally does not have a preconception of the hole:

(108) a.   ta ba dong wa-hao-le.
            he Ba hole dig-complete-Le
            'He completed digging the hole.'

cf.:

       b.   *ta ba dong da-po-le.
            he Ba hole hit-break-Le
            'He broke the hole.'

In the world we know, a hole comes into existence as a result of breaking, which is incompatible with the existence requirement of a *ba* NP. This is especially clear when words expressing the lack of intention, like 'unintentionally, carelessly', are added to (108b).

(108) c.   *ta bu-xiaoxin ba dong da-po-le.
            he not-careful Ba hole hit-break-Le
            'He broke the hole carelessly (unintentionally).'

More generally, no creation verbs are quite compatible with a *ba* NP, unless the *ba* NP expresses a conceptual existence before the event/action takes place. This is why a *ba* sentence is not acceptable with verbs like *faxian* 'discover' or *faming* 'invent':

(109) a. *ta ba jinzi faxian-le.
           he Ba gold discover-Le
           'He discovered gold.'
       b. *ta ba diandeng faming-le.
           he Ba light-bulb invent-Le
           'He invented light-bulbs.'

Similarly, the unacceptability of sentences like (110a–b) can be attributed to the existence requirement. Generally, the object of seeing or hearing comes into the existence only after the seeing or hearing. A *ba* sentence is not acceptable:

(110) a. *wo ba ta kan-dao-le.
           I   Ba he see-arrive-Le
           'I saw him.'
       b. *wo ba ta ting-dao-le.
           I   Ba he listen-arrive-Le
           'I heard him.'

In contrast, if my intention is to touch him (as in a game), the following sentence can be acceptable because the existence of 'him' is in my mind before my touching him:

(110) c. wo ba ta mo-dao-le!   wo ying-le!
           I   Ba he touch-arrive-Le I   win-Le
           'I touched him! I won!'

5.1.3.2 Specificity

A great majority of the literature on *ba* constructions claims that a *ba* NP must be specific or definite and that it has to do with the meaning of 'disposal' or 'affectedness' – the entity that is dealt with or affected needs to be specific (see the discussions in sections 5.2 and 5.4 on the revision of such a claim). Examples frequently quoted are those *ba* NPs (i) which are a bare NP and cannot be interpreted as indefinite, and (ii) which are a number + classifier expres- sion and cannot be interpreted as indefinite. Bare NPs and number + classifier expressions can be interpreted as indefinite in some other contexts, such as a postverbal object position:

(111) **Bare NP:**
       a. qing ni ba bi gei wo.
           please you Ba pen give me
           'Please give me the pen.' (definite reading)
           *'Please give me a pen.' (indefinite reading unavailable)

cf.:

> b.   qing   ni   gei   wo bi.
>   please you give me pen
>   'Please give me the pen.' (definite reading)
>   'Please give me a pen.' (indefinite reading)

[Number + classifier + noun] expressions generally are interpreted as non-specific and therefore unacceptable as a *ba* NP:

(112) a.   *qing ni   ba san-zhi bi   gei   wo.
           please you Ba three-Cl pen give me
           'Please give me three pens.'

cf.:

> b.   qing   ni   gei   wo san-zhi bi.
>   please you give me three-Cl pen
>   'Please give me three pens.'

(113) a.   *ta ba shi-duo-ben shu   mai-le.
           he Ba ten-more-Cl book buy-Le
           'He bought ten-plus books.'
      b.   ta mai-le   shi-duo-ben shu.
           he buy-Le ten-more-Cl book
           'He bought ten-plus books.'

(112a) and (113a) are not acceptable because 'three pens' and 'ten-plus books' generally cannot be interpreted as specific.

   When such expressions are interpreted as specific, as when the universal quantifier *dou* is added, they can serve as a *ba* NP:

(114) qing   ni   ba san-zhi bi   dou gei   wo.
      please you Ba three-Cl pen all   give me
      'Please give me all three pens.'

Sybesma (1999: 142) notes that, in the terms of Barwise and Cooper (1981), the *ba*-NP must be strong.[49]

   In these two subsections, we stated that 'existence' and 'specificity' are strong tendencies regarding a *ba* NP. They are not exceptionless, as we will see later in the chapter when discussing event and aspectual structural approaches to *ba* constructions. The exceptions may be vaguely related to how the notion of 'affectedness' is understood. We attempt to describe the general applications of 'affectedness' next.

5.1.3.3 Affectedness

The 'disposal' interpretation is also claimed to be responsible for the unacceptability of having a *ba* NP like (115a), in contrast to the one in (115b): a language is not manipulated or dealt with when one reads things in that language. A sentence can be tackled (figuratively) by reading it in its entirety:

(115) a. *wo ba Zhongwen nian-le san-xiaoshi-le.
           I   Ba Chinese   read-Le three-hour-Le
           'I read Chinese for three hours.'

cf.:

       a'. wo nian Zhongwen nian-le san-xiaoshi-le.
           I   read Chinese   read-Le three-hour-Le
           'I read Chinese for three hours.'
       b. wo ba zhe-juzi   nian-le san-xiaoshi-le.
           I   Ba this-sentence read-Le three-hour-Le
           'I read this sentence for three hours.'

Similarly, it may help capture the contrast between the acceptability of sentences like those in (116a–b) and the unacceptability of those in (116c–e): it is easier to think of 'a key' being affected, because of its displacement by being forgotten, dropped, or lost (116a), and a ball game being claimed by winning (116b). (116b) can be further contrasted with (116c), which it is harder to interpret as "affected" if one simply participates in a ball game. For (116d–e), it is harder to think of a place being affected when one arrives at or leaves the place:

(116) a. wo ba yaoshi wang/diu/yishi-le
           I   Ba key   forget/drop/lose-Le
           'I forgot/dropped/lost the key.'
       b. wo yiding   neng ba qiusai   ying-le.
           I   certainly can   Ba ball-game win-Le
           'I certainly can win the ball game.'
       c. *ta jingran   ba qiu-sai   canjia-le.
           he unexpectedly Ba ball-game participate-Le
           'Unexpectedly, he played the ball game.'
       d. *ta ba na-difang dao-le.
           he Ba that-place arrive-Le
           'He arrived at that place.'
       e. *ta ba na-difang likai-le   henjiu-le.
           he Ba that-place leave-Le long time-Le
           'He left that place for a long time.'

The 'affectedness' interpretation also helps determine the syntactic position a *ba* NP originates in. It has been suggested that a *ba* NP is an outer object when it is

not an inner object of the verb, as discussed in section 2.3.2. The so-called outer object receives an 'affected' theta-role. The clearer the 'affected' interpretation, the easier it is to make an 'affected NP' and an acceptable *ba* sentence.

In (117a), killing a person's father naturally affects this person (particularly in a patriarchal culture), and therefore a *ba* sentence is quite acceptable. On the other hand, visiting someone's father normally does not affect that person, and a *ba* sentence is not acceptable (117b). (117c) and (117d) illustrate the same contrast in affectedness and acceptability:

(117)   a.   tufei   ba ta   sha-le fuqin.
             bandit Ba him kill-Le father
             'The bandit killed his father (and he was affected).'
        b.   *tufei   ba ta   baifang-le fuqin.
             bandit Ba him visit-Le   father
             'The bandit visited his father.'
        c.   women ba ta   guai-zou-le   xiaohai.
             we   Ba him swindle-off-Le child
             'We swindled his child (and he was affected).'
        d.   *women ba ta   tanlun-le   xiaohai.
             we   Ba him discuss-Le child
             'We discussed his child.'

As mentioned earlier, the contrast between the pairs of sentences above is important in another sense: it shows that bearing some relation, such as a possession relation, to the object of the verb (the inner object) is not sufficient to create an outer object and a *ba* sentence. It must be that the combination of [V + inner object] can take an outer object which is interpreted as 'affected', along the lines of the discussion on the constraints of the thematic relation between a *ba* NP and the V/V' in section 2.5.

For double object structures, the choice of a direct object or an indirect object as the *ba* NP also is related to the notion of affectedness. As a rule of thumb, if a double object verb can be combined with *gei* 'give, to', the direct object can be a *ba* NP; if it cannot be combined with *gei*, the direct object cannot be a *ba* NP. The following minimal contrasts illustrate the relevance of *gei*:

(118)   a.   wo jiao   ta   Zhongwen.
             I   teach him Chinese
             'I taught him Chinese.'
        b.   *wo ba Zhongwen jiao   ta.
             I   Ba Chinese   teach him
             'I taught him Chinese.'
        c.   wo jiao-(gei) ta   mijue.
             I   teach-to him secret (of success)
             'I taught him the secret of success.'

    d. wo ba mijue jiao-(gei) ta.
        I   Ba secret teach-to him
        'I taught him the secret of success.'

Li (1990) argues that the use of *gei* expresses transaction. (118a) does not allow the occurrence of *gei* because a language cannot be transferred to someone. That is, a language cannot be given to someone. On the other hand, the secret of success can be given to someone. The possibility of transaction is expressed by the possibility of using *gei*. This is correlated with the use of *ba*: if something can be transferred, it can be affected in terms of its location being changed.

    The same is true with indirect objects: the notion of 'affectedness' also helps determine the acceptability of a *ba* sentence. In the double object structure with *jiao*(*gei*) 'teach (to)', the *ba* NP cannot be the indirect object because it is the direct object that is transferred, not the indirect object, as illustrated by (118c–d). The cases where an indirect object of a double object structure can be a *ba* NP are verbs like *wen* 'ask', *fa* 'fine', *qiang* 'rob', *tou* 'steal', *hua* 'spend, cost'. These are verbs that do not occur with *gei* and the direct object cannot be a *ba* NP. The 'affected' interpretation seems to be the driving force for the use of the indirect object of such verbs as a *ba* NP. The indirect object of *fa*, *qiang*, *tou*, and *hua* expresses someone that is fined, robbed, or has something stolen, or whose money has been spent, all qualified as someone that is affected:[50]

(119)   ta ba wo fa/qiang/tou/hua-le shi-kuai   qian.
        he Ba I   fine/rob/steal/cost   ten-dollar money
        'He fined/robbed/stole/fined/cost me ten dollars/ten dollars from me.'

    An indirect object of such double object structures without *gei* cannot always become a *ba* NP, however, if the 'affectedness' interpretation is not present. Take *wen* 'ask', for instance. A *ba* sentence is better only if the indirect object is somehow affected by the asking of questions. For instance, when the indirect object is asked about many difficult questions, as in (120), he may be affected emotionally by being asked so many difficult questions. An 'affectedness' interpretation obtains and a *ba* construction is available:

(120)   ta ba wo wen-le yi-da-dui   hen-nan-de   wenti.
        he Ba me ask-Le one-big-pile very-difficult-De question
        'He asked me many difficult questions.'

In contrast, the following sentence is much less acceptable, because, generally, it is much less likely that asking for directions would affect the person being asked:

(121)   ^{??}ta ba wo wen-le fangxiang.
        he Ba I   ask-Le directions
        'He asked me directions.'

Nonetheless, such a sentence can be made more acceptable if it is made clear that asking for directions affects the one being asked, such as being emotionally disturbed by such questions:

(122) ta   mingming zhidao wo bu-qingchu fangxiang, que hai
         you obviously know I   not-clear   direction but still
         dang-zhong ba wo wen-le fangxiang rang wo chu-chou!
         face-crowd Ba I   ask-Le direction let   me embarrass
         'He obviously knows that I am not clear about the directions; yet he still
         asked me directions in public, making me embarrassed!'

(123) zhen lan!!! ta (jingran)   ba wo wen-le fangxiang!!!
         really lousy he surprisingly Ba I   ask-Le directions
         'A disaster! (How dare) he ask(ed) me directions.'

5.1.4   Constraints on predicates

According to Li and Thompson (1981: 489), the 'disposal' nature of the *ba* construction provides an understanding of

> why some grammarians and textbook writers have thought that the verb in a *ba* sentence cannot stand alone, but must be either preceded by some adverb or followed by some element, such as a perfective, directional, or resultative verb suffix or a complex stative clause. The reason that *ba* sentences always have verbs with those elements preceding or following them is that such sentences serve to elaborate the nature of disposal.

The function of X in (1), then, is to add to the verb the special 'disposal' meaning in order to make an appropriately interpreted *ba* sentence. Different verbs may themselves have different strengths of 'disposal'. It is easier for a verb like *sha* 'kill', *da* 'hit', *pian* 'cheat', etc. to have an interpretation according to which its object is affected by the killing, hitting, and cheating (stronger disposal interpretation). In contrast, for a verb like *xihuan* 'like', *liaojie* 'understand', *renshi* 'know', it is harder to have such an interpretation (much weaker disposal interpretation). The former, those verbs higher in transitivity and disposal interpretation, generally just need a perfective aspect marker *le* to indicate that the action is carried out and the effect is inflicted on its object. That is, these verbs can appear in a *ba* sentence with the simple addition of a perfective aspect marker *le*. The latter, those low in transitivity and weak in disposal interpretation, such as stative verbs, generally are more difficult to make into a *ba* sentence, even with the help of an X factor. For instance, the addition of a resultative complement, number phrases/aspect marker, Adv, etc. does not make a good *ba* sentence with such verbs in the following cases:

(124) **Resultative complement:**
       a.   *Lisi ba ta xihuan-de hen gaoxing.
             Lisi Ba he like-De   very happy
             'Lisi likes him so much that he is very happy.'

cf.:

>   b. Lisi xihuan ta shi-de   ta hen gaoxing.
>   Lisi like   he made-De he very happy
>   'Lisi likes him so much that he is very happy.'

(125) **Number phrases/aspect marker:**
>   a. *ta yijing   ba Lisi renshi-le sannian-le.
>   he already Ba Lisi know-Le three-year-Le.
>   'He's already known Lisi for three years.'

cf.:

>   b. Lisi, ta yijing   renshi-le sannian-le.
>   like he already know-De three-year-Le.
>   'Lisi, he's already known for three years.'

(126) **Adv + V:**
>   a. *wo ba zhe-shi   yi-liaojie,   jiu lai-le
>   I   Ba this-matter once-understand then come-Le
>   'I came as soon as I understood this matter.'

cf.:

>   b. wo yi-liaojie   zhe-shi   jiu   lai-le
>   I   once-understand this-matter then come-Le
>   'I came as soon as I understood this matter.'

However, it is not impossible to find instances with the low-transitivity stative verbs making a good *ba* sentence with the help of an appropriate X, such as (69–70) discussed in section 2.5 (the adjectival verbs *re* 'hot', *leng* 'cold', are stative verbs) and the following one from Li and Thompson (1981: 470, example (30)):

(127) ta ba zhe-shi   liaojie-de   hen touche.
       he Ba this-matter understand-De very thorough
       'He understands the matter thoroughly.'

The thoroughness of understanding the matter probably entails that the matter is in control, i.e., it fits in a non-physical, imaginary affectedness interpretation.

Such a 'disposal/affectedness' account probably can also accommodate the fact noted in section 2.4.8 that a descriptive phrase is the only type of element that can occur in a postverbal position but does not make a good *ba* sentence. The examples are (66a–b), repeated here:

(66)   a. ta jintian-de gongke   xie-de   hen kuai.
           he today-De homework write-De very fast
           'He wrote today's homework fast.'

  b. *ta ba jintian-de gongke   xie-de   hen kuai.
      he BA today   homework write-De very fast
      'He wrote today's homework fast.'

The form [V + de + descriptive] is interpreted like a descriptive adjective (stative verb). There have been debates in the literature on whether the verb or the descriptive phrase (the postverbal adjective) is the main verb of the sentence structurally (see C.-T. Huang 1982a, 1988; C. R. Huang 1987; Li 1985, 1990; among others). What we claim here is that, semantically speaking, the adjective determines the situation type of the verb phrase. It makes the situation type like that of an adjectival predicate, rather than an activity denoted by the V. That is, the verb phrase [V + de + descriptive] behaves like a descriptive adjective with respect to situation types. For instance, just as an adjective cannot occur in a command, neither can [V + de + descriptive]:

(128) a. *ni hen kuai!
           You very fast
           'You be fast!'
       b. *ni xie-de   hen kuai!
           You write-De very fast
           'You write fast!'

They cannot occur in the progressive form either:

(129) a. *ta zheng-zai hen kuai.
           he right-at   very fast
           'He is being fast.'
       b. *ta zheng-zai xie-de   hen kuai!
           he right-at   write-De very fast
           'He is writing fast.'

The form [V + de + descriptive] is not an accomplishment or achievement verb phrase either, because it does not have an end-point and it does not occur in the pattern of completion in a certain amount of time:

(130) *ta zai yi-ge-xiaoshi-nei gongke   xie-de   hen kuai.
        he at one-hour-in   homework write-De very fast
        'He wrote homework fast in an hour.'

Because [V + de + descriptive] is interpreted like a descriptive adjective (stative verb) with respect to situation types, this pattern tends not to accept a *ba* form, just like other adjectival predicates or stative verbs, as we saw earlier.

   In brief, the addition of a postverbal or preverbal element makes the affectedness interpretation more salient and renders a *ba* sentence more acceptable. The

strength of the 'disposal/affectedness' interpretation of verbs interacts with the need of the X factor. For verbs with strong 'disposal/affectedness' interpretation, an aspect marker is sufficient. For verbs with weak or no 'disposal/affectedness' interpretation, an X may not be sufficient to draw out an affectedness interpretation, and a *ba* sentence is still unacceptable. Such a vague notion of 'disposal/ affectedness' plays an important role in the acceptability of *ba* sentences. Indeed, the notion of 'disposal/affectedness' has dominated the approaches to the constraints on the *ba* construction. The vagueness of the notion also leads to the claim that the acceptability of a *ba* sentence sometimes is not absolute. It is only better or worse as a *ba* sentence. This conception can be best summarized by Li and Thompson's (1981: 487) conditions on the use of the *ba* construction as a continuum:

(131) *ba*   *ba*   *ba*   *ba*
      Impossible   Likely   Obligatory

      Indefinite or non-referential object   Definite and highly prominent object
      No disposal   Strong disposal

A definite and highly prominent object is an object that is "more obvious in the speech context and more immediate to our discussion" (1981: 484). Li and Thompson further provide support for their continuum in (131) on the basis of statistics: the more elements that are added to elaborate the nature of disposal, the more likely are the sentences to appear in the *ba* form. For instance, their data produced 83 *ba* sentences, none of which was a verb that was reduplicated or only followed by -*zhe* (which have little 'disposal' meaning added, according to Li and Thompson). Only 6 or 7 percent of the 83 sentences ended with just V-*le*. Li and Thompson also suggest that the continuum may capture the fact that speakers tend to disagree on the acceptability of certain *ba* sentences, especially those that are less clear on their disposal nature, i.e., those in the middle of the continuum.

   In short, although it is doubtful that there are obligatory *ba* sentences (all *ba* sentences can have a non-*ba* counterpart), the continuum in (131) does express explicitly the complexity of *ba* sentences: whereas speakers can agree quite readily on the best examples and the least likely examples for this pattern (the two extremes), the judgment is not clear especially on those cases that fall between the two extremes.

5.1.5 Summary
A great majority of the literature on *ba* constructions focuses on the usage of *ba* sentences by expounding on the notion 'affectedness/disposal', which states that the *ba* NP is the NP that is disposed of, dealt with, manipulated, affected in some way (physical or non-physical imaginary). This notion is responsible for the requirements on the types of *ba* NPs and predicates required in this pattern. As described in this section, such a notion seems to capture the basic intuition about

this construction and the canonical interpretation of a *ba* sentence. In the clearest cases, like *wo ba cai chao-de hen lan* 'I stir-fried the vegetable very mushy', we know that the vegetable is affected by the cooking, the result being mushy. Something is manipulated in a certain way. In cases like *wo ba Li xing le* 'I take the surname Li (my surname is Li)', our intuition tells us that this is an unacceptable use because, in the common world, a surname cannot be affected or manipulated by someone's having that surname. However, when we go beyond the clear cases, the picture becomes fuzzy. As mentioned, the notion of 'affectedness' has to be relaxed to include non-physical or imaginary situations. This creates a great deal of uncertainty. The so-called explanation becomes less comprehensible. For instance, what is the difference between hating someone for life and fearing someone for life that makes one better than the other as a *ba* sentence (132)? What is the difference between missing someone extremely and resembling someone extremely that makes one more affected and acceptable as a *ba* sentence and the other less affected and unacceptable as a *ba* sentence (133)? In both situations, the *ba* NP, the one that is missed or taken after, does not even need to be aware that he or she is missed or taken after:

(132) a.   wo hui ba ta   hen yi-beizi.
             I   will Ba him hate one-life
             'I will hate him for life.'
       b.   ??wo hui ba ta   pa   yi-beizi.
             I   will Ba him fear one-life
             'I will fear him for life.'

(133) a.   xiaohai ba ta   xiang-de yao si.
             child   Ba him miss-De want die
             'The child misses him extremely.'
       b.   *xiaohai ba ta   xiang-de   yao si.
             child   Ba him resemble-De want die
             'The child resembles him extremely.'

cf.:

       c.   xiaohai xiang   ta xiang-de   yao si.
             child   resemble him resemble-De want die
             'The child resembles him extremely.'

Of course, one can always create a story to accommodate the difference. For instance, if I am in fear of him (132b), he is always in control and he will not be the affected one even in a non-physical, imaginary sense. Such an 'explanation', however, will always be fuzzy, uncertain, unpredictable, and even circular in some cases. However, this does highlight the fuzziness and uncertainty of some uses of this construction. As mentioned, speakers often disagree on their judgments of *ba* sentences, especially those that fall in between the two extremes in

(131). Moreover, the same speaker may also make very different judgment in different contexts. For instance, although a sentence like (134a) below is judged not quite acceptable normally, it can become acceptable to the same speaker in a context where the *ba* NP 'I' was very much disgusted with 'his asking directions'. 'He' fully knows that 'I' don't know about directions and 'he' is trying to embarrass 'me'. Under such circumstances, (134b) can be uttered with total disgust and disbelief, as noted earlier:

(134) a. $^{??}$ta ba wo wen-le fangxiang.
           he Ba I   ask-Le directions
           'He asked me directions.'
       b. ta (jingran)   ba wo wen-le fangxiang!!!
           he surprisingly Ba I   ask-Le directions
           '(How dare he) He asked me directions.'

The vagueness and uncertainty, in a way, then, seem to be also an advantage: they reflect the uncertainty in speakers' judgments of many such sentences. It gives us a clue as to what the clearest acceptable and unacceptable *ba* cases are and to what would be more unsettling, allowing for more speaker variations and contextual variations. On the other hand, the weakness remains that it is extremely difficult to characterize the properties and claim in precise terms what may a priori be called an acceptable or unacceptable *ba* sentence.

It would therefore be very desirable to clarify and eliminate the fuzziness and uncertainty in characterizing this pattern, if possible. Indeed, there have been proposals claiming that the notion of 'affectedness/disposal' is unnecessary. Within such proposals, the *ba* construction is not unique. It can be subsumed under other, more common structures. Constraints on the *ba* construction can be derived from some better-defined structural or semantic properties. These alternative proposals offer insight into this construction from different perspectives and contribute to our understanding of the complex properties of this pattern. Unfortunately, it is the complexity of this pattern, reflected by the continuum in (131), that makes precise structural accounts for this pattern fall short empirically. Above all, there exist many minimal pairs with identical grammatical structures that exhibit different degrees of acceptability as a *ba* sentence because of the different contextual information involved. It is difficult to make such contextual information precise in grammatical terms. This casts doubt on the adequacy of capturing the usage of this pattern grammatically.

The most interesting attempts to provide a clearer, more precise grammatical account for the properties of the *ba* construction, in place of a vague notion of 'affectedness', are the aspectual approach represented by Liu (1997; also see Szeto 1988 and Yong 1993; cf. Zou 1995 for an aspect phrase selected by *ba*) and a structural approach that links the *ba* construction to accomplishment structures, proposed by Sybesma (1999). We examine these two approaches below, discuss their insights, and evaluate how effectively they tackle the complexity of the *ba* construction.

5.2   *An aspectual approach*

Assuming with Mei (1978) and Tenny (1987), among others, that affectedness is a property of the verb, Liu (1997: 93) notes that a *ba* sentence "may or may not have the property of affectedness." To support this claim, she gives the following sentence (her 1997: 94, (118)) to show that a *ba* sentence need not have an affectedness interpretation:

(135)   ta ba yige   dahao   jihui   cuoguo-le.
       he Ba one-Cl big-good opportunity wrong-pass-Le
       'He let a great opportunity pass.'

Liu argues, instead, that a *ba* construction is essentially a construction expressing a bounded event, and constraints on the *ba* construction are due to the aspectual properties of this pattern.

5.2.1   *The analysis*

Liu (1997) argues that a *ba* sentence requires its predicate to denote a bounded event or situation – 'bounded situations' are as defined in (136), which is a revised version of boundedness by Dahl (1981) in (137):

(136)   Bounded situations do not have internal stages that are static or stages that can be viewed as such.

(137)   **Dahl's definition of boundedness:**
      A class of situations or a characterization of a situation (e.g., a sentence) is bounded if and only if it is an essential condition on the members of the class or an essential part of the characterization that a certain limit or end-state is attained.

The constraints on possible types of NPs and VPs of a *ba* sentence are manifestations of obligatorily expressing a bounded event/situation. Using the term 'event' to refer to denotations of predicates, presented in perfective or imperfective aspect, and 'situations' to refer to denotations of uninflected predicates, Liu argues that the notion of boundedness can be expressed in two ways: it can be bounded on the basis of the situation denoted by the uninflected predicate (situation type or situational aspect; see Vendler 1967a; Dowty 1979; Tai 1984; Teng 1986; Chen 1988; Smith 1991; Yong 1993), or it can be bounded when a situation of an appropriate type is presented in a certain aspect (viewpoint aspect). If the terminal point or resultative state is included in the meaning of the uninflected predicate, then the situation alone will guarantee boundedness. If, however, the terminal point or resultative state is included only when the situation is presented in an appropriate aspect, then a bounded event depends on both the situation and the aspect it is presented in. An appropriate aspect is a completive aspect *-le* or a durative aspect *-zhe* (see the discussions in section 2.4.6). According

to Liu, the notion of 'bounded situations/events' captures the fact that *ba* sentences generally take the following forms (Liu 1997: 62, (30a–i)):

(138) a. V + complement
       b. V + *de*
       c. V + retained object
       d. V + perfective marker *le*
       e. V + PP (dative or locative)
       f. V + quantified phrase
       g. V + *yi* + V
       h. V + durative marker *zhe*
       i. Adv + V

According to Liu, all patterns in (138) except those with aspect markers, i.e., (d) and (h), contain predicates which express bounded situations. Evidence for this claim comes from the fact that none of these patterns can occur with the durative marker -*zhe*, which is a marker that presents a continuous and stable situation without regard to end-points (Smith 1991). It basically marks a situation as stative or resultative (Liu 1997: 66). Some of her examples showing the incompatibility of the durative marker -*zhe* and the predicates in (138a–c, e–g, i) are repeated here (see Liu 1997: 68–69, (52a–g)):

(139) a. *wo ba wenti   kan qingchu-zhe.
           I   Ba question see clear-Zhe
           'I'm seeing the question clearly.'
       b. *ta ba jia   baochi-zhe-de hen ganjing.
           he Ba home keep-ZHE-DE very clean
           'He keeps his home very clean.'
       c. *wo ba damen shang-zhe   suo.
           I   Ba gate   put-on-ZHE lock
           'I'm locking the gate.'

That such predicates express a bounded situation can be understood along the lines presented in section 2: a result (including resultative complement, directional complement, and PP or object) or a number expression provides an end-point to the event. For instance, in a sentence like *wo bu-hui ba ta ti-tong* 'I will not kick him hurt', the result *tong* 'hurt' provides an end-point to the action of kicking. In *wo ba ta ti sanxia/sanjiao* 'I kicked him three times/three kicks', the number expression 'three times/three kicks' provides a terminal point for the action. An adverbial modifier can also provide an end-point (138i). Liu uses examples such as the following to illustrate this pattern (her 1997: 70–71, (59a–b)):

(140) a. ta zhengzai   ba dongxi wang   wuli   ban.
           he in-progress Ba things toward room-in move
           'He is in the process of moving things into the room.'

b. ta ba tou yi   tai.
    he Ba head one raise
    'He raised his head up.'

In (140a), the adverbial phrase 'into/toward the room' provides an end-point, and 'one' in (140b) serves the same function. Liu further argues that the constraints on possible *ba* NPs (specificity, existence; see section 5.1.3) can be derived from a dependency relation between the *ba* NP and the predicate:

> there is a dependency between the *ba* NP argument and the predicate, and boundedness and specificity are different manifestations of a property that holds of the dependency. The dependency can be characterized in terms of a very simple notion in semantics. The idea has been explored in Krifka (1989) and Dowty (1991), where the way the aspect of telic predicates depends on their NP arguments is captured in terms of a structure-preserving function – a homomorphism. (1997: 88–89)

Liu suggests taking

> the meaning of a *ba* predicate to be a homomorphism that maps the *ba* argument denotations into the domain of events, and the structure that is preserved in this case is the 'all of' relation. For example, *xiewan* 'write and finish' in *ba zhefengxin xiewan* 'write and finish the letter' maps *zhefengxin* 'this letter' to the event writing and finishing this letter. The 'all of' relation that is preserved in the mapping makes sure that all of the letter – the entire letter – is mapped to all of the event, i.e., finishing the letter. . . . When applied to the predicate, the 'all of' relation characterizes the event as bounded since only events that are bounded can enter into the 'all of' relation. Unbounded events like 'know Japanese' cannot be quantified because such events do not have boundaries – beginning point and terminal point – and it does not make sense to consider an 'entire' event of knowing Japanese. Only events with boundaries (both end points) provide a domain for universal quantification. Similarly, when it comes to NP denotation, the 'all of' relation makes sure that the individuals can be quantified by 'all of'. And only G(eneralized)-specific NPs denote individuals that can be quantified by 'all of'. (1997: 89–90)[51]

The notion of 'G-specific' Liu proposes differs from the notion of 'specific' used in other works. According to Liu (1990), G-specific NPs are the NPs that can be scope-independent in object positions. They can occur with the universal quantifier *dou* 'all' in Chinese. The forms they take are given in (141), in contrast to the non-G-specific NPs in (142) (Liu 1997: 86):

(141)   Definite NPs: Demonstrative NPs, pronouns, names
        Universally quantified NPs: *Suoyou de* N 'all of the N'
                                               Meige N 'every N'
        Most N: *Daduoshu de* N 'most N'
                                               Dabufen de N 'most N'
        Some N: *Mo xie* N 'certain N'
        Bare numeral Det: *two* N: *Liangge* N 'two N'

(142)   Decreasing NPs: *Shige yixia de* N 'fewer than ten N'
         Modified numeral Det: *Shilaige* N 'about ten N'
                                        San wu ge N 'three to five N'

According to Liu, the 'all of' relation dictates that only the type of NPs in (141) can be a *ba* NP.

Another important point of this analysis concerns the fact that a bare verb cannot occur in a *ba* sentence. According to Liu, even though 'read that book' and 'sell that car' should be considered a telic predicate (a definite object makes an activity verb telic), they do not denote a bounded situation because they cannot be modified by the duration phrase *zai X nei* 'in (amount of time)', with the interpretation 'complete/finish something in X' (1997: 72):

(143) a. *ni neng zai yige   zhongtou-nei kan naben shu-ma?
           you can at one-Cl hour-in   read that-Cl book-Q
           'Can you read that book in an hour?'
       b. *wo xiwang zai yige   xingqi-nei mai naliang che.
           I   hope   at one-Cl week-in   sell that-Cl car.
           'I hope to sell that car in a week.'

Moreover, they are compatible with the durative marker *-zhe*. 'Read that book' thus contains internal stages that can be viewed as static and cannot denote a bounded event:

(144) wo zheng kan-zhe naben shu (ne).
       I   Prog read-Zhe that-Cl book Par.
       'I am reading that book.'

Because such a telic predicate does not express a bounded situation, an aspect marker to express the notion of boundedness is necessary in a *ba* structure (to create a bounded event through the presentation of a situation from an approriate viewpoint). This captures the fact that the verb does not occur in the bare form:

(145) a. wo ba na-ben shu   kan-*(le).
           I   Ba that-CL book read-Le
           'I read that book.'
       b. wo ba naliang che mai-*(le).
           I   Ba that-Cl car sell-Le
           'I sold that car.'

Finally, Liu explains why the durative marker *-zhe*, such as the one in (146) below, can make a *ba* sentence:

(146) qing ni dai-zhe   shoutao.
       please you wear-Zhe gloves
       'Please wear gloves.'

She suggests that this type of *ba*-sentences must be in the irrealis mode so that the sentence can express a bounded event: the inception of an action is included in the meaning of a sentence when it is in the irrealis mode. *-Zhe* provides the meaning of a resultative state: the resultative state holds. The inception and the resultative state combine to make a bounded event.

In brief, the requirement that a *ba* sentence must express a bounded event/ situation is responsible for the constraints on possible types of NPs and VPs in the *ba* construction.

5.2.2   *The issues*
This analysis is very attractive, in that it captures the constraints on *ba* NPs and VPs in *ba* constructions through a simple requirement of 'boundedness'. The term is defined and does not suffer from the fuzziness of the 'affectedness' account.

Unfortunately, it is not clear that the argument given against an 'affectedness' account is convincing or whether such an aspectual account is adequate empirically. The main argument against an 'affectedness' account given by Liu is that a sentence like (135), repeated here, does not have an 'affectedness' interpretation:

(135)   ta ba yige   dahao   jihui   cuoguo-le.
        he Ba one-Cl big-good opportunity wrong-pass-Le
        'He let a great opportunity pass.'

However, given the loose notion of 'affectedness', it is very difficult to make a decisive claim that (135) does or does not have an 'affectedness' interpretation. Recall that a sentence such as *wo ba yaoshi wang le* 'I forgot the key' in (116a) in section 5.1.1.3, for instance, is an acceptable *ba* sentence that was subsumed under the notion of 'affectedness'. 'The key' in this sentence is no more or less 'affected' than 'a great opportunity' in (135). Indeed, Lü (1948: 128) assumes the following sentence, almost identical to (135), to be a disposal (affectedness) sentence as well:

(147)   ba jihui   cuo-guo-le.
        Ba opportunity wrong-pass-Le
        '(Subject) missed the opportunity.'

Nonetheless, if an aspectual approach can capture the constraints on *ba* constructions without resorting to the vague notion of 'affectedness', the analysis is much more desirable. We show below, however, that this attractive analysis falls short empirically and that the tests it relies on to determine boundedness are not adequate. We illustrate these problems in the following subsections.

5.2.2.1   Tests for predicates of bounded situations
Recall that in order to account for why an aspect marker *-le* is required in some cases, Liu claims that an activity verb plus a definite NP such as 'that book/car'

does not express a bounded situation in Chinese, even though the verb phrase is telic. The tests used were the (un)acceptability of a co-occurring time expression 'in an X-amount of time' and the compatibility with the durative marker *-zhe* (cf. (143–145)).

Consider the test using the time expression 'in an X-amount of time'. Such a test would lead us to expect that, if the object NP is replaced by some other types of NPs which allow the co-occurrence of 'in an X-amount of time', a *ba* sentence should be acceptable without *le*. However, this is not the case. For instance, (143) can be made acceptable by replacing the definite NP with a quantified or a number phrase:

(148) a. ni   neng zai yige   zhongtou-nei xiugai quanbu-de wenzhang-ma?
           you can at one-Cl hour-in   correct all-De   article-Q
           'Can you correct all the papers in an hour?'
       b. wo xiwang zai yi-fengzhong-nei mai yiliang che.
           I   hope   at one-minute-in   sell one-Cl car.
           'I hope to sell a car in a minute.'

Nevertheless, these expressions still cannot occur in a *ba* sentence with a bare verb. The aspect marker *-le* is still required:

(149) a. *wo ba quanbu-de wenzhang (dou) xiugai.
           I   Ba all-De   article   all   correct
           'I correct all the papers in an hour.'
       b. wo ba quanbu-de wenzhang (dou) xiugai-le.
           I   Ba all-De   article   all   correct-Le
           'I correct all the papers in an hour.'

(150) a. *wo ba yiliang che mai.
           I   Ba one-Cl car sell
           'I sold a car.'
       b. wo ba yiliang che mai-le.
           I   Ba one-Cl car sell-Le
           'I sold a car.'

One may argue that Liu probably is wrong in stating the requirement of *-le* for instances like (144) (see section 2.5 regarding the occurrence of *-le*) and such instances probably should simply express bounded situations after all, just like their English counterparts. However, this raises the question of what is a valid test to determine if a predicate expresses a bounded situation. Specifically, it is not clear why the contrast between (143) and (148) should exist, if the time phrase 'in an X-amount of time' is taken as a test for bounded situations.

Another test Liu uses to determine if a predicate expresses a bounded situation is compatibility with the durative marker *-zhe*. Specifically, the predicates in (138a–c, d–g, i) cannot occur with *-zhe*; therefore, they express a bounded situation.

Were this test to apply consistently, this approach would be quite precise and clearly defined. However, such a test is not always reliable: incompatibility with -*zhe* does not guarantee a *ba* sentence, and compatibility with -*zhe* does not necessarily brand a *ba* sentence for rejection, either. Liu (1997: 67) quotes Yeh's (1993) observation that -*zhe* marks a contingent state, not an absolute state. In other words, -*zhe* does not occur with individual-level predicates but only with stage-level predicates. It therefore does not occur with verbs like *zhidao* 'know' or *xing* 'be surnamed as'. Although -*zhe* does not occur with an individual-level predicate, such a predicate does not normally occur in a *ba* pattern:

(151) a. *ta xihuan-zhe wo.
           he like-ZHE   me
           'He is liking me.'
       b. *ta ba wo xihuan(-zhe).
           he Ba me like-ZHE
           'He likes/is liking me.'

Note that one cannot simply say that such verbs express an 'absolute state', not a 'contingent state', and this is why -*zhe* cannot occur with them and they are not acceptable in a *ba* sentence independently. To see why, recall the discussion in section 5.1 regarding 'imaginary' or 'emotional' affectedness. For instance, a stative verb like *hen* 'hate' does not occur with -*zhe* and, generally, does not occur in a *ba* sentence. However, strong modification makes a *ba* sentence acceptable:

(152) a. *ta hen-zhe   wo.
           he hate-ZHE me
           'He is hating me.'
       b. *ta ba wo hen(-zhe).
           he Ba me hate-ZHE
           'He hates/is hating me.'

cf.:

       c. ta ba wo hen-de ya   yang-yang-de.
           he Ba me like-De tooth itchy-itchy-De
           'He hated me so much that his teeth became itchy.'

Moreover, as noted in section 2.4.8, when a *de* complement (138b) is a descriptive complement, it cannot occur in a *ba* sentence, as illustrated in (66). Such predicates cannot occur with -*zhe* either:

(153) *ta jintian-de gongke   xie-zhe-de   hen kuai.
        he today-De homework write-Zhe-De very fast
        'He was writing today's homework fast.'

Finally, it is not quite clear that -*zhe* can make a good *ba* sentence because it is in an irrealis mode. The following examples show that such *ba* sentences can be a complement to *kan* 'see', which does not necessarily include the inception of an action:

(154)   wo qu ta-jia   shi,   kan ta ba haizi bao-zhe, hai ba lanzi
        I   go he-home when see he Ba child hold-Zhe and Ba basket
        na-zhe,   haoxiang yao chu-qu-de yangzi.
        take-Zhe like   will out-go-De appearance
        'When I went to his home, I saw him holding the child, holding the basket, as if he was going out.'

In brief, the two tests Liu uses to determine if a predicate expresses a bounded situation, namely incompatibility with -*zhe* and compatibility with the time expression 'in an X-amount of time', do not work adequately. This account, consequently, loses an important foundation: the ability to determine whether a predicate expresses a bounded situation so that the acceptability of a *ba* construction can be determined.

Regardless of the validity of the tests to determine boundedness of a predicate, empirical problems exist.

5.2.2.2   Bounded events/situations not acceptable as *ba* sentences

Liu's main claim is that a *ba* sentence always expresses a bounded event/situation. If a predicate expresses a bounded situation or is presented in the appropriate aspect to express a bounded event, it should be acceptable as a *ba* sentence. However, many instances exist where bounded events/situations are expressed, but they do not make acceptable *ba* sentences.

First, there are predicates that express bounded situations but fail to make an acceptable *ba* sentence. For instance, the most typical bounded predicates (accomplishment verb phrases) are [V + result] expressions (138a); yet they do not always make an acceptable *ba* sentence:

(155)   a.   ta zhexie wenzhang dou kan-de hen shengqi.
            he these   article   all   read-De very angry
            'He got angry from reading all these articles.'
     b.   *ta ba zhexie wenzhang dou kan-de hen shengqi.
            he Ba these   article   all   read-De very angry
            'He got angry from reading all these articles.'

(156)   a.   wo zhe-ping-jiu he-zui-le.
            I   this-Cl-wine drink-drunk-Le
            'I have drunk the wine drunk.'
     b.   *wo ba zhe-ping-jiu he-zui-le.
            I   Ba this-Cl-wine drink-drunk-Le
            'I have drunk the wine drunk.'

Indeed, it seems possible to find counter-examples for all the patterns in (138). We have already discussed cases which illustrate the unacceptability of [V-*de*] (138b) in a *ba* sentence (section 2.8). Let us demonstrate the same point with a few more examples. The pattern (138c), V+ retained object, for instance, is illustrated in (157a–b), which are unacceptable as a *ba* sentence:

(157)　a.　*tufei ba ta　baifang-le fuqin.
　　　　　　bandit Ba him visit-Le　father
　　　　　　'The bandit visited his father.'
　　　　b.　*women ba ta　tanlun-le　xiaohai.
　　　　　　we　　Ba him discuss-Le child
　　　　　　'We discussed his child.'

　Take (138f) as another instance. For Liu (1997: 56), when a verb occurs with a quantified phrase (number phrase), it expresses a bounded event. A quantified phrase can be a duration or a frequency phrase. That is, if a verb is followed by a duration or frequency phrase, the predicate expresses a bounded situation and is predicted to occur in the *ba* form. However, counter-examples, again, are not difficult to find:

(158)　a.　wo renshi ta　san-nian-le.
　　　　　　I　know　him three-year-Le
　　　　　　'I have known him for three years.'
　　　　b.　*wo ba ta　renshi san-nian-le.
　　　　　　I　　Ba him know　three-year-Le
　　　　　　'I have known him for three years.'

cf.:

(159)　wo ba ta　qipian/nuedai san-nian-le.
　　　　I　Ba him cheat/maltreat three-year-Le
　　　　'I have cheated/maltreated him for three years.'

　Finally, although -*le* can be used with a predicate which does not express a bounded situation in the appropriate (perfective) aspect in order to establish a bounded event, there are many instances which show that the addition of -*le* still fails to make an acceptable *ba* sentence:

(160)　a.　*ta ba na-difang likai-le.
　　　　　　he Ba that-place leave-Le
　　　　　　'He left that place.'
　　　　b.　*ta ba qiu-sai　canjia-le.
　　　　　　he Ba ball-game participate-Le
　　　　　　'He participated in the ball game.'

    c.   *ta ba na-ge canting   baifang-le.
          he Ba that-Cl restaurant visit-Le
          'He visited that restaurant.'
    d.   *ta ba wode mingling fucong-le.
          he Ba my   order   obey
          'He obeyed my order.'
    e.   *ta yijing ba mei-jian-shi   dou zhidao-le.
          he already Ba every-Cl-matter all   know-Le
          'He has already known everything.'
    f.   *ta ba zhe-zhi-mao zhaogu-le.
          he Ba this-Cl-cat   care-Le
          'He cared for this cat.'

In brief, many instances exist which are not acceptable in the *ba* form, although they conform to the patterns listed in (138) and do express a bounded situation/ event.

5.2.2.3   Non-bounded events/situations acceptable as *ba* sentences

On the other hand, there are cases which do not express bounded events/situations, yet are acceptable as a *ba* sentence. This is especially true with the pattern in (137i) [Adv + V]. Recall that a preverbal adverbial may contribute to make a *ba* sentence acceptable. The examples given by Liu are (140a–b). The addition of an appropriate adverbial makes a predicate denote a bounded situation. However, closer examination of the relevant examples shows that such adverbials do not make the predicate a bounded one. Take Liu's example (140a), repeated below, for instance:

(140) a.   ta zhengzai   ba dongxi wang   wuli   ban.
            he in-progress Ba things toward room-in move
            'He is in the process of moving things into the room.'

Although Liu translated the predicate as 'moving things into the room', a more appropriate translation would be 'moving things toward the room'. *Wang* 'toward' simply expresses direction, rather than reaching a destination 'into'. Such a predicate is not compatible with the time expression 'in an X-amount of time' (the test used by Liu to determine if a predicate expresses a bounded situation):

(140′) *ta zai yige-zhongtou-nei ba dongxi wang   wuli   ban.
        he at one-hour-in   Ba things toward room-in move
        'He moved things toward the room in an hour.'

In other words, the adverbial phrase does not make the predicate express a bounded situation. Yet this predicate is acceptable in a *ba* sentence.

   There are other adverbial phrases which behave in the same way. Take preverbal manner adverbs, for instance. Such adverbs can help to make a good *ba* sentence but do not make the predicate express a bounded situation. 'Carefully',

for example, can occur preverbally without making the predicate bounded, as illustrated by the acceptability of a progressive marking:

(161)   ta zheng-zai zixi-de   nian-zhe na-pian wenzhang.
        he right-at   carefully read-Asp that-Cl article
        'He was carefully reading that article.'

It can also occur in a command, in contrast to a postverbal descriptive phrase (see (128a–b) in section 5.1):

(162)   zixi-de   nian!
        carefully read
        'Read carefully!'

The time expression 'in an X-amount of time' is incompatible:

(163)   *ni zai yige   zhongtou-nei zixi-de   nian naben shu-ma?
        you at one-Cl hour-in   carefully read that-Cl book-Q
        'Did you read that book carefully in an hour?'

The unacceptability of (163) indicates that *zixi-de nian* 'read carefully' is not an accomplishment predicate. The possibility of a progressive in (161) and the acceptability of a command in (162) indicate that *zixi-de kan* remains an activity verb phrase. However, such an unbounded predicate can occur in the *ba* form:

(164)   ni   bu ba zhe-wenzhang zixi-de   nian, zen hui zhao-chu wenti?
        you not Ba this article   carefully read how will find-out question
        'If you don't read the article carefully, how can you find problems?'

Recall also that the sentence given by Chao (1968: 348) quoted as (63f) also does not contain a bounded predicate:

(63) f.   ta ba jiu   bu-ting-de he.
           he Ba wine not-stop-De drink
           'He drank without stop.'

It is even possible for the durative marker *-zhe* to occur with the verb (this example is not in the irrealis mode either):

(165)   ta ba jiu   bu-ting-de he-zhe.
        he Ba wine not-stop-De drink-Zhe
        'He was drinking without stop.'

Furthermore, for Liu, the example in (154) discussed earlier, regarding the use of *-zhe* as a durative marker in the past time rather than in the irrealis mode, also presents a problem for the notion of bounded situations/events. This example is repeated below:

(154) wo qu ta-jia   shi,   kan ta ba haizi bao-zhe, hai ba lanzi
      I   go he-home when see he Ba child hold-Zhe and Ba basket
      na-zhe,   haoxiang yao chu-qu-de yangzi.
      take-Zhe like   will out-go-De appearance
      'When I went to his home, I saw him holding the child, holding the basket, as if he was going out.'

Such examples illustrate the empirical problem that expressions which do not express bounded situations/events can still be acceptable as a *ba* construction.

In short, to claim that a bounded event or situation makes an acceptable *ba* sentence is both too weak and too strong empirically. There are cases of bounded events/situations unacceptable as a *ba* sentence and cases of non-bounded events/situations acceptable as a *ba* sentence.

5.2.2.4   The *ba* NP

Recall that Liu further derives the specificity (G-specificity) constraint on *ba* NPs by resorting to an 'all of' homomorphism relation between a bounded predicate and a *ba* NP. She claims that a *ba* NP must participate in all the event from the beginning to the end-point. That is, a *ba* NP must be able to quantified by 'all of'. An important test used is the occurrence of *dou* 'all': only an NP that can occur with *dou* can be a *ba* NP (cf. (141–142). For instance, the *ba* NP in the following sentence is interpreted as specific and is a participant of the event from the beginning to the end. It can co-occur with *dou*:

(166) wo hui ba san-ben shu   dou fang-zai zhuo-shang.
      I   will Ba three-Cl book all   put-at   table-on
      'I will put all three books on the table.'

This captures many interesting constraints, such as the difficulty of a non-G-specific NP serving as a *ba* NP and the difficulty of a *ba* NP occurring with verbs of creation (*manufacture*) or perception verbs (*see, hear*). Indeed, this accommodates the generalizations concerning the *ba* NP discussed in section 5.1.

The problem, however, is that the constraints on *ba* NPs are not as rigid as we would wish for. There are many examples which do not fall within the account. For instance, the example (63f) by Chao just quoted above does not seem to require the wine to be presented in an 'all of' relation. Moreover, it is not clear what it means that the *ba* NP must be able to be quantified by 'all of'. When a *ba* NP is a singular NP, is it also quantified by 'all of'? Note that the addition of the universal quantifier *dou* 'all' is not possible when the individual to be quantified over is singular. Independently, a singular NP just cannot be quantified by *dou*:

(167) a. wo ba ta   xiang-de yao-si.
           I   Ba him miss-De want-die
           'I missed him so much (that I want to die).'

　　b.　*wo ba ta　dou xiang-de yao-si.
　　　　I　Ba him all　miss-De　want-die
　　c.　ta (*dou) xiang-de yao-si.
　　　　he all　　miss-De　want-die
　　　　'He missed so much (that he wants to die).'

(168)　a.　wo ba zhe-pi-ma　　qi-le　　yici.
　　　　　　I　Ba this-Cl-horse ride-Le once
　　　　　　'I rode the horse three times.'
　　　b.　*wo ba zhe-pi-ma　　dou qi-le　　yici.
　　　　　　I　Ba this-Cl-horse all　ride-Le once
　　　c.　zhe-pi-ma　(*dou) qi-le　　yici.
　　　　　　this-Cl-horse all　　ride-Le once
　　　　　　'This horse was ridden once.'

There are also instances which are clearly listed in Liu's category of non-G-specific NPs (142), not allowing the occurrence of *dou*, but do appear in a *ba* construction. Expressions such as *budao aifen-zhi-yi* 'less than 1 percent' and *san dao wu ge* 'three to five' in the following sentences are such examples:

(169)　a.　anzhao　guiding ni　zhi　neng ba budao　baifenzhiyi-de yingyu
　　　　　　according rule　you only can　Ba less-than 1 percent-De　profit
　　　　　　na-lai　　gei yuangong feng　　hong.
　　　　　　take-come to　employee distribute bonus
　　　　　　'According to the rules, you can only take less than 1 percent of the profit to distribute to the employees as bonus.'
　　　b.　*budao　baifenzhiyi-de yingyu dou gei yuangong feng　　hong-le.
　　　　　　less-than 1 percent-De　profit　all　to employee distribute bonus-Le
　　　　　　'Less than 1 percent of the profit was all distributed as bonus to the employees.'

(170)　a.　wo zuiduo zhi　neng ba san-dao-wu-pian xiugai-hao-de wenzhang
　　　　　　I　most　only can　Ba three-to-five-Cl　corrected-De　article
　　　　　　na-chulai gei ni　kan.
　　　　　　take-out　for you read
　　　　　　'I can only bring at most three to five corrected articles for you to read.'
　　　b.　*san-dap-wu-pian xiugai-hao-de wenzhang dou gei ni　kan.
　　　　　　three-to-five-Cl　corrected-De article　　all　for you read
　　　　　　'Three to five corrected articles are for you to read.'

On the other hand, there are also instances allowing the occurrence of *dou* which are not acceptable as a *ba* form. The examples in (155a–b) we saw earlier, for instance, demonstrate the acceptability of *dou* with an NP which cannot be a *ba* NP:

(155) a.   ta zhexie wenzhang dou kan-de hen shengqi.
            he these   article   all   read-De very angry
            'He got angry from reading all these articles.'
     b.   *ta ba zhexie wenzhang dou kan-de hen shengqi.
            he Ba these   article   all   read-De very angry
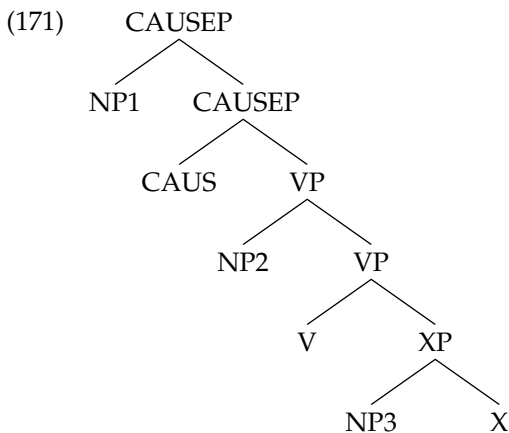   'He got angry from reading all these articles.'

Summarizing, although Liu's account based on the notion of 'boundedness' is quite attractive, it falls short empirically. It does not account for why some *ba* sentences are acceptable with an unbounded predicate and some other *ba* sentences are unacceptable with a bounded predicate. The derivation of the properties of *ba* NPs from a homomorphism relation with a bounded predicate may capture the core cases (cf. the continuum in (131)); however, the facts are not as clean and clear as the analysis predicts.

5.3   *An event-structural account*

Sybesma (1999), revised from his 1992 dissertation, is a very interesting work that incorporates the interpretation of and the semantic (pragmatic) constraints on the *ba* construction into the syntactic structure. This represents the best syntactic structural effort to account for the properties of the *ba* construction. Unfortunately, the complexity of the *ba* construction still evades an adequate structural description.

5.3.1   *The analysis*

Sybesma proposes that *ba*-sentences are always CAUS-sentences in some abstract sense. The VP (comprising the V after the *ba* NP and the embedded XP) does not have an external argument. The subject of the sentence (NP1 in (171) below) bears the role of the causer; in other words, it bears a semantic relation to the head CAUS (not to the VP):

(171)

```
                CAUSEP
              /        \
           NP1        CAUSEP
                     /       \
                  CAUS        VP
                            /     \
                         NP2        VP
                                  /    \
                                 V      XP
                                      /    \
                                   NP3      X
```

In this structure, NP1 is the subject of the sentence. NP2 and NP3 are related by NP-movement, NP3 being the trace. The head of the CAUSP (for CAUS Phrase) is phonologically filled either by way of insertion of *ba* or by movement of the head of VP (Sybesma 1999: 170). The latter derives a non-*ba* sentence with an accomplishment VP. The former derives a *ba* sentence. Because *ba* is only a phonological filler, interpretations are the same for structures derived by verb-raising or *ba*-insertion. That is, a *ba* sentence does not carry a special meaning. It is just like a non-*ba* sentence with an accomplishment predicate. Both express a result or an end-point: the VPs embedded under CAUS must be unaccusatives, which are "characterized by the fact that they involve an end point" (1999: 178). The *ba* NP is the subject of the underlying result small clause (the end-point) and is the theme that undergoes a change of state or location.

This structure, according to Sybesma, can be paraphrased as "the subject causes the *ba*-NP to undergo the event denoted by the VP." Revised slightly to be distinct from the lexical causative cases, such as those with causative verbs *shi* 'make' or *rang* 'let', the structure is interpreted as follows: "the subject of the sentence (the causer) brings about a new state of affairs which results from the event denoted by V" (1999: 178). Importantly, the *ba* NP is not independently mentioned and is only semantically dependent on the embedded predicate. It is part of the resulting state. This is a departure from the 'affected/disposal' tradition: a *ba* sentence is no longer viewed as primarily aimed at disposing of the *ba* NP. The paraphrase applies to all causatives and accomplishments, or simply, all are accomplishments. That is, the structure in (171) is the structure for both *ba* and accomplishment sentences. When verb-raising takes place, it is an accomplishment sentence; when *ba* is inserted, it is a *ba* sentence.

This structure derives the constraints on the *ba* construction, according to Sybesma. The apparent specificity requirement on the *ba* NP (the *ba* NP must be specific) and the 'affectedness' of the *ba* NP follow from the fact that the structure expresses a bounded event. "An event is bounded if it contains an object which is affected and quantificationally closed" (1999: 173). The relevant factor for the 'affectedness' of the *ba* NP is the "change of state" (1999: 175).

Sybesma's contribution is to approach the *ba* construction with its specific interpretation and constraints from a structural perspective. The notion of 'structural dynamism' is central to the analysis: the structure determines the meaning, rather than the theta-theory or thematic structures of individual lexical items. Structures are generated (Generate a) and lexical items are interpreted accordingly. The *ba* construction is simply realization of a CAUS head in the CAUSP of an event structure. The event structure has a CAUS head subcategorized for a VP that is an unaccusative (without a subject, necessarily involving an end-point). When the unaccusative verb is not raised to the CAUS head, it is spelled out as *ba*. The *ba* construction is not unique at all. It is just a variation of a construction with an accomplishment verb phrase, and the verb-raising process is replaced by *ba* insertion. The constraints on possible types of NPs and VPs in a *ba* sentence follow from the event structure (bounded event; cf. Liu's analysis in the previous section).

5.3.2   *The issues*

Despite its attractiveness in eliminating the vague notion of disposal/affected-ness and providing a more concrete structural analysis for the *ba* construction, this analysis still encounters difficulties in face of the complexities of *ba* constructions.

5.3.2.1   A *ba* sentence and the non-*ba* counterpart

The main claim of this approach is that a *ba* sentence and a non-*ba* accomplish-ment have identical structures, which only differ in whether verb-raising takes place or a dummy *ba* is inserted. It is not clear that *ba* sentences and non-*ba* accomplishments are indeed identical. Liu (1997: 60), while reviewing Sybesma (1992), observes that "this hypothesis runs into difficulty both ways: there are *ba* sentences with non-accomplishments and sentences of accomplishments which nonetheless cannot occur with *ba*, as seen in [172] [173] respectively:"

(172)   women dou ba Laowang dangzuo laoshi.
       we   all   Ba Laowang take-as   teacher
       'We all consider Laoang as our teacher.'

(173)   *wo dasuan mingtian ba nei-ben-shu kan.
       I   plan   tomorrow Ba that-Cl-book read
       'I plan to read that book tomorrow.'

According to Liu, in (172), *dangzuo laoshi* 'take as teacher' is not an accomplish-ment but an achievement; on the other hand, in (173), *kan nei-ben-shu* 'read that book' is a typical case of accomplishment, and yet it does not license *ba*. These cases, therefore, suggest that the *ba* predicate cannot be equated with accomplishments.

    Liu's reservations concerning equating a *ba* predicate with an accomplishment are legitimate. However, these two cases may not be really serious problems, because Sybesma can try to expand his system to include the achievements that can appear in a *ba* pattern (after all, (172) does involve a result clause *zuo laoshi* 'as a teacher') and because the unacceptability of (173) need not be specific to the *ba* pattern (cf. the discussion in section 3 on the *ka* counterpart in Taiwanese). Nonetheless, these considerations do point out the importance of not equating a *ba* predicate with an accomplishment. These two do not always have the same structures or the same requirements. Otherwise, all *ba* predicates would be accomplishments and all accomplishments would have a *ba* counterpart. The former hypothesis would exclude cases like (172). With respect to the latter, there are many accomplishments that do not allow a *ba* counterpart. Some of such examples are those discussed in the previous section (155–160). In these cases, we see that *kan-de hen shengqi* 'read and get angry' and *he-zui* 'drink-drunk' (accom-plishment) can occur in a non-*ba* sentence but not in a *ba* sentence. This contrast is not expected if *ba* and accomplishment sentences have identical structures and interpretations, and *ba* is simply a dummy inserted to the CAUS head position when verb raising does not take place. In other words, if indeed (156a–b), for instance, are derived by the raising of the compound verb *he-zui* 'drink-drunk' and, when this compound verb is not raised, *ba* is inserted, (156b) should be as

acceptable or as unacceptable as (156a). Of course, Sybesma can distinguish non-*ba* accomplishments from *ba* cases by specifying that a *ba* NP is always "the subject of the small clause complement of the verb" (1999: 179). Taking this step, however, would require making a special statement for the *ba* construction, rather than making it a more general claim that the *ba* construction is just an accomplishment and all accomplishments, even all transitives, have the same structure and interpretation (Sybesma 1999: chapter 7).

5.3.2.2   The *ba* NP as subject of the result phrase

Considering the *ba* construction alone, then, one may argue that Sybesma's analysis can be adopted as long as we specify that a *ba* NP must be the subject of the result clause. However, this still faces challenges. There are cases of *ba* sentences that are quite acceptable but where *ba* is not interpreted as the subject of the result clause. In the earlier examples (103–104), quoted from Li and Thompson (1981: 469), for instance, the result clause 'he won't even eat his meals'/'wants to die' does not take the *ba* NP as its subject. Instead, it is interpreted as referring to the subject of the matrix clause:

(103)   ta ba ni   xiang-de fan   dou bu-ken   chi.
        he Ba him miss-De food even not-willing eat
        'He misses you so much that he won't even eat his meals.'

(104)   Lisi ba xiao-mao ai-de   yao   si.
        Lisi Ba small cat love-De want die
        'Lisi loves the kitten so much that he wants to die.'

Such examples are not isolated ones. They are quite common. (152c), discussed earlier, is another example, where the subject of the result clause is the matrix subject:

(152)   c.   ta ba wo hen-de ya   yang-yang-de.
             he Ba me like-De tooth itchy-itchy-Par
             'He hated me so much that his teeth became itchy.'

More such examples are illustrated below. In (174a), the result clause has a lexical subject that is the same as the matrix subject. The result expression *hui* in (174b) is interpreted as taking the matrix subject as its subject: *wo hui youyong* 'I am capable of swimming'. In (174c), the result expression *dong* should take the matrix subject as its subject, rather than the *ba* NP; the *ba* NP is the object of the result expression: *ta dong-le wenzhang-le* 'He understood the article'. The result expression *tou* 'thorough' in (174d) is more like a degree modifier of the verb, the hatred being thorough, rather than being a predicate of the *ba* NP. Similarly, the "result" expression *hen zixi* 'very careful' in (174e) modifies the verb, rather than functioning as the predicate of the *ba* NP. If *hen zixi* can have a subject at all, it is the action, not the *ba* NP, that functions as the subject: *ta de kaolu hen zixi* 'his thinking is careful'; cf. **zhe shi hen zixi* 'this thing is careful':

(174) a. wo ba ta   ma-de   wo-ziji dou shou-bu-liao!
            he Ba him scold-De myself all   put-not-up
            'I scolded him so much that I could not stand it myself.'
     b. deng wo xian ba youyong   zhende xue-hui   yihou zai
            wait I   first Ba swimming really   study-capable after   then
            gen ni   bi.
            with you race
            'Let me first really learn to swim and then I will race against you.'
     c. xian rang ta   ba wenzhang nian-dong   yihou zai   wen
            first let   him Ba article   read-understand after   then ask
            ta   wenti   ba!
             him question Par.
            'Let him first understand the article and then ask him questions.'
     d. ta yiding   hui ba ni   hen-tou-de.
            he definitely will Ba you hate-thorough-particle
            'He will definitely hate you thoroughly.'
     e. wo ba zhe-shi   kaolu-de hen zixi.
            I   Ba this matter think-De very carefully
            'I thought about the matter carefully.'

To be noted, however, is that the *ba* NP is still the object of the verb in these cases. All these examples show that it is acceptable for a *ba* NP to be simply the object of the verb without being the subject of the result clause (cf. the generalization in (29) that a *ba* NP is a V-object or a V'-object).

5.3.2.3   Absence of a result clause

The above section shows that, although a *ba* sentence may contain a result/extent expression, such an expression need not interpret the *ba* NP as its subject. This casts doubt on the appropriateness of Sybesma's analysis, outlined in (171). A further problem is that a result expression need not even exist. As shown earlier, there are cases expressing an unbounded event – without an end-point – such as the examples discussed earlier in section 5.2.2.2 concerning unbounded events, as in (164–165) (repeated below) and (63f):

(164)   ni   bu ba zhe-wenzhang zixi-de   nian, zen hui zhao-chu wenti?
       you not Ba this article   carefully read how will find-out   question
       'If you don't read the article carefully, how can you find problems?'

(165)   ta ba jiu   bu-ting-de he-zhe.
       he Ba wine not-stop-De drink-Zhe
       'He was drinking without stop.'

Other examples, such as (140a) discussed earlier, also denote an unbounded situation/event and do not have a result complement. (Recall that the translation should be 'toward the room' in contrast to Liu's 'into the room'.)

(139) a. ta zhengzai   ba dongxi wang   wuli   ban.
           he in-progress Ba things   toward room-in move
           'He is in the process of moving things [toward] the room.'

5.3.2.4   Placement of adverbials

The fact that a *ba* sentence and its non-*ba* counterpart only differ in whether V is raised to CAUS or whether *ba* spells out CAUS in the structure (171) also faces problems with the placement of adverbials. As mentioned, some adverbials can occur before or after the *ba* NP. However, such adverbials do not occur post-verbally (see the discussions in sections 4.1–4.2). If *ba* is only a filler inserted when verb-raising does not take place, it is not clear why the relevant adverbial cannot occur postverbally, when it can occur after *ba*.

5.3.3   Summary

In brief, it is doubtful that a *ba* construction is the same as sentences with accomplishment predicates in sharing the structure in (171), with their only difference being in whether CAUS is filled by a raised V or by an inserted *ba*. There are many accomplishments that do not have a *ba* counterpart, and a *ba* sentence need not be an accomplishment. The two patterns are not always identical in acceptability and interpretation. A *ba* sentence, therefore, needs to be distinguished from simply accomplishments. Moreover, it is not true that a *ba* NP is always the subject of an unaccusative predicate (the result). There are cases where the result clause takes the matrix subject as its subject, and instances which denote unbounded events; i.e., a result clause is not a constituent within the *ba* sentence. Finally, the distribution of adverbials in a *ba* sentence and its non-*ba* counterpart fails to be accounted for.

5.4   Affectedness revisited

We discussed in section 4 the structural properties of the *ba* construction. Structurally, a *ba* NP must be a V-object (inner object) or a V'-object (outer object, assigned an 'affected' theta-role by a complex predicate that consists of V and its object). This over-generates greatly, however. Not all objects can be a *ba* NP. Constraints also exist on the types of Vs or VPs allowed in a *ba* sentence. The issue is how these constraints can be captured. We discussed in sections 5.1–5.3 approaches from different perspectives: (i) an interpretation/pragmatics approach that relies on a vague notion of 'affectedness'; (ii) an aspectual approach that requires a *ba* sentence to express a bounded situation or event; and (iii) an event structure approach that subsumes *ba* sentences under those with accomplishment predicates. All three approaches are completely satisfactory when only the canonical cases of the *ba* construction are considered, i.e., those containing a result expression with a *ba* NP as the subject: *wo ba cai chao-de hen lan* 'I stir-fried the vegetable quite mushy'. These are also the kind of *ba* sentences most frequently used and most readily accepted by speakers. The problem, however, is that the 'non-canonical' cases, those not having the pattern [V + result], are also

widely used. The acceptability of some such sentences is also more heavily subject to individual variations or uncertainty.

The aspectual approach and the event structure approach are both too weak and too strong. Both approaches have the problem of over-generation. They cannot predict why many accomplishments or many sentences of bounded situations/ events cannot be acceptable *ba* sentences. At the same time, both approaches fail to generate those *ba* sentences that express unbounded situations/events and those cases where the *ba* NP is not the subject of the result expression. The 'affectedness' approach is harder to evaluate because the notion of 'affectedness' is so vague, especially when imaginary effects are included. This approach, however, does differ from the other two in this respect: while the latter express the constraints on the *ba* pattern in terms of event structures or aspectual structures (explicit linguistic representations), the former expresses the constraints without explicit linguistic representations. They are within the realm of world knowledge, speaker intention, hearer perception, etc. Recall Li and Thompson's explanation of why sentences like (103) and (104), repeated here, are acceptable:

(103) ta ba ni xiang-de fan dou bu-ken   chi.
       he Ba him miss-De food even not-willing eat
       'He misses you so much that he won't even eat his meals.'

(104) Lisi ba xiao-mao ai-de   yao si.
       Lisi Ba small cat love-De want die
       'Lisi loves the kitten so much that he wants to die.'

They stated that the use of the postverbal expression in (103) greatly exaggerates the degree of his missing you. "It is as if one cannot help thinking that you are affected in some way when he misses you to such an extent that he can't even eat" (Li and Thompson 1981: 469). The added expression *yao si* '(he) wants to die' in (104) hypothetically creates an image that such intense love must have some effect on the 'small cat'. Accordingly, the disposal idea is implied by the verb together with the added expression.

Although such explanations are vague and depend greatly on speakers' interpretations, they seem to be the nature of the constraints on the use of *ba* sentences. Again, take variations of (104), for instance. We find the following contrast:

(175) a. Lisi ba xiao-mao ai-de   feng-le.
           Lisi Ba small cat love-De crazy-Le
           'Lisi loves the kitten so much that he is going crazy.'
       b. Lisi ai   xiao-mao ai-de   feng-le.
           Lisi love small cat love-De crazy-Le
           'Lisi loves the kitten so much that he is going crazy.'

(176) a. *Lisi ba xiao-mao pa-de   feng-le.
           Lisi Ba small cat fear-De crazy-Le
           'Lisi fears the kitten so much that he is getting crazy.'

> b. Lisi pa xiao-mao pa-de   feng-le.
>   Lisi fear small cat fear-De crazy-Le
>   'Lisi fears the kitten so much that he is getting crazy.'

(175a) is much better than (176a) as a *ba* sentence. The two sentences, however, are identical with respect to aspectual structures or event structures. Further note that their non-*ba* counterparts are equally acceptable.

   Such instances abound: many sentences are identical with respect to represent-able linguistic structures and they are equally acceptable as a non-*ba* sentence; yet they, again, differ greatly in acceptability as a *ba* sentence:

(177) a. wo ba ta   da-le yixia.
           I   Ba him hit-Le a bit
           'I hit him a bit.'
       b. wo da ta   da-le yixia.
           I   hit him hit-Le a bit
           'I hit him a bit.'

(178) a. ??wo ba ta   zhaogu-le yixia.
           I   Ba him care-Le   a bit
           'I took care of him a bit.'
       b. wo zhaogu ta   zhaogu-le yixia.
           I   care   him care-Le   a bit
           'I took care of him a bit.'

(179) a. women ba ta   shuo-le yici.
           we   Ba him say-Le   once
           'We said to him (mildly scolded him) once.'
       b. women shuo ta   shuo-le yici.
           we   say him say-Le   once
           'We said to him (mildly scolded him) once.'

(180) a. *women ba ta   taolun-le   yici.
           we   Ba him discuss-Le once
           'We discussed him once.'
       b. women taolun ta   taolun-le   yici.
           we   discuss him discuss-Le once
           'We discussed him once.'

The contrast between the pairs of sentences, (177) and (178), (179) and (180), is a puzzle under any structural account, either an aspectual structure or an event structure account. On the other hand, an advocate of the 'affectedness' approach may claim that it is easier to interpret the one being hit in (177) as the one affected than the one being taken care of (178), and that it is easier to interpret the one being (mildly) scolded (179) as the one affected than the one being discussed

(180). Although it is impossible to verify such an account, it, nonetheless, points to the inadequacy of a clearly defined structural account.

   More examples illustrate the futility of a clearly defined structural account. The following two sets of sentences only differ in the noun used as a *ba* NP: *zhe-dun-fan* 'this-Cl-meal' vs. *zhe-pan-cai* 'this-Cl-dish':

(181)   deng wo ba zhe-dun-fan chi-bao yihou zai   chu-qu.
        wait I   Ba this-Cl-meal eat-full after then out-go
        'Wait till I eat-full this meal (I get full from eating this meal), I will go out.'

(182)   *deng wo ba zhe-pan-cai chi-bao yihou zai   chu-qu.
        wait I   Ba this-Cl-dish eat-full after then out-go
        'Wait till I eat-full this dish (I get full from eating this dish), I will go out.'

The acceptability of (181) is especially surprising. Normally, *ba fan chi bao* 'Ba meal eat-full', along with *ba jiu he zui* 'Ba wine drink-drunk', has been marked unacceptable as a *ba* predicate and has been used as a typical example to support the claim that a *ba* NP must be the subject of a result clause. Indeed, *ba zhe-dun-fan chi-bao* 'Ba this meal eat-full' is not acceptable in all contexts. There seems to be a contrast between the following two sentences:

(183)   a.   wo hai mei ba zhe-dun-fan chi-bao-ne!
             I   still not Ba this-Cl-meal eat-full-Par.
             'I haven't finished the meal yet!'
        b.   *wo ba zhe-dun-fan chi-bao-le.
             I   Ba this-Cl-meal eat-full-Le
             'I finished the meal.'

However, it is not clear how these sentences can be distinguished structurally. Equally challenging to a structural account is the fact that (181'), which has the identical pattern to (181) and contains the other famous predicate *ba jiu he zui* 'Ba wine drink-drunk', is still not acceptable as a *ba* sentence:[52]

(181')   *deng wo ba zhe-ping-jiu he-zui   yihou zai   chu-qu.
         wait   I   Ba this-Cl-wine drink-drunk after then out-go
         'Wait till I eat-full this meal (I get full from eating this meal), I will go out.'

Structurally, these cases are identical; it is simply not clear how a structural account can accommodate such different acceptability of *ba* sentences.

   We also saw earlier, in section 3, examples like the following, which only differ in the *ba* NP used, and were subsumed under the notion of 'affectedness':

(120)   ta ba wo wen-le yi-da-dui   hen-nan-de   wenti.
        he Ba me ask-Le one-big-pile very-difficult-De question
        'He asked me many difficult questions.'

(121)   ??ta ba wo wen-le fangxiang.
        he Ba me ask-Le directions
        'He asked me directions.'

The following two sentences only differ in the use of the adverb:

(184)   ni   ruguo bu ba shu   zixi-de   nian, zenme neng dong-ne?
        you if   not Ba book carefully read how   can   understand-Q
        'If you don't study the book carefully, how can you understand?'

(185)   ??ni ruguo bu ba shu   anjing-de nian, zenme neng dong-ne?
        you if   not Ba book quietly   read how   can   understand-Q
        'If you don't study the book quietly, how can you understand?'

It may be easier to understand that, if one reads a book carefully, it is more likely that every word in the book will be read; but this is less likely to be the case when one reads a book quietly. There is more connection with ('effect' on) the book by careful reading than quiet reading. Of course, such 'explanations' cannot be verified. Nonetheless, they also defy the structural accounts proposed.

The following sentences only differ in the duration phrases used: one expresses a stronger degree of hatred (hatred for life) than the other (just temporary hatred):

(186)   ta ba wo hen-le   yi-beizi.
        he Ba me hate-Le one-life
        'He hated me for a whole life.'

(187)   ??ta ba wo hen-le   yi-xiazi.
        he Ba me hate-Le   one-while
        'He hated me for a while.'

The following sentences show the same 'inner object/outer object' structures that differ in acceptability only because different verbs are used:

(188)   ta ba wo sha-le fuqin.
        he Ba me kill-Le father
        'He killed my father.'

(189)   *ta ba wo yao-le   fuqin.
        he Ba me invite-Le father
        'He invited my father.'

Many such examples exist, like those discussed in section 5.1, which all point to the same generalization: the constraints on possible *ba* NPs and predicates cannot be easily characterized in clearly defined structural terms.

6   Conclusion

The *ba* construction has been one of the most challenging topics in the literature on Chinese grammar. We have shown that, to understand the difficulties of this construction, we need to separate its form from its usage. Formally, it is clearer what structure a *ba* sentence should take. It has the structure represented in (93) in section 4.2, which places all the constituents of a *ba* construction in appropriate positions and can correspond to a non-*ba* sentence without structural problems. A *ba* NP is always related to the V or V'. When it is a V'-object (outer object, object of a complex predicate), the theta-role it receives is an affected theta-role. The definition of an 'affected' theta-role, however, was not made clear in the literature and was not further elaborated in this chapter either. This is related to the difficult part of this construction: the appropriate usage of a *ba* sentence, which has been most controversial. The usage part has essentially been defined by the constraints on possible *ba* NPs and VPs: what NPs are allowed as a *ba* NP and what components are acceptable or necessary to make a VP in a *ba* sentence. The discussions in section 5.2 and 5.3 show that accounts for such constraints based on bounded events/situations or event structures fail empirically, even though they provide very attractive options.

If the comparison between the Taiwanese *ka* construction and the Mandarin *ba* construction is any indication, it shows that a *ba* sentence carries a special meaning, even though *ba*, unlike *ka*, no longer assigns an 'affected' theta-role independently. Although such a special meaning is clear in the canonical cases ('he stir-fried the vegetable mushy'), it becomes less and less clear as the speakers expand and deviate from the core cases.[53] This probably is what contributes to the uncertainty and variation in speakers' judgment with the more deviant cases, which is also the spirit of the continuum discussed by Li and Thompson, illustrated in (131) in section 5.1. We take this to be an indication that the construction is strongly influenced by discourse, pragmatic, and idiolectal factors and the notion of affectedness is a fuzzy and loose notion which may be interpreted differently by different speakers. Further evidence for the non-grammatical nature of the constraints on the usage of *ba* sentences was supported by minimal pairs like those discussed in section 5.4, where all pairs of sentences share the same grammatical structure, including the same aspectual structure or event structure, and all have equally acceptable non-*ba* counterparts. If we want to capture the fact that all *ba* sentences have a non-*ba* counterpart and that sentences with identical structure can have different acceptability as a *ba* form, we are forced to recognize the effect of world knowledge, speaker intention, etc. on the use of this construction. In other words, we should recognize the existence of different contributing factors characterizing this construction and separate form from usage, distinguish basic structures from the constraints on when the structure is used.

NOTES

1 'Mandarin Chinese', the official Chinese language, will simply be referred to as 'Chinese' in this chapter, unless when contrasted with Taiwanese, a Southern Min dialect of Chinese spoken in Taiwan.

2 The version of Mandarin spoken in Taiwan has been significantly influenced by Taiwanese phonologically and even syntactically to some extent.

3 The distinction between NPs and DPs does not concern us in this chapter and nominal expressions are consistently labeled as NPs (see Abney 1987 for the proposal of DP structures and Li 1998, 1999, for arguments for the existence of DPs in Chinese).

4 In the following discussions, we concentrate on the constituents necessary for a *ba* sentence and disregard the elements that are allowed in a *ba* sentence but are not obligatory, such as sentential adverbials or other modifiers.

5 The usage of 'counterpart' here does not necessarily mean that one is transformationally derived from the other. It only means that for a *ba* sentence, it is always possible to find a non-*ba* sentence which only differs from the one with *ba* in the occurrence of this key word and the corresponding difference in word order.

Also note that there are some isolated *ba* sentences from Mandarin varieties spoken in Northern China that lack non-*ba* counterpart, such as (i):

(i) ba-ge   Feng yatou bing-le.
     BA-Cl. Feng maid sick-Le
     '(Something) got the maid Feng sick.'

(i) might be related to the earlier verbal usage of *ba*. We will disregard such cases as they are not productive patterns in modern Mandarin and they are impossible in Taiwanese (section 3).

6 The morpheme *-le* can be suffixed to a verb (verbal *-le*) or occur at the end of a clause (clause-final *-le*, allowing only a root clause-final particle to follow it). The verbal *-le* has generally been taken as an aspect marker, indicating completion. The clause-final *-le* has generally been analyzed as a 'change of state' marker. A verbal *-le* and a clause-final *-le* can co-occur in a clause. When a clause ends with V-*le*, it is possible that this *-le* is a combination of the verbal *-le* and the clause-final *-le*. There is an immense literature on whether the two *-le*s should be analyzed as one or two different morphemes (see, for instance, Wang 1965; Chao 1968; Rohsenow 1978; Li and Thompson 1981; Mei 1981; Huang and Davis 1989; Lu 1991; Li 1992; Soh 1998; Sybesma 1999; among many others). Because the exact analysis of the two *-le*s is not our concern, we will gloss all occurrences of *-le* simply as 'Le'.

7 Many verbs in Chinese can be used as both an unaccusative and a causative verb without any morphological changes. *Zui-dao* in the following example is unaccusative:

(i) ta zui-dao-le.
     he drunk-fall-Le
     'He got very drunk.'

8 Some patterns allow more than one constituent in postverbal position, such as double object structures, control structures, and purposive clauses. See Li (1990).

9   It has been suggested that the complexity of postverbal elements and the prohibition against more than one postverbal constituents contribute to the proliferation of *ba* sentences (see, for instance, Hu and Wen 1956: 129).

10 A 'serial verb construction' is not a unified structural notion. It refers to all constructions with the surface form of more than one verb phrase occurring consecutively. Structurally, the series of VPs can be analyzed as different types of coordination or subordination structures. See Li and Thompson (1981: chapter 2), for instance.

11 In modern Shanghai and Wuhan dialects, it is possible in some cases to use *ba* in the pattern [*ba* NP1 V NP2] with NP2 being a pronoun coreferential with NP1 (Bingfu Lu, Yuzhi Shi, p.c.).

12 *Ta* in Chinese is a human and non-human third person pronoun. For simplicity, we will just use one of the many possible translations for each case.

13 Several West African languages, such as Twi and Fong, have similar constructions that involve the grammaticalization of a morpheme like *ba*; see Zou (1995) for some discussions on cross-linguistic comparisons of such structures and the grammaticalization process.

14 There have also been proposals claiming that *ba* is a 'coverb' (see, among others, Wang 1947, 1954; Lü 1948; Li and Thompson 1974, 1981: chapters 9, 15). A coverb is a special category created in Chinese grammatical studies to represent the group of words which were verbs but have gradually lost their verbal properties. They are so labeled because they are no longer verbs and yet they have not become true prepositions, either: they don't fully behave like lexical verbs or typical prepositions.

15 There are speakers who find *ba* in the V-not-V question form acceptable (see, for instance, Wu 1982). Using the V-not-V form as a test for verbhood does not seem to be quite deterministic, even though it is frequently applied in the literature. For some speakers, certain prepositions, adjectives, and adverbs may also occur in the 'V-not-V' form, which should be more correctly labeled as a general A-not-A question form, not just V-not-V.

16 Sybesma (1999) is an extensive revision of Sybesma (1992) and includes many of his other works. We will mainly quote from Sybesma (1999). See Sybesma (1999: 220–221) for many other related references.

17 It is acceptable if *ba* also occurs in the second conjunct, i.e., *ba*, the *ba* NP and the following VP can form one constituent.

18 The preposing is not possible when it is a 'causative' sentence (i.e., the type of sentences whose subject bears a causer thematic role):

(i) a. zhe-ping jiu   ba ta   zui-dao-le.
         this-bottle wine BA him drunk-fall-Le
         'This bottle of wine made him very drunk.'
     b. *ba ta,   zhe-ping jiu   zui-dao-le
         BA him   this-bottle wine drunk-fall-Le

19 Wang (1954) suggests the terms 'disposal' and 'causative', which are Sybesma's 'canonical' and 'causative' respectively.

20 It was observed by Zou (1995), for instance, that *ba* and the *ba* NP cannot form a constituent and be preposed. However, Yafei Li (p.c.) notes that it is not that difficult to prepose the *ba* phrase in some instances. We agree with his judgment, though this pattern occurs only in casual informal speech. It seems that preposing of the *ba* phrase is the best in the contexts where the interpretation of doing something to the *ba* NP

is clearest. A command sentence is a very good example. However, it does not have to be a command:

(i)   ba na-dui   wenzhang, wo zao jiu   gai-hao-le.
      BA that-pile article   I   early then correct-finish-Le
      'I corrected that pile of articles long ago.'

21   It should be pointed out that the element following *ba* is not necessarily an NP. A clause is also possible:

(i)   wo ba [ta bu-lai]   dang-zuo shi hen yanzhong-de shi.
      I   BA him not-come take-as   be very serious-De   matter
      'I take it as a very serious matter that he does not come.'

This is not common, however. A noun typically co-occurs:

(ii) ta bu-gan ba [ni shengbing]-de shi   gaosu dajia.
      he not-dare BA you sick-De   matter tell   everyone
      'He dare not tell everyone the matter that you are sick.'

(iii) *ta bu-gan   ba [ni shengbing] gaosu dajia.
      he not-dare BA you sick   tell   everyone
      'He dare not tell everyone that you are sick.'

22   See Lu and Ma (1985: 200–201) for the instrument and locative examples in (18b) and (18d).
23   When the location marker *zai* is used as in (18c), a localizer such as *shang* 'top' must be used. With *ba*, such a localizer is optional.
24   In light of recent developments in the structure of VPs (Larson's (1988b) VP-shell, for instance) and the almost non-existent status of an intermediate category X' in the Minimalist Program (Chomsky 1991, 1993, 1995c), it is not clear if the term V'-object is appropriate. It nonetheless suffices to express the sister relation between an outer object and a complex predicate consisting of a verb and its complement. We will continue using the term 'V'-object', alongside the term 'outer object', for convenience.
25   More radically, it is possible to suggest that every instance of the *ba* NP is a V'-object (Huang 1982a, 1987, 1988). When it looks like an inner object (V-object), it actually is an outer object identifying an empty category in the V-object position.
26   A pro generally is identified by the first c-commanding NP (Huang 1982a). This means that a pro in an object position generally cannot be identified with an NP outside the clause, due to the intervening subject of the clause. However, it can be topicalized to the peripheral position of the clause first, and then be identified by an NP outside the clause. This is the analysis proposed by Huang (1982a) for cases like (i):

(i)   Zhangsan$_i$ [T$_i$ [e$_j$ renshi pro$_i$ de] ren$_j$ hen duo.
      Zhangsan   know   De person very many
      'Zhangsan, the people who knew (him) are numerous.'

The pro in the object position of the relative clauses moves to T first in order to be co-indexed with *Zhangsan*.

27 The morpheme *-de* must occur between V and the result expression if the two are not compounded. It was suggested that this morpheme was reduced from the verb *dao* 'arrive' (Chao 1968: 353). This morpheme is to be distinguished from the potential morpheme *-de*, or the manner *-de*, which cannot occur in the *ba* construction:

(i) *ta ba youyong   xue-de-hui.
     he BA swimming study-De-able
     'He can learn swimming.'

(ii) *ta ba gongke   xue-de-kuai.
     he BA homework write-De-fast
     'He wrote the homework fast.'

In some southern dialects of Chinese, such as Taiwanese, the three *de*s are pronounced differently. The resultative *-de* is pronounced like the morpheme for *dao* 'arrive', the potential *-de* is pronounced like the morpheme 'can, able', and the manner *de* is like *zhao* 'hold'.

28 Compounding is subject to syllable structure constraints. See Feng (1995) for a phonological account.

29 The directional expressions *lai* 'come' and *qu* 'go' do not necessarily indicate the action of coming and going. They can simply be the indicators of the direction of motion (to or away from the speaker): *qing ni ba ta na-lai* 'please bring it over'; *qing ni ba ta na-qu* 'please take it'.

30 When the direct object becomes a *ba* NP, the main verb must be able to be compounded with the verb of the purposive clause; otherwise, *qu* 'go' or *lai* 'come' must occur between the two verbs. Thus, (46b) is acceptable with or without *lai/qu* because *na* and *gei* can be compounded. In contrast, (47b) cannot delete *lai/qu*, as indicated by the unacceptability of (i), because *mai* and *rang* cannot be compounded:

(i) *wo ba shu   mai rang ta   yong.
     I   BA book buy let   him use
     'I bought the book for him to use.'

It seems that the following generalization exists in Chinese: when two bare Vs occur next to each other, they must be compounded. If the two cannot be compounded, the sentence becomes unacceptable.

31 Verb reduplication can take the form of V-V or V-*yi*-V 'V-one-V' for those verbs with one syllable. For verbs with two syllables AB, an activity verb is reduplicated as ABaB and a stative verb as AABB (such as *piao-liang* 'pretty'/*piao-piao-liang-liang*, *gan-jing* 'clean'/*gan-gan-jing-jing*). A stative verb generally does not occur in a *ba* sentence; the reduplicated stative verb AABB does not occur in a *ba* sentence either.

32 Verbs that have more than one syllable can only occur in the pattern V-V as in (i), not V-*yi*-V as in (ii):

(i) women dei   xian ba zhe-wenti   kaolü-kaolü/taolun-taolun.
     we   should first BA this-question consider-consider/discuss-discuss
     'We should first consider/discuss this question a bit.'

(ii) women dei   xian ba zhe-wenti   kaolü-yi-kaolü/taolun-yi-taolun.
     we   should first BA this-question consider-one-consider/discuss-one-discuss
     'We should first consider/discuss this question a bit.'

33 The non-occurrence of *-zhe* in a *ba* sentence is only true when the verb is bare and *-zhe* plays the role of the X in (1). If there is an additional X, *-zhe* need not play the role of the X and a *ba* sentence is available: We will discuss such examples later in the chapter.

34 The literature generally focuses on the verbal aspect marker *-le* and does not discuss the sentence-final *-le* with respect to the acceptability of a *ba* sentence. It seems that in most cases, a sentence-final *-le* does not make a *ba* sentence available.

A sentence-final *-le* is typically used in the following cases, which express that a new state of affair has just been realized:

(i)   wo bu-xihuan ta-le.
     I   not-like   him-Le
     'I do not like him (now; it used to be the case that I liked him).'

(ii)   ta hui shuo-hua-le.
     he can speak-word-Le
     'He can speak now (it used to be the case that he could not speak).'

(iii)   ta bu-ting   zhe-ge-le.
     he not-listen this-song-Le
     'He does not listen to this song any more (he used to).'

The *ba* counterpart of these sentences seems to be generally less acceptable than those with a verbal *-le*:

(iv)   a. ni   ba zhe-che xi-le   (jici?) (verbal *-le*)
         you BA this-car wash-Le how many times
         'How many times did you wash the car?'
     b. wo bu xi   zhe-che-le. (sentence-final *-le*)
         I   not wash this-car-Le
         'I don't wash this car any more.'
     c. *wo zai   ye   bu-ba   zhe-che xi-le. (sentence-final *-le*)
         I   again also not-BA this-car wash-Le
         'I will no longer wash this car.'

(v)   a. wo ba ta   pian-le. (yici). (verbal *-le*)
         I   BA him cheat-Le one time
         'I cheated him (once).'
     b. wo zai   ye   bu-pian ta-le. (sentence-final *-le*)
         I   again also not-cheat him-Le
         'I will no longer cheat him.'
     c. ?wo zai   ye   bu-ba   ta   pian-le. (sentence-final *-le*)
         I   again also not-cheat him cheat-Le
         'I will no longer cheat him.'

35 The other aspect marker, the experiential marker *-guo*, has not received much attention in the literature regarding its role in a *ba* sentence (cf. Lu and Ma 1985). It seems that it is less acceptable than the verbal *-le* in allowing a *ba* sentence, though it is still quite acceptable in some cases, such as (id). This may be due to the pragmatic factors to be discussed in section 3:

    (i)   a.   ᵗ*ta ba na-pi-ma*   *qi-guo-ma?*
             he BA that-Cl-horse ride-Guo-Q
             'Did he ride that horse before?'
       b.   ᵗ*ta ba zhexie-haizi ma-guo.*
             he BA these-boys   scold-Guo
             'He has scolded these boys before.'
       c.   ᵗ*ta ba yaoshi wang-guo.*
             he BA key   forget-Guo
             'He has forgotten the key before.'
       d.   *ni   you-mei-you   ba zhongyao-de shiqing wang-guo?*
             you have-not-have ba important-De thing   forget-Guo
             'Have you forgotten important matters (before)?'

36   Adjectives in the traditional literature have been grouped with verbs (stative verbs) especially when they occur as the predicate of a clause. We continue to use the term 'verb' to include predicative adjectives.

37   It could be that the result clause is an 'extent' clause in such cases: the extent of seriousness, the extent of smallness, etc. If an extent clause is different from a result clause, we might conclude that a *ba* sentence is acceptable only with a result clause. However, it is not easy to distinguish 'extent' from 'result'. Note that being serious and being small both can yield a result, as illustrated by the acceptability of a lexical causative in (71c) and (72c). Even in the Taiwanese dialect which uses different pronunciations for the various *de*s in different constructions, the same pronunciation is found with both the extent and result *de*. Also see Sybesma (1999), which assumes 'extent' and 'result' to be the same.

38   Sybesma (1999: 178), for instance, argues that both the *ba* construction and the lexical causative construction have the same CAUSE morpheme and only differ in categorial selection: a CAUSE in the *ba* construction selects a VP as its complement, and a CAUSE spelled out as a lexical verb (lexical causative) selects a CP/TP as its complement.

39   *Re* 'hot' in (69) is just like *leng* 'cold' and can occur in the pattern in (73). *Zou* 'walk' seems to be less acceptable in this pattern:

    (i)   *ta zou-zai tui-shang.*
          he walk-at leg-on

    (ii)   a.   *ni   yinggai zou-zou   ni-de   tui.*
              you should walk-walk you-De leg
              'You should walk your legs (let your legs walk).'
        b.   *ni-de   tui neng zou-ma?*
             you-De leg can   walk-Q
             'Can your legs walk?'

40   This sentence can be acceptable with the interpretation that the parents are the toys for the children to play with. Both *kaixin* 'happy' and *shangxin* 'sad' are used in this example to show that even an unfortunate event cannot be acceptable as a *ba* sentence here. See Lü (1980) and Wu (1987) for discussions on the *ba* construction expressing unfortunate events.

41   The sound symbol *N* in the Taiwanese examples represents nasalization of the preceding vowel.

42   In addition, *ka* in Taiwanese can be a beneficiary marker, which is not available for *ba*.

43   One may argue that the distribution of adverbs can be captured by an analysis that assumes adverbs must be licensed by a head that is lexically filled. When *ba* occurs, an adverb can be licensed by the main verb occurring in the lower V position or by *ba* in the higher v position. When V-to-v-raising takes place, the lower V is an empty category and cannot license an adverb within the lower VP. Such an approach would require cross-linguistic parameterization, because V-raising does not prevent an adverb from occurring in the lower position, as shown in the study of French by Pollock (1989). Moreover, if the analysis by Huang (1992b), Soh (1998), and Tang (1998) concerning V-raising is correct, an empty verb in Chinese can license a duration/frequency phrase.

44   This is the structure adopted in work in progress by James Huang, Yen-Hui Audrey Li, and Yafei Li.

45   This does not mean that Taiwanese does not have the movement option. A *ba* sentence can always be translated into a *ka* sentence but not vice versa. It is therefore possible to claim that Taiwanese *ka* can allow either a base-generated *ka* NP or a raised *ka* NP, and that Mandarin only allows a raised *ba* NP.

46   Such a prohibition can be phrased as follows: an NP within the thematic domain of a head cannot be raised to a position within the thematic domain of another head.

47   We will not discuss the approach based on information structures because it is hard to find convincing accounts of this type in the literature based on a clearly defined theory of information structures. Moreover, as shown in the text, the choice of the *ba* NP, the choice of verbs, and the type of X in (1a–b) affect the acceptability of a *ba* sentence. It is difficult to see how this can be captured by an account based on notions of topic-comment or presupposition-focus.

48   Chao (1968: 343) sometimes refers to the *ba* sentence as a "Pretransitive" construction. This construction is "a special form of the V-V series [which] has a first verb, the pretransitive, and an object, which ordinarily would be the object of the V-V series. For this reason, this object of the pretransitive is often regarded as a form of the inverted object." This definition of the *ba* construction is closest to the structural description given in (93) and the generalization in (29) (a *ba* NP must be a V or V'-object).

49   Chao (1968: 344) notes that even an indefinite-looking *ba* NP should still not be interpreted as indefinite: "Attention should, however, be drawn to a class of apparent cases of indefinite reference consisting of a pretransitive with *ig* or *g* before the object; here something quite definite is referred to. Thus: *ta ba ge pibao diu le* 'She lost a purse', *ta ba ge zhangfu si le, keshi bujiu you jia le ge zhangfu* 'She lost a husband but she soon re-married' . . . The advanced position of the object, brought about by the pretransitive, has a stronger effect than the presence of the word *g* or *ig* in deciding the definiteness of reference. As Leu Shwushiang (LWjuo. 129–130) [Lü 1948] has noted, there is no reason why forms like *g* or *ig* in Chinese should be limited to indefinite reference because *a* or its equivalent in other Indo-European languages is the indefinite article."

50   Syntactic constraints, however, also play a role in determining which NP can become a *ba* NP. The following sentence, for instance, shows that what is stolen can also be a *ba* NP:

(i)   ta jingran   ye   ba wode pibao tou-le.
      he unexpected also Ba my   purse steal-Le
      'Unexpectedly, he also stole my purse.'

When an indirect NP of the verb *tou* occurs as in (119), however, only the indirect NP can be the *ba* NP, not the direct NP:

(ii)   *ta jingran   ye   ba pibao tou-le   wo.
       he unexpected also Ba purse steal-Le me

See Li (1990) for the extractability of direct and indirect objects in double object constructions.

51   See Zhang (2000) for a similar observation of the 'all of' interpretation of a *ba* NP.

52   It is possible to speculate that the contrast between (181) and (181') is due to different degrees of lexicalization: *chi-bao* 'eat-full' is more lexicalized and takes *fan* as its object, in contrast to *he-zui* 'drink-drunk', which only originates as a bi-clausal structure. Some analysis along the lines of the generalization in (29) can be explored. However, this still does not explain why *chi-bao* in a *ba* construction is quite limited, as illustrated by the contrast between (183a) and (183b).

53   This is in the spirit of a prototype approach to this construction. See, for instance, Bybee and Moder (1983) and Rosch (1978).

REFERENCES

Abney, Steven (1987). The English Noun Phrase in its Sentential Aspect. PhD dissertation, Cambridge, MIT.

Barwise, Jon and Robin Cooper (1981). Generalized Quantifiers and Natural Language. *Linguistics and Philosophy* 4: 159–219.

Bennett, Paul (1981). The Evolution of Passive and Disposal Sentences. *Journal of Chinese Linguistics* 9: 63–90.

Bybee, Joan and Carol Moder (1983). Morphological Classes and Natural Categories. *Language* 59: 251–270.

Chao, Yuen-ren (1968). *A Grammar of Spoken Chinese*. Berkeley: University of California Press.

Chen, Chung-Yu (1978a). Aspectual Features of the Verb and the Relative Positions of the Locative. *Journal of Chinese Linguistics* 6.

Chen, Chung-Yu (1978b). The Two Aspect Markers Hidden in Certain Locatives. In: *Proceedings of Symposium on Chinese Linguistics, 1977: Linguistic Institute of the Linguistic Society of America*. Robert Cheng, Ying-Che Li, and Ting-Chi Tang (eds.), 233–242. Taipei: Student Books.

Chen, Ping (1988). Lun Xiandai Huanyu Shijian Xitong de Sanyuan Jiegou. (On the Triplex Structure of the Temporal System in Modern Chinese.) *Zhoungguo Yuwen* 5: 401–422.

Cheng, Lisa (1986). Clause Structures in Mandarin Chinese. PhD dissertation, University of Toronto.

Cheng, Lisa and C.-T. James Huang (1994). On the Argument Structure of Resultative Compounds. In: *In Honor of William S-Y. Wang: Interdisciplinary Studies on Language and Language Change*. Matthew Y. Chen and Ovid J. L. Tzeng (eds.), 187–221. Taiwan: Pyramid Press.

Chomsky, Noam (1977b). On *Wh*-Movement. In: *Formal Syntax*. Peter Culicover, Thomas Wasow, and Adrian Akmajian (eds.), 71–132. New York: Academic Press.

Chomsky, Noam (1981). *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, Noam (1991). Some Notes on Economy of Derivation and Representation. In: *Principles and Parameters in Comparative Grammar*. Robert Freidin (ed.), 417–454. Cambridge: MIT Press.

Chomsky, Noam (1993). A Minimalist Program for Linguistic Theory. In: *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Ken Hale and Samuel J. Keyser (eds.), 1–52. Cambridge: MIT Press.

Chomsky, Noam (1995c). *The Minimalist Program*. Cambridge: MIT Press.

Dahl, Östen (1981). On the Definition of the Telic–Atelic (Bounded–Nonbounded) Distinction. In: *Syntax and Semantics 14: Tense and Aspect*. Philip Tedeschi and Annie Zaenen (eds.), 79–90. New York: Academic Press.

Dowty, David (1979). *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and Montague's PTQ*. Dordrecht: Reidel.

Dowty, David (1991). Thematic Proto-Roles and Argument Selection. *Language* 67: 547–619.

Feng, Shengli (1995). Prosodic Structure and Prosodically Constrained Syntax in Chinese. PhD dissertation, Philadelphia, University of Pennsylvania.

Frei, Henri (1956/1957). The Ergative Construction in Chinese: Theory of Pekingese *Pa*. *Gengo Kenkyu* 31: 22–50 and 32: 83–115.

Goodall, Grant (1987a). On the Argument Structure and L-Marking with Mandarin Chinese *Ba*. In: *Proceedings of the North Eastern Linguistic Society 17*. Joyce McDonough and Bernadette Plunkett (eds.), 232–242. Amherst: Graduate Linguistics Student Association.

Goodall, Grant (1989). Evidence for an Asymmetry for Argument Structure. *Linguistic Inquiry* 20: 669–674.

Hashimoto, Anne Yue (1971). *Mandarin Syntactic Structures*. Unicorn 8 (Chinese Linguistics Project and Seminar), Princeton University.

Hoekstra, Teun (1992). Aspect and Theta Theory. In: *Thematic Structure: Its Role in Grammar*. Iggy Roca (ed.), 145–174. Berlin: Mouton.

Hoekstra, Teun (1993). Small Clause Theory. In: *Belgian Journal of Linguistics: Special Issue on Predication*. Johan De Caluwe, André Hantson, and Willy Vandeweghe (eds.). Amsterdam: John Benjamins.

Hopper, Paul and Sandra Thompson (1980). Transitivity in Grammar and Discourse. *Language* 56: 251–299.

Hornstein, Norbert (1994). An Argument for Minimalism: The Case of Antecedent-Contained Deletion. *Linguistic Inquiry* 25: 455–480.

Hsueh, Feng-Sheng (1987). The *Ba* Construction in Mandarin: An Integrated Interpretation. *Language Teaching and Linguistic Studies* 1: 4–22.

Hu, Fu and Lian Wen (1956). *Xiandai Hanyu Yufa Tansuo*. (*Studies of Modern Chinese Grammar*.) Shanghai: Xin Zhishi Chubanshe.

Huang, Shuan-fan (1974). Mandarin Causatives. *Journal of Chinese Linguistics* 2: 355–369.

Huang, C.-T. James (1982a). Logical Relations in Chinese and the Theory of Grammar. PhD dissertation, Cambridge, MIT.

Huang, C.-T. James (1983). Phrase Structure, Lexical Integrity and Chinese Compounds. *Journal of Chinese Language Teachers Association* 19/2: 53–78.

Huang, C.-T. James (1987). *Wo Paode Kuai* and Chinese Phrase Structure. *Language* 64: 274–311.

Huang, C.-T. James (1988). Two Types of Intransitive Verbs in Chinese. In: *Proceedings for the Second World Conference on Chinese Language and Language Teaching*. Taipei.

Huang, C.-T. James (1992a). Complex Predicates in Control. In: *Control and Grammar*. Richard Larson, Utpal Lahiri, Sabine Iatridou, and James Higginbotham (eds.), 119–147. Dordrecht: Kluwer.

Huang, C.-T. James (1992b). On Lexical Structure and Syntactic Projection. In: *Proceedings of International Symposium on Chinese Linguistics and Language 3.* Taiwan.

Huang, Chu-Ren (1987). Mandarin Chinese NP *De*: A Comparative Study of Current Grammatical Theories. PhD dissertation, Ithaca, Cornell University.

Huang, Lillian M. J. and Philip W. Davis (1989). An Aspectual System in Mandarin Chinese. *Journal of Chinese Linguistics* 17: 128–165.

Koopman, Hilda (1984). *The Syntax of Verbs: From Verb Movement in the Kru Languages to Universal Grammar.* Dordrecht: Foris.

Krifka, Manfred (1989). Nominal Reference, Temporal Constitution and Quantification in Event Semantics. In: *Lexical Matters.* Ivan Sag and Anna Szabolcsi (eds.), 29–54. Stanford: CSLI Publications.

Larson, Richard (1988b). On the Double Object Construction. *Linguistic Inquiry* 19: 335–391.

Li, Charles and Sandra Thompson (1974). Co-Verbs in Mandarin Chinese: Verbs or Prepositions? *Journal of Chinese Linguistics* 2: 257–278.

Li, Charles and Sandra Thompson (1981). *Mandarin Chinese: A Functional Reference Grammar.* Berkeley: University of California Press.

Li, Jinxi and Shiru Liu (1955). *Zhongguo Yufa Jiaocai.* (*Chinese Grammar.*) Beijing: Wushinian Chubanshe.

Li, T.-G. (1992). *Le₁, Le₂* Qubie Fanfa de Yibidan Shangque. (Some Notes on Methods of Distinguishing *Le₁* and *Le₂*.) *Zhongguo Yuwen* 3.

Li, Yafei (1993). Structural Head and Aspectuality. *Language* 69: 480–504.

Li, Yafei (1995). The Thematic Hierarchy and Causativity. *Natural Language and Linguistic Theory* 13: 255–282.

Li, Yen-Hui Audrey (1985). Abstract Case in Chinese. PhD dissertation, Los Angeles, University of Southern California.

Li, Yen-Hui Audrey (1990). *Order and Constituency in Mandarin Chinese.* Dordrecht: Kluwer.

Li, Yen-Hui Audrey (1998). Argument Determiner Phrases and Number Phrases. *Linguistic Inquiry* 29: 693–702.

Li, Yen-Hui Audrey (1999). Plurality in Classifier Languages. *Journal of East Asian Linguistics* 8: 75–99.

Li, Ying-Che (1974). What Does Disposal Mean? Features of the Verb and Noun in Chinese. *Journal of Chinese Linguistics* 2: 200–218.

Liu, Feng-Hsi (1990). Scope Dependency in English and Chinese. PhD dissertation, UCLA.

Liu, Feng-Hsi (1997). An Aspectual Analysis of *Ba. Journal of East Asian Linguistics* 6: 51–99.

Lu, Bingfu (1997). Computer-Aided Training in Reading Chinese. *Journal of the Chinese Language Teachers Association* 32: 57–73.

Lu, Jianming and Zhen Ma (1985). *Xiandai Hanyu Xuci Sanlun.* (*Essays on the Function Words in Modern Chinese.*) Beijing: Beijing University Press.

Lü, Shuxiang (1948). *Ba* Zi Yongfade Yanjiu. (On the Usage of *Ba*.) *Zhongguo Wenhua Yanjiu Huikan* (*Studies in Chinese Culture*) 8: 111–130.

Lü, Shuxiang (1955). *Hanyu Yufa Lunwenji.* (*Essays on Chinese Grammar.*) Beijing: Kexue Chubanshe.

Lü, Shuxiang (1980). *Xiandai Hanyu Babaici.* (*Eight Hundred Words of Modern Chinese.*) Beijing: Shangwu Chubanshe.

Lu, Y.-S. (1991). Tantan *Le₁* he *Le₂* de Qubie Fangfa. (Brief Comments on Methods of Distinguishing *Le₁* and *Le₂*). *Zhongguo Yuwen* 4: 275–278.

Ma, X.-W. (1987). Yu Dongjieshi Youguan de Mouxie Jushi. (On a Number of Sentence Forms Related to Verb-Result Constructions.) *Zhongguo Yuwen* 6: 424–441.

Mei, Kuang (1978). *Ba* Zi Ju. (*Ba* Sentences.) *Wenshizhe Xuebao* 27: 145–180.

Mei, Tsu-Lin (1981). Xiandai Hanyu Wancheng Mao Jushi He Ciwei *Le* de laiyuan. (The Origin of Perfective Sentence of Modern Chinese and the Affix *Le*.) *Yuyan Yanjiu* 1: 65–77.

Pollock, Jean-Yves (1989). Verb Movement, Universal Grammar and the Structure of IP. *Linguistic Inquiry* 20: 365–424.

Rohsenow, John S. (1978). Perfect *Le*: Aspect and Relative Tense in Mandarin Chinese. In: *Proceedings of Symposium on Chinese Linguistics*. Robert Cheng, Ying-Che Li, and Ting-Chi Tang (eds.), 269–291. Taipei: Student Books.

Rosch, Noel (1978). Principle of Categorization. In: *Cognition and Categorization*. Eleanor Rosch and Barbara B. Lloyd (eds.), 27–48. Hillsdale, NJ: Lawrence Erlbaum.

Smith, Carlota (1991). *The Parameter of Aspect*. Dordrecht: Kluwer.

Soh, Hooi-Ling (1998). Object Scrambling in Chinese. PhD dissertation, Cambridge, MIT.

Stewart, John M. (1963). Some Restrictions on Objects in Twi. *Journal of African Languages* 2: 145–149.

Stowell, Tim (1981). Origins of Phrase Structure. PhD dissertation, Cambridge, MIT.

Sybesma, Rint (1992). Causatives and Accomplishments: The Case of Chinese *Ba*. PhD dissertation, Leiden University.

Sybesma, Rint (1999). *The Mandarin CP*. Dordrecht: Kluwer.

Szeto, Yee-Kim (1988). A Semantic Description of Aspectual and Temporal Reference in Chinese. PhD dissertation, University of Ottawa.

Tai, James (1984). Verbs and Times in Chinese: Vendler's Four Categories. In: *Papers from the Twentieth Regional Meeting of the Chicago Linguistic Society*. Joseph Drogo, Veena Mishra, and David Testen (eds.), 288–296. Chicago: Chicago Linguistic Society.

Tang, C.-C. Jane (1990). Chinese Phrase Structure and the Extended X'-Theory. PhD dissertation, Ithaca, Cornell University.

Tang, Sze-Wing (1998). Parameterization of Features in Syntax. PhD dissertation, Irvine, University of California.

Teng, Shou-Hsin (1974b). *A Semantic Study of Transitivity Relations in Chinese*. Berkeley and Los Angeles: University of California Press.

Teng, Shou-Hsin (1986). Hanyu Dongci de Shijian Jiegou. (The Temporal System of Verbs in Mandarin.) In: *Diyijie Guoji Hanyu Jiaoxue Taolunhui Lunwen Xuan.* (*Papers from the First International Conference on Chinese Language Teaching*.) Beijing: Beijing Language Institute.

Tenny, Carol (1987). Grammaticalizing Aspect and Affectedness. PhD dissertation, Cambridge, MIT.

Thompson, Sandra (1973). Transitivity and Some Problems with the *Ba*-Construction in Mandarin Chinese. *Journal of Chinese Linguistics* 1: 208–221.

Tiee, Henry H.-Y. (1990). *A Reference Grammar of Chinese Sentences*. Tucson: University of Arizona Press.

Travis, Lisa (1984). Parameters and Effects of Word Order Variation. PhD dissertation, Cambridge, MIT.

Tsao, Feng-Fu (1979). *A Functional Study of Topic in Chinese: The First Step Towards Discourse Analysis*. Taipei: Student Books.

Tsao, Feng-Fu (1987). A Topic-Comment Approach to the *Ba* Construction. *Journal of Chinese Linguistics* 15: 1–54.

Tsao, Feng-Fu (1990). *Sentence and Clause Structure in Chinese: A Functional Perspective*. Taipei: Student Books.

Vendler, Zeno (1967a). *Linguistics in Philosophy*. Ithaca: Cornell University Press.

Wang, Huang (1957). Ba *Ji Ju he* Bei *Zi Ju*. (Ba *Sentences and* Bei *Sentences*.) Shanghai: Shanghai Xin Zhishi Chubanshe.

Wang, Li (1945). *Zhongguo Yufa Lilun*. (*Theories of Chinese Grammar*.) Beijing: Zhonghua Press.

Wang, Li (1947). *Zhongguo Xiandai Yufa*. (*Modern Chinese Grammar*.) Shanghai: Commercial Press.

Wang, Li (1954). *Zhongguo Yufa Lilun*. (*Theories of Chinese Syntax*.) Shanghai: Commercial Press.

Wang, Mingquan (1987). Transitivity and the *Ba*-Construction in Mandarin. PhD dissertation, Boston University.

Wang, Peter (1970). A Transformational Approach to Chinese *Ba* and *Bei*. PhD dissertation, Austin, University of Texas.

Wang, William S.-Y. (1965). Two Aspect Markers in Mandarin. *Language* 41: 457–470.

Wu, Baotang (1987). Yizhong You Biao Shiyi Qinxiang de *Ba* Ziju. (A *Ba* Pattern that Expresses the Meaning of Loss.) In: *Dongci he Juxing*. (*Verbs and Sentence Patterns*.) Zhongguo Shehui Kexueyuan (Modern Chinese Research Group) (eds.), 94–116. Xiandai hanyu yanjiushi. (Academy of Social Sciences, China.)

Wu, Meng (1982). *Ba* Zi Yongfa Er Li. (Two Illustrations for the Usage of *Ba*.) *Zhongguo Yuwen* 6: 434.

Yeh, Meng (1993). Stative Situations and the Imperfective -*Zhe* in Mandarin. *Journal of the Chinese Language Teachers Association* 28: 69–98.

Yong, Shin (1993). The Aspectual Phenomena of the *Ba*-Construction. PhD dissertation, Madison, University of Wisconsin.

Zhang, Bo-jiang (2000). Lun *Ba* Zi Ju De Jushi Yuyi. (On the Structure and Meaning of the *Ba*-Construction.) *Yuyan Yanjiu* 1: 29–39.

Zhu, Dexi (1982). *Yufa Jiangyi: Lectures on Grammar*. Beijing: Shangwu.

Zou, Ke (1995). The Syntax of the Chinese *Ba*-Constructions and Verb Compounds: A Morpho-Syntactic Analysis. PhD dissertation, Los Angeles, University of Southern California.

Zubizarreta, Maria Luisa (1987). *Levels of Representation in the Lexicon and in Syntax*. Dordrecht: Foris.