# The BA Construction in Mandarin Chinese: A Syntactic-semantic Analysis

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## 1. Introduction

The BA construction has been one of the most widely discussed topics in Chinese linguistics (e.g., Li & Thompson 1981; Y. A. Li 1990; Tenny 1994) because of its special features and challenges to different theoretical frameworks. The BA construction does not have a real equivalent in English or other Indo-European languages. A simple BA construction is illustrated in (1a) in comparison with a non-BA sentence with a Subject-Verb-Object (SVO) word order (1b):

- (1) a. Tom ba neige pingguo chi le<sup>1</sup>.

  Tom BA that apple eat ASP.

  "Tom ate the apple."
  - b. Tom chi le neige pingguo. Tom eat ASP that apple. "Tom ate the apple."

As we can see, in the above BA construction, BA together with the object of the verb appears in a preverbal position<sup>2</sup>. The different reading of the two sentences is that the BA construction (1a) gives a focus interpretation of the noun phrase (NP) after BA<sup>3</sup>, and the sentence has a delimited reading that the a

(2a) is ungrammatical because the first half of the sentence has already indicated that the apple is finished, and adding a further comment that the apple is not finished is thus unacceptable. However, unlike the English verb phrase (VP) counterpart, "eat that apple", which clearly indicates that the apple is eaten and finished, in (2b), *chi le neige pinguo* "eat ASP that apple" only indicates that the action of *chi* "eat" has happened and completed, while it is unclear whether the apple is finished or not.

There have been three major claims about the grammatical status of BA in the BA construction: the BA phrase (BA together

will argue that BA is a Case marker by addressing the problems of the first two claims, and defending the claim that BA is a Case marker. This section will discuss the claim of the BA phrase as a VP. We will first review the arguments for the claim that the BA phrase is a VP, and then we will see why these arguments are problematic.

Some linguists argue that the BA phrase is a VP (e.g., Ding 2001; Rhys 1996; T. Tang 1986; S. Yang 1995) for the following four reasons: (1) historically, the origin of BA is a verb in ancient Chinese, meaning "to hold" or "to take"; (2) BA can still be used as a full verb meaning "to hold" in modern Mandarin; (3) the negation of the BA construction must precede BA; (4) BA can pass a verbhood test ,V-not-V. In the following section, we will investigate the four arguments one after another.

#### 2.1. Historical Trace

The origin of BA with the meaning of "to hold" and "to take" can be traced to as early as the 5<sup>th</sup> to 3<sup>rd</sup> centuries B.C. (Bennett 1981; Choonharuangdej 2003; S. Yang 1995, among others). The use of BA in such a sense can be seen in an example of a famous Chinese poem written by SU Shi in the 11<sup>th</sup> century.

(3) ming yue jishi you, ba jiu wen qing tian

mean "to take/hold" in many cases where *na* can be used to denote the meaning of "to take/hold". BA has been grammaticalized; *na* has taken the place.

- (4) a. \*Tom ba zhe hua.ping.

  Tom hold ASP flower.bottle
  - b. Tom na zhe hua.ping. Tom hold ASP flower.bottle "Tom is holding the vase."
  - c. \*Tom ba hua.ping ba zhe.
    Tom BA flower.bottle hold ASP
    "Tom is holding the vase."
  - d. Tom ba hua.ping na zhe. Tom BA flower.bottle hold ASP "Tom is holding the vase."

# 2.2. BA Meaning "to Hold"

Tremblay (2006) argues that BA is a verb because in a few cases BA can still be used as a full verb to mean "to hold", as in examples  $(5) - (6)^4$  provided by Ding (2001).

- (5) Ta ba zhu lan'gan, shen xi le yi.kou qi. 3SG hold ASP railing, deep inhale ASP one.Cls breath "Holding on to the railing, s/he took a deep breath."

  (Adapted from Ding 2001, p. 107)
- (6) shibing shou.ba zhe qiang, yonggande xiangqian chongfeng.

- (6) sounds a bit awkward to me as a native speaker of Mandarin. This sentence can be rewritten as (7) with another verb *wo* to replace *ba* in (6).
  - (7) shibing shou.wo zhe qiang, yonggande xiangqian chongfeng. solider hand.hold ASP gun, bravely forwards charge "Holding their rifles in hand, the soldiers charged forwards bravely."

The reason for such a change is that when ba is used as a verb, the sentence denotes a

between a preverbal PP and a verb. This argument is exemplified in (9) and (10) (Ding 2001, p. 118-119; his (24) & (25)):

- (9) a. xuexiao li gongyuan you yi bai mi. school from park have one hundred meter "There are a hundred meters from the park to the school."
  - b. xuexiao li gongyuan **mei** you yi bai mi. school from park **Neg** have one hundred meter "There are not a hundred meters from the park to the school."
  - c. \*xuexiao **mei** li gongyuan you yi bai mi. school **Neg** from park have one hundred meter "There are not a hundred meters from the park to the school."
- (10) a. haizi ba dan'gao chi guang le. child BA cake eat finished ASP "The child(ren) has/have eaten up the cake(s)."
  - b. haizi **mei(you)** ba dan'gao chi guang le. child **Neg** BA cake eat finished ASP "The child(ren) has/have not eaten up the cake(s).
  - c. \*haizi ba dan'gao **mei(you)** chi guang le. child BA cake **Neg** eat finished ASP "The child(ren) has/have not eaten up the cake(s)."

The distinction between the negation of the BA construction and that of a sentence with a preverbal PP is quite clear. However, the comparison of the above two sets of examples can only suggest that BA does not behave like a preposition. It cannot be used as evidence to support that BA is a verb.

Actually, Mandarin allows two VPs in a sentence. A negative morpheme can precede either VP or even both VPs, as seen in (11).

- (11) a. wo jiao ta lai wo jia.

  1SG call 3SG come 1SG home

  "I invited him/her to come to my home."
  - b. wo **mei** jiao ta lai wo jia. 1SG **Neg** call 3SG come 1SG home "I didn't invite him/her to come to my home."
  - c. wo jiao ta **bie** lai wo jia.

    1SG call 3SG **Neg** come 1SG home

    "I told him/her not to come to my home."

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<sup>&</sup>lt;sup>5</sup> There are four commonly-used negative forms in Chinese: bu, mei, bie, and meiyou.

d. wo **mei** jiao ta **bie** lai wo jia. 1SG **Neg** call 3SG **Neg** come 1SG home "I didn't tell him/her not to come to my home."

In these sentences, the proximity condition on negation is respected, and a negative morpheme is placed as close to the element that is negated as possible. In (11b), it is the verb *jiao* "to call" that is negated, and the sentences implies that "I did not invite him/her"; in (11c), it is the verb *lai* "to come" that is negated, and the sentence means that "I told him/her not to come"; and in (11d), both *jiao* "to call" and *lai* "to come" are negated, and the sentence conveys the meaning that "I did not tell him/her not to come". When we look back to example (10), the sentences (10b, c) suggest that it is not the verb *chi* "to eat" or BA that is negated, but *BA dan'gao chi wan* "eat up the cake" that is negated. The fact that a negative morpheme

bie, and meiyou), bu and mei can be used in the V-Neg-V form to form a general question. S. Yang argues that although the

and a verb, this structure can also be formed by copying a preposition, an adjective or an adverb. Thus, it is better to refer to the structure as A-Neg-A rather than V-Neg-V.

- (15) A as a verb
  Tom lai-bu-lai?
  Tom come-Neg-come
  "Is Tom coming?"
- (16) A as a preposition
  ni gen-bu-gen ta jianghua bu zhongyao.
  You to-Neg-to 3SG speak Neg important
  "It's not important whether you want to talk to him/her."
- (17) A as an adjective jintian tianqi hao-bu-hao today weather good-NEG-good "Is today's weather good?"
- (18) A as an adverb
  Tom pao de kuai-bu-kuai?
  Tom run de fast-NEG-fast
  "Does Tom run fast?"

Since all the above words can be used in the A-Neg-A form, and we cannot claim that they are verbs. For the same reason, we cannot argue that BA is a verb because it can be copied in the A-Neg-A form.

Therefore, we have to apply other tests to diagnose whether BA is a verb or not. The first test we will use is that a verb can be used to answer a general question. Unlike English and many other languages where auxiliary verbs are very active in question formation, Mandarin does not have similar auxiliary verbs. To form a yes/no question in Mandarin, a question marker (Q-marker) or an A-Neg-A form is adopted. The content word is used to answer such questions. If the answer is negative, then a negative morpheme is added in front of the content word. In case of a verb as a content word,

"(Neg) verb" is the form to answer a yes/no question of both types, formed by adding a Q-marker or using an A-NEG-A form.

(19) a. Tom dao le ma?
 Tom arrive ASP Q-marker
 "Has Tom arrived?"
b. Tom dao-mei-dao?
 Tom arrive-NEG-arrive
 "Has Tom arrived?"
c. dao le/mei dao.
 arrive ASP/ NEG arrive
 "Yes/No."

In the BA construction, a yes/no question can be formed in the same way by adding a Q-marker or using an A-Neg-A structure, but the answers to the question are never "BA" or "Neg BA"; on the other hand, it is always the verb.

- (20) a. Tom ba shu gei ta le ma?

  Tom BA book give 3SG ASP Q-marker

  "Has Tom given the book to him/her?
  - b. Tom ba-mei-ba shu gei ta?
    Tom BA-Neg-BA book give 3SG
    "Has Tom given the book to him/her?"
  - c. gei le / mei gei give ASP / Neg give "Yes/No."
  - d. \*ba le /\*mei ba BA ASP/ Neg BA

The second test is already applied in s

(22) Tom **mei** ba shu gei ta.

Tom **Neg** BA book give 3SG

"Tom didn't give the book(s) to him/her."

In both sentences, it is the constituent *zaizhuozishang xie zi* "to write characters on the desk" and *ba shu gei ta* "to give the book(s) to him/her" that is negated, rather than the preverbal PP in (21) or the BA phrase in (22).

Second, the answer to a general question with a preverbal PP and to a question with the BA construction adopts the verb, rather than the preposition (23) or BA (20), here repeated as (24).

- (23) a. Tom zai-zhuozi-shang xie zi le ma?

  Tom on-desk write character ASP Q-marker

  "Did Tom write characters on the desk?"
  - b. Tom zai-mei-zai-zhuozi-shang xie zi?
    Tom on-Neg-on-desk write character
    "Did Tom write characters on the desk?"
  - c. xie le / mei xie. write ASP / Neg write "Yes/No."
  - d. \*zai le / \*mei zai. on ASP / Neg on
- (24) a. Tom ba shu gei ta le ma?

  Tom BA book give 3SG ASP Q-marker

  "Has Tom given the book to him/her?
  - b. Tom ba-mei-ba shu gei ta?
    Tom BA-Neg-BA book give 3SG
    "Has Tom given the book to him/her?"
  - c. gei le / mei gei. give ASP / Neg give "Yes/No."
  - d. \*ba le /\*mei ba. BA ASP/ Neg BA

Thirdly, Y. A. Li (1990) argues that BA is a preposition because the BA phrase can be coordinated with a PP, as seen in (25)<sup>8</sup>:

<sup>8</sup> Question marks in front of both sentences are marked by Y. A. Li (1990) in the original work.

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(25) a. ?ni you wei ta you gen ta jie qian, shi sheme yisi?
You and for 3SG and from 3SG borrow money be what meaning
"You borrowed money from him/her and for him/her. What do you
mean?"

(Adapted from Y.A. Li 1990, p. 190 (68b))

b. ?ni you wei ta you ba ta qiang qian, shi sheme yisi? you and for 3SG and BA 3SG rob money be what meaning "You forced away money for him/her and from him/her. What do you mean?"

(Adapted from Y.A. Li 1990, p. 190 (69))

First, I would like to point out that I do not accept the data (25) presented by Y. A. Li (1990). Although (25a) is marginally acceptable, I do not accept the grammaticality of (25b) in any case. This grammaticality judgment was confirmed by consulting seven other Mandarin speakers. To express the same meanings, the above data can be revised as follows:

- (26) a. ni wei ta gen ta jie qian, shi sheme yisi?
  you for 3SG from 3SG borrow money, be what meaning
  "You borrowed money from him/her and for him/her. What do you
  mean?"
  - b. ni wei ta ba ta de qian qiang le, shi sheme yisi? you for 3SG BA 3SG poss. money rob ASP, be what meaning "You forced away money for him/her and from him/her. What do you mean?"
  - c. \*ni wei ta ba ta qiang qian, shi sheme yisi? you for 3SG BA 3SG money rob, be what meaning "You forced away money for him/her and from him/her. What do you mean?"

By taking off the coordinator *you...you* "and...and", we can see that (26a) from (25a) becomes grammatical, while (26c) from (25b) becomes ungrammatical. Comparing (26a), a two-preverbal-PP sentence, with (26b), a BA construction, we are hesitant to claim that they follow the same pattern. As we can see, the object of the verb stays postverbally in (26a) while the object of the verb appears preverbally in (26b). Also, if they were coordinated PPs in both sentences, the sentences would still be acceptable

In (28a), *keting he shufang* "living room and study" is a coordinated NP. Together it is the object of *zai*, the preposition. In (28b), there are two preverbal PPs. However, it is not possible for a sentence to have more than one BA phrase (Ritter & Rosen 2000).

(29) a. wo ba yanjing he maozi duo diu le.

I BA glasses and hat both lose ASP
"I lost both my glasses and my hat."
b. \*wo ba yanjing ba maozi duo diu le.

I BA glasses BA hat both lose ASP
"I lost both my glasses and my hat."

In (29a), *yanjing he maozi* "glasses and hat" is a coordinated NP, but having two BAs preceding *yanjing* "glasses" and *maozi* "hat" separately is not acceptable. That is to say, Mandarin allows two preverbal PPs, but never allows two BA phrases in a sentence.

Secondly, the PP and the BA phrase do not appear in the same positions in a sentence. Ritter and Rosen (2000) observe that PPs can appear both preverbally and postverbally, while the BA phrase only appears preverbally. Actually, PPs can also appear in the sentence-initial position, but the BA phrase cannot (Rhys, 1996).

- (30) Three positions of a PP
  - a. Preverbal
    wo zai ma.lu.bian jian dao yi fen qian.
    I at horse.road.side pick up one Cls money
    "I found and picked up a penny at the road side."
  - b. Postverbalwo tiao dao ma.shang.I jump up horse.on"I jumped onto a horse."
  - c. Sentence-initial
    zai jie.shang wo peng.dao yi ge lao tongxue.
    at street.on I meet.up one Cls old classmate
    "I ran into an old classmate of mine on the street."

- b. \*Tom gei le ta ba shu Tom give ASP 3SG BA book
- c. \*ba shu Tom gei le ta BA book Tom give ASP 3SG

Thirdly, in Mandarin PPs can be the subject of a sentence, but the BA phrase can never be a subject. There is always a NP appearing before the BA phrase except for in an imperative sentence.

(32) PP as a subject cong wo jia dao xuexiao hen yuang. from my home to school very far "Mp(o)5()-12 D0.0004 Tc-0.0004 Twb1085(PP as a subject)]TJ0 -1(Be-0.0.0011.Mab[(bl.5)/ (n

glass of beer, and it also means that s/he was not home or finished the beer during any period of time before s/he accomplished the action.

Tenny (1992, 1994) has found that all the delimited predicates, which have a distinct and inherent endpoint, involve direct objects. Thus, she further argues that the aspectual property of delimitedness is not only associated with the verb, but also associated with the internal arguments of the verb. She also

the nondelimited sentence can only take "for  $\boldsymbol{X}$ 

Although (41c) is marginally accepted, it does not put the emphasis on accomplishing the action, but on the process the action happens. (41d) is more like a question of asking for the information when the action is accomplished, similar to "how long did it take" in English. The answers to (41a) and (41d) are (42a) and (42b) respectively.

- (42) a. ta tui che tui le ershi fenzhong. 3SG push cart push Asp twenty minutes." "S/he pushed the cart for twenty minutes."
  - d. ta yong le ershi fenzhong ba che dui dao Niu Yue. 3SG use ASP twenty minutes BA cart push arrive New York "It took him twenty minutes to push the cart to New York."

In English, the answers to the two questions are two adverbial phrases, but in Mandarin, two verb phrases are used to ask and answer the questions. Repeating the main verb with *duoshao shijian* "how much time" at the end of a sentence is the way to ask and answer a question of states and activities; *yong le duoshao shijian* "use how much time" after the subject NP is to ask and answer a question of accomplishments and achievements.

In this section, we discussed (1) the four aspectual classifications of verbs proposed by Vendler and Dowty: two nondelimited categories, states and activities, and two delimited categories, accomplishments and achievements; (2) the relationship of the property of delimitedness to verbs and arguments (Tenny 1992, 1994); and (3) the delimitedness test of "in X time" versus "for X time" to determine whether an event is delimited or not (Dowty 1979; Vendler 1967). We also examined the Mandarin phrases meaning "in X time" and "for X time". We will use these Mandarin verb phrases *yong le duoshao shijian* meaning "in X time" and *V le duoshao shijian* meaning "for X time" in later section to test the delimitedness of the predicates.

Ritter and Rosen (2000) build their analysis on Borer's syntactic structure of the Event Structure. They further point out that for a structure to be eventive, it is not necessary to activate both eventive FPs. When either FP-init (Asp<sub>p</sub>P) or FP-delim (Asp<sub>p</sub>P) is projected, the structure will have eventive interpretation. They identify two classes of languages: D-language and I-language. D-language requires that a predicate is eventive if and only if it is delimited. These languages, including English, Finnish, Mandarin, and Haitian Creole, have a terminal bound, and accomplishments and achievements determine eventhood. The latter class, I-language, requires that a predicate is eventive if and only if it has an initiator. These languages, including Icelandic, Irish, and Japanese, have an initial bound, and activities and accomplishments determine eventiveness.

## 4.2.1. Ritter and Rosen's (2000) Analysis of the BA Construction

Ritter and Rosen (2000) suggest that Mandarin is a D-language. They claim that the distinction in the object position between delimited and non-delimited predicates supports their hypothesis of the existence of FP-delim. According to them, when a NP remains in the VP, it does not get the delimited readings. When a NP is raised to the [Spec, FP-delim] position, it checks the delimitation features and gets the delimited readings. BA may in fact be an overt realization of accusative Case, checked by FP-delim. This analysis of the BA construction is represented in (43) (Ritter & Rosen 2000, p. 211, their (45)).

(43)	Ritter and Rosen's Phrase Structure of the BA construction
Data (	1) presented at the beginning of this paper, here repeated as (44), can be used to
illustrate t	his analysis.
(44)	a. Tom ba neige pingguo chi le. Tom BA that apple eat ASP.

This above analysis successfully captures the distinction between delimited and non-delimited structures between a simple non-BA construction and a simple BA construction. However, what is the BA phrase in relation to the verb following it, what special features the BA NP bears, what roles these features play in the structure, and whether BA is a base-generated or inserted elements are left unanswered. In the following section, we will first look at the features of the BA construction and then address the above questions.

#### 4.3. Features of the BA Construction

A Chinese non-BA construction usually follows a SVO order, and the BA construction has a structure of NP BA NP V XP, in which XP can be a NP, a PP, or some aspectual constructions. The first NP of the BA construction is the subject of the sentence. The apparent object of BA, the second NP, is not the object of the BA, as discussed in section 2, because it gets its thematic role from the verb following it, rather than from BA. This section will discuss the special features of the BA construction, and in the next section,

- c. Tom yong le yi fenzhong ti men. Tom use ASP one minute kick door "Tom spent one minute kicking the door."
- d. Tom ti men ti le yi fenzhong. Tom kick door kick ASP one minute "Tom kicked the door for one minute."

# (49) Direct object

- a. Tom yong le wu fenzhong ba pingguo chi le.
   Tom use ASP five minute BA apple eat ASP "Tom ate the apple in five minutes."
- b. \*Tom ba pingguo chi le chi le wu fenzhong.

  Tom BA apple eat ASP eat ASP five minute

  (Intended meaning "Tom ate the apple in five minutes.")
- c. Tom yong le wu fenzhong chi pingguo. Tom use ASP five minute eat apple "Tom spent five minutes eating an apple."
- d. Tom chi pingguo chi le wu fenzhong. Tom eat apple eat ASP five minute "Tom was eating an apple for five minutes."

The above tests show that the BA construction is delimited structure, while the non-BA construction is nondelimited structure.

#### 4.3.2. Definiteness of the BA NP in the BA Construction

In addition to the aspectual restrictions, the BA construction also imposes a definiteness constraint on the NP in the BA phrase. Although in a non-BA construction, the object NP can be either definite or indefinite (50a, c), in the BA construction, the BA NP has to be definite (50d). (50b) is ungrammatical because *yi-kuai qiakeli* "a bar of chocolate" is indefinite.

- (50) a. Dave gei le Sonya yi-kuai qiaokeli.

  Dave give ASP Sonya one-bar chocolate

  "Dave gave Sonya a bar of chocolate."
  - b. \*Dave ba yi-kuai qiaokeli gei le Sonya.
     Dave BA one-bar chocolate give ASP Sonya
     (Intended meaning "Dave gave Sonya a bar of chocolate.")

- c. Dave ba nei-kuai qiaokeli gei le Sonya Dave BA that-bar chocolate give ASP Sonya "Dave gave Sonya the chocolate."
- d. Dave ba tade qiaokeli gei le Sonya. Dave BA his chocolate give ASP Sonya "Dave gave Sonya his chocolate."

In Mandarin, a NP can be modified by a definite article or an indefinite article. In this case, it is clear whether the NP is definite or not. However, some Mandarin NPs do not have any articles. For example, in (47), here repeated as (51), *pingguo* "apple" does not have any articles preceding it.

- (51) a. Tom chi le pingguo. Tom eat ASP apple "Tom ate an/the apple."
  - b. Tom ba pingguo chi le. Tom BA apple eat ASP "Tom ate the apple."

In this case, the NP can be definite or indefinite, depending on the context. As we see, in the non-BA construction (51a), "apple" is indefinite or definite; in the BA construction, "apple" has to be definite. If we interpret "apple" in a BA construction as an indefinite NP, the sentence is not longer grammatical (52).

(52) \*Tom ba pingguo chi le.
Tom BA apple eat ASP
"Tom ate **an** apple." **n**,

- (53) a. Dave ba zi xie zai-heiban-shang
  Dave BA character write on-blackboard
  "Dave wrote the character(s) on the blackboard."
  - Sonya ba heiban xie-man le zi
     Sonya BA blackboard write-full ASP character
     "Sonya wrote characters all over the blackboard."

In (53a), the sentence emphasizes that the characters are now on the board, and in (53b), the sentence emphasizes that the blackboard is full of characters. The next example shows that a theme argument or even part of the theme argument can be used in the BA construction, but it is the part that is affected.

- (54) a. Dave ba juzi bo le pi.
  Dave BA orange peel ASP skin
  "Dave peeled the orange."
  - b. Dave ba juzi-pi bo le Dave BA orange-skin peel ASP "Dave peeled the orange."
  - c. \*Dave ba pi bo le juzi. Dave BA skin peel ASP orange "Dave peeled the orange."

In (54a) and (54b), *juzi* "orange" and *juzi-pi* "orange skin" can be used in the BA construction because they are the arguments that are affected by the action of the verb *bo* "peel". However, (54c) is ungrammatical because it is not possible to affect the skin of an orange without affecting the orange.

The last example is similar to the English spray/load words. In English "I completely loaded the hay onto the wagon" means all the hay is gone, and "I completely loaded the wagon with hay" means the wagon is totally full. Whichever one is the direct object is the one that "measures the event out" (Tenny 1992, 1994; Dowty 1991). The following example in the BA construction is similar to the spray/load words in English in that (55a) means that the water is gone, and (55b) means that the flower has been watered. The difference is that the DP here may not be the direct object of the verb.

(55) a. instrument argument
Dave ba shui jiao le hua.
Dave BA water water ASP flower
"Dave has used the water to water flowers."

b. goal argument
Dave ba hua jiao le shui
Dave BA flower water ASP water
"Dave has watered the flower(s)."

In (55a), *shui* "water" is an instrument argument, and in (55b), *hua* "flower" is a goal argument. Although they are not like the NP in the spray/load words as a direct object, they are the words that "measure out" or delimit the events, which is the same as the NP in the English sentences. In addition, they are the NPs that are affected.

It is worth noting that in Ritter and Rosen's (2000) discussion about the ungrammaticality of the BA construction with the verb *kanjian* "see", they claim that the recipient argument of *kanjian* "see" cannot be used in the BA construction because the sentence is not a delimited event. However, as Vendler (1967) discusses, "see" in English has two interpretations; one as a state, which is non-delimited, and the other is an achievement, meaning "spot", which is delimited. In the same way, *kanjian* "see" in Chinese may be interpreted as either a state or an achievement. Although the sense of "spot" is an achievement, which is a delimited structure, *kanjian* still cannot be used in the BA construction.

- (56) a. Dave yi.yan jiu kanjian le Sonya.

  Dave one.glance then spot ASP Sonya
  "Dave spotted Sonya immediately."
  - b. \*Dave yi.yan jiu ba Sonya kanjian le.
     Dave one.glance then BA Sonya spot ASP
     "Dave spotted Sonya immediately."

Based on the above analysis that the BA NP has to be affected by the action of the verb, it is not hard to understand why (56b) is ungrammatical. Although the sentence is delimited, and the NP is definite, the NP is not affected by the verb.

Affectedness does not necessarily imply that the NP has to be "physically" affected (Li & Simpson 1981, p.474). It conveys how the NP is dealt with. In the following two examples, the BA NPs are not physically affected by the verb, and the sentences are still grammatical.

- (57) a. Tom ba xiaotou hen si le.

  Tom BA thief hate die ASP

  "Tom hates the thief very much."
  - b. \*Tom ba xiaotou hen le. Tom BA thief hate ASP

# **4.3.4.** Summary

To summarize the features of the BA construction, the predicate has to bear an aspectual property of delimitedness. Some verbs which are not delimited in the non-BA sentences become delimited if they are used in the BA construction. The BA construction can be tested by the time frame adverbial "in X time", although its counterpart in Mandarin is a VP *yong le X time*. That is to say, the BA construction has an interpretation of event structure. It is bounded and has a clear endpoint. It denotes accomplishments and achievements, rather than states or activities.

Besides the delimitedness, the BA NP has to be definite and affected by the verb<sup>11</sup>. NPs are affected when that are physically affected or affected by involving resultative postverbal constitutes.

<sup>11</sup> These features of the BA construction contradict to Ritter and Rosen's (2000) grammaticality judgment of a sentence.

(58) a.?\*Ta ba fangjian da-sao-le.

3SG *ba* room hit-sweep-asp

"S/he cleaned the room."

(Rittern and Rosen, 2000, p. 210 (43a))

b. Ta dao-sao-le fanjian.

3SG hit-sweep-asp room

"S/he cleaned the room."

c. Ta yong le yi xiaoshi ba fangjian da-sao-le.

3SG use ASP one hour ba room hit-sweep-asp

"S/he cleaned the room in an hour."

According to Ritter and Rosen, (58a) is ungrammatical. However, my knowledge of Mandarin Chinese as a native speaker accepts the sentence, which is also supported by consultation of five more native speakers of Mandarin Chinese. Based on the features of the BA construction we discussed, (58b) does not have a delimited reading because it can be interpreted as "s/he cleaned the room, but did not finish cleaning." However, when the verb is used in the BA construction, it has a delimited reading because there is a clear endpoint. The sentence means that "s/he has finished cleaning the room." Besides, it can also pass the "in X time" test (58c). If we look at the BA NP, this NP refers to a definite room, and it is affected by the verb as well.

#### 4.4. The Phrase Structure of the BA Construction

Previous analysis has shown that BA is not a verb or a preposition, and it is not a Case assigner. As we have seen in the discussion of the features of the BA construction, the BA NP gets its thematic role from the verb following it, which leads us to an assumption that BA is an overt realization of a Case marker. The reason to say that it is an overt realization of Case marker is that Chinese, like English, does not have obvious case marking. The NPs only have abstract Case, unpronounced morphology. We argue that BA is one of the few Case markers in Chinese.

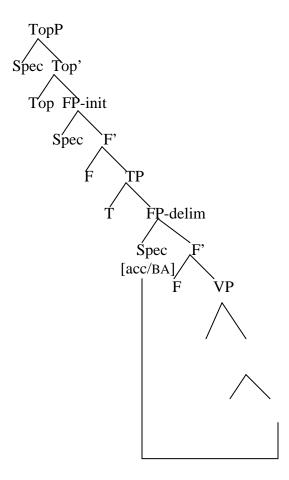
This assumption is supported by Borer's (1994, 1996) and Ritter and Rosen's (2000) proposal that event structure is grammaticalized through function projections (FP) dominating the predicate. Ritter and Rosen, following Borer, argue that there are two FPs (initiating FP and delimiting FP), and when either one is activated, a sentence will have an eventive interpretation. Which one to be activated to express eventiveness varies from language to language. In terms of Chinese, it is always the argument which delimits the event that denotes an interpretation of event, so the delimiting FP (FP-delim) is activated when it happens. Borer argues that when the FP-delim is activated, there is an argument in the [Spec, FP-delim] position, and accusative Case is assigned in this position. Ritter and Rosen further argue that language grammaticalizes events through Case and agreement features in FPs.

Based on the FP analysis of event structure, we support the Ritter and Rosen's (2000) argument that BA is the accusative Case associated with the [SPEC, FP-delim] position. When FP-delim is not projected, there is no BA construction. When FP-delim is projected, BA checks the delimitation features and denotes a delimited event. As

discussed earlier, it is always the argument that measures out the event that is moved out of the VP; this means that the delimiting argument has an abstract feature [+delim] (Ritter and Rosen, 2000). Only when this [+delim] feature agrees with the features required by the FP-delim can the argument move out the VP to the [Spec, FP-delim] position and be checked the accusative Case BA.

In the BA construction, the delimited event always requires an argument which is definite and affected by the verb. Thus, the FP-delim may require the features [+delim, +definite, +affected]. Only the arguments which have all these features can be moved to [Spec] position to activate the delimiting function projection because of the feature agreement.

(59) Phrase Structure of the BA construction (based on Ritter and Rosen, 2000)



This phrase structure shows that when the argument which delimits the event moves to the [Spec, FP-delim] position, it is checked by the accusative Case. FP-init is not activated, so the subject gets an abstract nominative Case structurally.

This proposal explains the ungrammaticality of the sentences we have discussed, repeated in (60).

- (60) a. \*Tom ba chezi tui le Tom BA cart push ASP "Tom pushed the cart."
  - b. \*Dave ba yi-kui qiaokeli gei le Sonya. Dave BA one-bar chocolate give ASP Sonya "Dave gave a bar of chocolate to Sonya."
  - c. \*Dave ba pi bo le juzi.Dave BA skin peel ASP orange"Dave peeled the skin of the orange."
  - d. \*Dave yi-yan jiu ba Sonya kanjian le. Dave one-glance then BA Sonya spot ASP "Dave spotted Sonya immediately."

As analyzed before, in order to get eventive interpretation, the FP-delim requires an argument which has the following features:

However, none of the arguments of the BA construction in the above sentences satisfy this requirement.

It is the failure of the feature agreement that these sentences with the BA construction are not accepted in Chinese. It also explains why only the delimiting argument can be moved to the Spec position and has an overt accusative Case.

This analysis also successfully captures the event structure of the BA construction with double objects. In a double object sentence,

As we can see, the reason why the goal argument stays in the VP is

preposition assigns a dative Case to the NP in the phrase; and (5) the BA NP is assigned thematic role by the verb following it, and a preverbal PP does not get a thematic role.

In the last section, we have built our argument that BA is an accusative Case marker on Event Structure and Functional Projections of Event Structure proposals. We have analyzed the features of the BA construction, and conclude that the BA construction has an aspectual restriction of delimitedness. The BA phrase may be a theme, goal, instrument, or location argument of the following verb. Because only certain arguments which can meet the required features [+de

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