

**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 le¹.
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 position². The different reading of the two sentences is that the BA construction (1a) gives a focus interpretation of the noun phrase (NP) after BA³, and the sentence has a delimited reading that the apple is finished. While the non-BA sentence (1b) does not put the emphasis on the NP following the verb, and the interpretation of the sentence can be either that the apple is finished or that there is still some of the apple left. This distinction can be seen in (2).

- (2) a. *Tom ba neige pingguo chi le, dan mei chi wan.
Tom BA that apple eat ASP, but NEG eat finished.
“*Tom ate the apple, but did not finish it.”
b. Tom chi le neige pingguo, dan mei chi wan.
Tom eat ASP that apple, but NEG eat finished.
“Tom was eating the apple, but he did not finish it.”

¹ In Mandarin, *le* is a perfective ASPectual particle and denotes the completion of an action.

² As we will see in later sections, the NP after BA is not necessarily the object of the following verb.

³ The NP after BA will be referred to as BA NP thereafter.

(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 with the following NP) is a VP (e.g., Rhys 1996; T. Tang 1986; S. Yang 1995), the BA phrase is a preposition phrase (PP) (e.g., Y. A. Li 1990; K. Mei 1972), or BA is a Case marker (e.g., Bennett 1981; Ritter & Rosen 2000; C. Sun 1996). In this paper, I will support the argument that BA is an overt ACCusative Case marker by exploring the semantic features and the syntactic analysis of the BA construction. In section 2, the paper will first argue that the BA phrase is not a VP. In the same manner, section 3 will argue that the BA phrase is not a PP either. In section 4, the paper will discuss the BA construction in terms of its special features, base the analysis of the BA construction on the Function Projection analysis (Borer 1994, 1996; Ritter & Rosen 2000) of event structure (Dowty 1979; Tenny 1992; Vendler 1967), and argue that BA in the BA construction is an overt realization of an accusative Case marker.

2. BA as a Verb

There are three major claims about the categorial status of the BA construction in the Chinese linguistics literature: BA is a verb, BA is a preposition, or BA is a Case marker. I

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 5th to 3rd 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 11th century.

(3) ming yue jishi you, ba jiu wen qing tian
bright moon when have, hold wine ask blue sky
“When will there be a bright moon? I hold up the wine and ask Heaven.”

However, we cannot claim that the BA phrase is a VP because there is a historical trace. BA as a verb to mean “to take/hold” was gradually replaced by *na* since the 17th century, and BA has been grammaticalized (Bennett 1981; Choonharuangdej 2003; C. Sun 1996; Xing 2003; Ziegeler 2000). The following data show that *ba* cannot be used to

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.
solider hand.hold ASP gun, bravely forwards charge
“Holding their rifles in hand, the soldiers charged forwards bravely.”

(Adapted from Ding 2001, p. 107)

A closer scrutiny suggests that when BA is used as a full verb, its meaning is not just “to hold”, but is restricted to the meaning of “to hold something with force” or “to hold something so firmly that the thing does not move in one’s hand(s)”. Ding (2001) also mentions that the usage of BA as a full verb is “scant” (p. 107). Actually, even example

⁴ Data from other recourses are presented in a way consistent with that used in this paper to avoid confusion.

(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 relatively inactive action. If BA is used in the first half of the sentence, it is better to have a motionless action in the second part of the sentence, as in (8).

(8) shibing shou.ba zhe qiang, renzhen miaozhun.
solider hand.hold ASP gun, carefully aim
“Holding their rifles in hand, the soldiers aimed them carefully at the targets.”

As we see in the above examples, the use of BA as a full verb is very much restricted. Its verbhood function might be preserved because of the strong interpretation of BA as “to hold something firmly with force”. However, BA cannot be used to function as a full verb having the meaning “to hold” in most cases, such as “to hold something casually”, “to pick up something and hold it”, or “to hold something in hand and not let it drop”. The limited usage of BA as a full verb again lends support to the argument that BA has been grammaticalized in the process of historical development.

2.3. Negation of the BA Construction

Ding (2001) argues that BA is a verb because a Negative morpheme⁵ is placed right before BA and that Mandarin “places a negative morpheme in a position maximally proximate to the element being negated” (p. 118). The evidence Ding (2001) provides is that if a negative morpheme appears between the BA NP and the verb, the sentence is ungrammatical; while a sentence is still grammatical when a negative morpheme appears

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.”

⁵ 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 sentence 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 can only appear before BA, not before the verb after the BA NP suggests that the BA construction does not consist of two verb phrases. It also leads us to a conclusion that [BA NP V NP/AP] as a whole is a constituent, and [BA NP] and [V NP/AP] are not two constituents.

2.4. Verbhood Tests

S. Yang (1995) and Rhys (1996) have used a special Chinese V-Neg-V form to test the BA construction. The V-Neg-V form is often used in a sentence to form a general question. For example,

- (12) ni qu-bu-qu tushuguan?
 You go-NEG-go library
 “Are you going to the library?”

According to S. Yang and Rhys, the V-Neg-V form is a test to see whether a construction is a verb or not. Among the four commonly-used negative forms in Mandarin (*bu*, *mei*,

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 BA construction cannot be used with *bu* to form a question, it passes the test when the negative form is *mei*⁶.

- (13) a. *Laoshi ba-bu-ba xueshen ma?
 teacher BA-NEG-BA student criticize
 “Has the teacher criticized the student?”
 (T. Tang, 1986, p.178; cited in S. Yang, 1995, p.171)
- b. Laoshi ba-me-i-ba men guan-shang.
 teacher BA-NEG-ba door close-on
 “Has the teacher closed the door?”
 (S. Yang, 1995, p. 172)

Rhys provides an example of using BA with *bu* in the BA-NEG-BA form.

- (14) a. ni ba-bu-ba shu gei ta?
 You BA-NEG-BA book give 3SG
 “Are you giving the book to him/her?”
 (Rhys, 1996, p.303)
- b. ni ba-me-i-ba shu gei ta?
 You BA-NEG-BA book give 3SG
 “Have you given the book to him/her?”

Although these linguists’ analyses are different in terms of the negation word used in the question form, what they share in common is that BA can pass the diagnostic test for verbs in Chinese. Actually, in Chinese, BA can be used in the BA-Neg-BA form with either *bu* or *mei*, as seen in (14a, b)⁷. When it is *ba-bu-ba*, the question is about the potential of an event, while *ba-me-i-ba* talks about a completed event. Since BA can be used in the V-Neg-V form, these linguists claim that the BA construction is a VP.

However, the V-Neg-V form is not a proper test for verbs. As mentioned earlier, this copied form with a negative morpheme can produce a general question. But besides *ba*

⁶ However, Y. A. Li (1990) does not accept the grammaticality of BA-Neg-BA in a sentence. Although I personally accept this usage, when I consulted several other Mandarin speakers, it seems that the form of BA-Neg-BA is acceptable to some of them, while marginally accepted by others. In this paper, we will accept the grammaticality of BA-Neg-BA, but we will also see that this is not an appropriate verbhood test.

⁷ Although it may not apply to every verb, such as (13a).

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-meì-dao?
Tom arrive-NEG-arrive
“Has Tom arrived?”
c. dao le/meì 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-meì-ba shu gei ta?
Tom BA-Neg-BA book give 3SG
“Has Tom given the book to him/her?”
c. gei le / meì gei
give ASP / Neg give
“Yes/No.”
d. *ba le /*meì ba
BA ASP/ Neg BA

The second test is already applied in section 2.3 when we discussed the negation of the BA construction. As repeated here, in Mandarin the negation before a verb is to negate the verb, and in a sentence with two verb phrases, the negative morpheme can appear in front of either VP or both VPs. However, in a negation of the BA construction, the negative morpheme can appear only before BA, not before the verb following BA NP, and it cannot appear twice, namely, before BA and before the verb. Besides, the negation is to negate the entire [BA NP V NP/AP], not just [BA NP].

The different behaviors of the BA construction and a VP in terms of yes/no questions and negation argue against the claim that the BA construction is a VP.

2.5. Summary

The discussions in the previous sections show that BA is not a verb for the following reasons:

- (i) The origin of BA as a verb meaning “to take” and “to hold” has been grammaticalized in the process of historical development of language;
- (ii) BA as a full verb in modern Mandarin is restricted to a strong interpretation of BA as “to hold something with force or firmly”; it cannot be used as a verb in other cases;
- (iii) Unlike a two-VP sentence, where a negative morpheme can appear before either VP or both VPs, depending on which element to be negated, the negation of a BA construction can appear only before BA to negate the entire construction;
- (iv) BA cannot pass verbhood tests. BA cannot stand alone; for example, it cannot answer a yes/no question, while verbs can.

Based on the above evidence, we argue that BA is not a verb.

3. BA as a Preposition

Some linguists argue that BA is a preposition (Y. A. Li 1990; K. Mei 1972) because the BA phrase behaves the same as a preverbal PP in the following three ways. First, negation of a sentence with a preverbal PP and of the BA construction is to negate the whole sentence, not the PP (21) or the [BA NP] (22).

- (21) Tom **mei** zai-zhuozi-shang xie zi.
Tom **Neg** on-desk write character
“Tom did not write characters on the desk.”

- (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-meizai-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-meiba 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)⁸:

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

- (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

when we change the order of the two PPs. However, as we can see in the examples below (27), both sentences become ungrammatical when the two PPs in (27a) and the PP and the BA phrase in (27b) change the orders.

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

Therefore, even the two PPs in (26a) are not in a coordinated position, so Y. A. Li’s (1990) evidence to claim that the BA phrase is a PP is problematic. Thus, it is not sufficient to assert that (26b) is also a sentence with two preverbal PPs.

In addition, the similarity between the BA phrase and a preverbal PP does not lead to a conclusion that BA is a preposition⁹ because the BA phrase does not have some features that PPs have. In Mandarin, there can exist more than one preverbal PP, as seen in the above example (26a). In a sentence of two preverbal PPs with the same preposition, we can have the following two expressions, although (28a) sounds more natural than (28b).

- (28) a. wo zai ke.ting he shu.fang duo zhao bu dao wode yanjing.
I in guest.room and book.room both find Neg got my glasses
“I can’t find my glasses in the living room and the study.”
- b. wo zai ke.ting zai shu.fang duo zhao bu dao wode yanjing.
I in guest.room in book.room both find Neg got my glasses
“I can’t find my glasses in the living room and the study.”

⁹ However, BA somehow behaves similarly to a preposition provides further support that BA is not a verb.

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. Postverbal
wo 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.”

- (31) Obligatory position of the BA phrase
 a. *Tom ba shu gei le ta.*
 Tom BA book give ASP 3SG
 “Tom has given the book to him/her.”

- 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
“My home is very far from school.”

- (33) *ba shu hen gui.
BA book very expensive
(Intended meaning “The book is very expensive.”)

Next, BA cannot assign a thematic role to the NP following it (Rhys, 1996). The NP gets its thematic role assigned by the verb after the BA phrase. A simple BA construction in (1) can illustrate this very well, repeated here as (34).

- (34) a. Tom ba neige pingguo chi le.
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.”

This suggests that *neige pingguo* “that apple” does not get its thematic role from BA, but from the verb *chi* “eat”. This also suggests that *neige pingguo* “that apple” is not the object of BA, and BA is not a Case assigner. However, the NP in a PP is the object of the preposition. Although in Mandarin when a PP appears postverbally, it also behaves like an argument of the verb, it can never be a theme argument as the BA phrase may (for example, in (34)). For example, in the following example (35), the PP *gei wo* “to me” is a

goal argument, and *wo* “me” gets dative Case licensed by the preposition *gei* “to”, not by *mai* “sell”. The theme argument in a non-BA sentence is never a PP.

- (35) ta mai gei wo chezi le.
3SG sell to me car ASP
“S/he sold a car to me.”

(Ritter & Rosen 2000, p. 212)

In addition, when a PP appears preverbally, it only has the semantics of an adverbial, and is not an argument of the verb; the BA phrase, however, is always an argument of the verb.

- (36) a. ta zai che.hang mai gei wo chezi le.
3SG at car.office sell to me car ASP
“S/he sold a car to me at the car-dealer’s.”
b. ta zai che.hang ba chezi mai gei wo le.
3SG at car.office BA car sell to me ASP
“S/he sold a car to me at the car-dealer’s.”

In both sentences, the preverbal PP *zai chehang* “at the car-dealer’s” does not get a thematic role, but in (36b) *ba chezi* “BA car” is a theme argument assigned by the verb *mai* “sell”.

To summarize, BA is not a preposition in that (i) there can be two preverbal PPs, but there cannot exist two BA phrases in a sentence; (ii) the BA phrase and PPs appear in different positions in a sentence; (iii) unlike PPs, the BA phrase cannot function as the subject of a sentence; (iv) BA is not a Case assigner, but a preposition is, and (v) the BA construction is always an argument of a verb, but a PP is not necessarily an argument.

4. BA as a Case Marker

As discussed above, BA is not a verb or a preposition. In terms of position, the BA phrase obligatorily appears in a preverbal position. This section will investigate the following issues:

- (37) a. What is BA in relation to the NP following it?
- b. What is the BA phrase in relation to the verb following it?
- c. Is BA a base-generated or inserted element?
- d. What are the special features of the BA construction?
- e. What role do these special features play in the analysis of the BA construction?

This section will explore the above questions by examining the features of the BA construction in relation to Event Structure (Vendler 1967; Dowty 1979; Tenny 1992, 1994). Ritter and Rosen (2000) point out that BA in the BA construction is an accusative Case marker. However, how BA is projected and what special features the NP following BA bears are left unanswered. Before we move to the discussion of the features of the BA construction, it is necessary to introduce the typology of events, and the Functional Projection (FP) analysis to present Event Structure syntactically and semantically proposed by Borer (1994, 1996) and Ritter and Rosen (2000).

4.1. Event Structure

Vendler (1967) and Dowty (1979) classified verbs into four aspectual classes: states, activities, accomplishments, and achievements. This classification has been acknowledged for accounting for lexical semantics and the semantics-syntax interface (Ritter & Rosen 2000). Vendler and Dowty propose that states are static; they last for a period of time, but do not denote the meaning of continuity. If I “know” a person, then it means that I know the person for a period of time, but I cannot say that I am knowing the

person at any definite time. Activities are durative; they relate to processes, but they are atelic, meaning there is no inherent endpoint. When I say that I listened to music for two hours, I talk about the process of two hours, and I was listening to music at any time during the two hours. Both accomplishments and achievements are telic and have inherent endpoints, but they differ in that accomplishments are developments, while achievements are punctual occurrences. When I say that I watched a movie, I can make such a claim only when I finished the movie, but the watching of the movie went on for a period of time. So “watch a movie” is an accomplishment. On the other hand, when I arrived in Victoria, “arriving” happened at that particular moment and cannot last for a period of time. That is, “arrive” is achievement. Some examples of the four aspectual classes of verbs are given as follows (Dowty 1979; Huddleston & Pullum 2002; Mourelatos 1978; Tenny 1992; Vendler 1967):

State:	love, hate, smell, know, believe
Activity:	snow, walk, drink beer, play
Accomplishment:	kill, walk home, drink a glass of beer, build a house
Achievement:	spot, recognize, reach, die

Verdurl (1972) points out that, as can be seen from the above examples, some verbs are telic on their own, such as “kill” and “spot”, while telicity of some other words are determined by the arguments they take. For example, “walk in a park” and “drink beer” are atelic; that is to say, if someone is walking in a park or drinking beer, s/he must be walking or drinking during any period of time when the activity is going on. But “walk home” and “drink a glass of beer” are telic because they have inherent endpoints; namely, when one walked home or drank a glass of beer, it means that the action has completed, and that s/he was not walking or drinking anymore when s/he walked home or drank a

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 observes that not every direct internal argument takes the role to delimit the event. In an example given by Tenny (1992, p. 6, her (7)),

- (38) a. push the cart (*in an hour/for an hour)
b. push the cart to New York (in an hour/?for an hour)

“the cart” in both sentences are the direct internal arguments, but (38a) is nondelimited, and (38b) is delimited because the goal argument “to New York” delimits the event by adding an endpoint.

A test to decide whether an event is delimited or not is to see if the phrase “in X time” can be attached to the sentence (Dowty 1979; Vendler 1967). “In X time” and “for X time” are called “*aspectual adverbs*” by Dowty (1979, p. 332). Dowty suggests that one of the semantic differences between the in-adverbials and for-adverbials is that in-adverbials require that predicates be indivisible, while for-adverbials are related to a period of time and can be used with predicates that are true at any interval. According to Vendler and Dowty, since sentences with a delimited reading have an endpoint, or are bounded, they can be used with “in X time”, a modifier of delimited event (as in 38b); while nondelimited events are related to a period of time and can be asked by a question of “for how long”, and they are usually not answered by “in X time” but “for X time”, so

the nondelimited sentence can only take “for X time”, a modifier of nondelimited events (as in 38a). More examples are provided in (39)

- (39) a. I walked in the park (*in thirty minutes/for thirty minutes).
b. I walked home (in thirty minutes/*for thirty minutes).

“Pushed the cart to New York” in (38b) and “walked home” in (39b) are accomplishments, and the sentences allow “in X time” phrase. “Pushed the cart” in (38a) and “walked in the park” in (39a) are activities, and thus only “for X time” is allowed.

What are the Mandarin phrases equivalent to “in X time” and “for X time” in English? To answer this question, we can go back to how Vendler (1967) and Dowty (1979) distinguish the differences between the two phrases. Two question forms are employed to distinguish a predicate without a set terminal point (i.e., states and activities) and a predicate with a set terminal point (i.e., accomplishments and achievements).

- (40) a. For how long did he push the cart?
b. *How long did it take to push the cart?
c. *For how long did he push the cart to New York?
d. How long did it take him to push the cart to New York?

“For how long” is an appropriate question to ask about a non-delimited event, and “how long did it take” is to ask about a delimited event. Applying the same philosophy, the two Mandarin question forms are as follows:

- (41) a. ta tui che tui le duoshao shijian?
3SG push cart push ASP how.much time
“How long did s/he push the cart?”
b. *ta yong le duoshao shijian dui che?
3SG use ASP how.much time push cart
“How long did s/he push the cart?”
c. ?ta ba che tui dao Niu Yue dui le duoshao shijian?
3SG BA cart push arrive New York push ASP how.much time
“How long did s/he push the cart until s/he pushed the cart to New York?”
d. ta yong le duoshao shijian ba che dui dao Niu Yue?
3SG use ASP how.much time BA cart push arrive New York
“How long did it take him to push the cart to New York?”

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.

4.2. Functional Projection

It is argued that it is not the verb that determines the aspectual classification of the event, but the arguments of the verb and their position in the syntax that determine the classification (Borer 1994, 1996; Ritter & Rosen 2000; Tenny 1992, 1994; van Voorst 1988). There is a relationship between the terminal point of a delimited event and the direct object (Tenny 1992, 1994; van Voorst 1988), and the initiation point (the participant responsible for launching the event) is related to the subject (van Voorst 1988). Borer (1994, 1996) points out that the argument-oriented approach (semantics) of event structure by Tenny and van Voorst fails to explain the relationship between the subject and initiation and the relationship between the object and delimitation. He thus proposes a syntactic approach to address the relationships and argues that the clausal functional projections (FP) determine the event structure of a sentence, and that NPs receive both Case and event roles in the **Specifier** position of these functional projections.

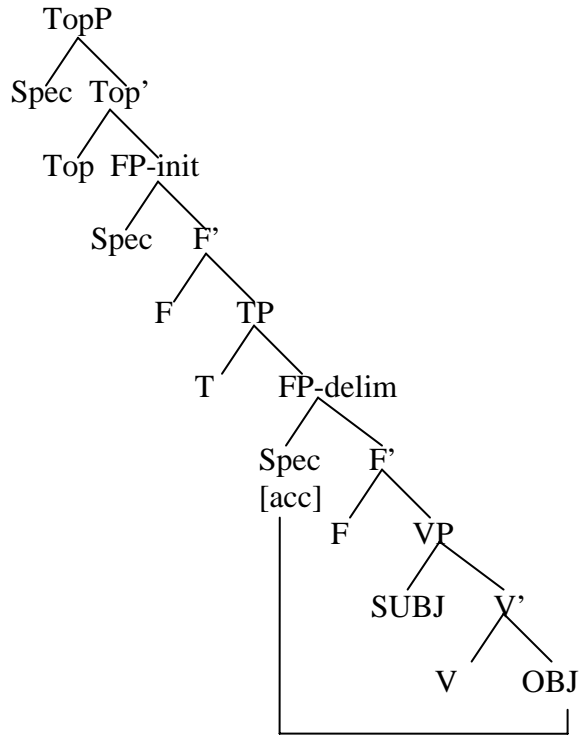
Borer (1994, 1996) proposes that there are two optional aspectual projections (Asp_EP and Asp_PP) dominating VP, which decides the eventive interpretation of predicates and their arguments. When Asp_EP is projected, a ‘result’ argument fills [Spec, Asp_E] and an accusative Case is assigned in this position. Thus, accusative Case is only available when the predicate denotes a delimited event (i.e., accomplishment or achievement). When Asp_PP is projected, a “process” argument fills [Spec, Asp_PP], but it does not get a nominative Case. The nominative Case is assigned in [Spec, TP] (i.e., activity). Borer hypothesizes that the interpretation of the event structure is determined when the FP is “activated”, i.e., when the Spec position of an eventive functional projection is filled.

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_pP) or FP-delim (Asp_EP) 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 this analysis.

- (44) a. Tom ba neige pingguo chi le.
 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."

When the NP *neige pingguo* "that apple" stays in the VP (44b), it gets the inherent accusative case, and sentence is not delimited. When the NP moves out the VP to the [Spec, FP-delim] position, it gets the accusative case checked by FP-delim. The sentence is a delimited event. However, the BA construction is much more complex than the one presented here. The complexity will be seen and explored in the next section.

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, we will analyze the syntactic category of BA in the construction.

4.3.1. Delimitedness of the BA Construction

The BA construction has certain aspectual restrictions. It is bounded and has a clear endpoint. It has a telic, or resultative, reading; namely, the construction has to be an achievement or accomplishment, which means that the BA construction is a delimited structure, or D-language as called in Ritter and Rosen (2000).

- (45) a. Tom tui chezi.
Tom push cart
“Tom pushes carts.”
- b. *Tom ba chezi tui.
Tom BA cart push
- c. Tom tui-zou le chezi.
Tom push-away ASP cart
“Tom pushed the cart away”.
- d. Tom ba chezi tui-zuo le.
Tom BA cart push-away ASP
“Tom pushed the cart away.”

As seen in the above example, (45a) is not delimited, and the counterpart of the BA construction (45b) is ungrammatical. (45c) has a delimited reading, and the counterpart of the BA construction (45d) is grammatical. This shows that the BA construction can only be used in delimited events. One more example is shown in (46).

- (46) a. *Tom ba men ti.
Tom BA door kick
(Intended meaning “Tom is kicking the door.”)
- b. *Tom ba men ti le.
Tom BA door kick ASP
(“Intended meaning “Tom kicked the door.”)
- c. Tom ba men ti le liang-jiao.
Tom BA door kick ASP two-foot
“Tom kicked the door twice.”

In Mandarin, *ti* “kick” is an activity, and has no endpoint, thus (46a) is not acceptable. By simply adding a perfective aspectual particle *-le* in (46b), the sentence is still ungrammatical because there is still no endpoint. However, in (46c), by adding a quantitative phrase *liangjiao* “twice”, the sentence has an interpretation of accomplishment, so it is grammatical.

Ritter and Rosen (2000) have also pointed out that some verbs only get the delimited reading when they are used in the BA construction.¹⁰ For example, it is grammatical to say *chi pingguo* “eat apple” in both a BA construction and a non-BA construction.

- (47) 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.”

However, (47a) is non-delimited, and (47b) is delimited, because it is hard to tell from (47a) whether Tom has finished the apple or whether there is still some part of the apple left. By reading (47b), we know for sure that the apple was finished.

The distinction of “in X time” and “for X time” phrases in delimited and non-delimited structures also applies for the BA construction. As mentioned in section 4.1, the counterparts to “in X time” and “for X time” are two VPs in Mandarin: *yong le X shijian* and *V le X shijian*. All the BA constructions can be modified by *yong le X shijian* “in X time”, but not *V le X shijian* “for X time”; all the non-BA sentences can appear with *V le X shijian* “for X time”. Although *yong le X time* can also be used with the non-BA sentences sometimes, we have discussed the meaning of the phrase in the sentence, which is somewhat different from “in X time”.

- (48) Quantitive phrase
 a. Tom yong le yi fenzhong ba men ti le liang-jiao.
 Tom use ASP one minute BA door kick ASP two-foot
 “Tom kicked the door twice in one minute.”
 b. *Tom ba men ti le liang-jiao ti le yi fenzhong.
 Tom BA door kick ASP two-foot kick ASP one minute
 (Intended meaning “Tom kicked the door twice in one minute.”)

¹⁰ The claim is valid, but the example given by using *sha* “kill” is not very acceptable. The reason for the unacceptance is because the word *sha* “kill” is a telic verb, and has a strong interpretation of an endpoint.

- 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 qiaokeli* “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.”

4.3.3. Affectedness of the BA NP in the BA Construction

The BA NP can be a theme, goal, instrument or location argument of the verb following it, but it has to be the NP that is affected by the action of the verb. In the following example, *zi* “character” is the theme of the verb *xie* “write”, while *heiban* “blackboard” is the location, and both of them can be used in the BA construction.

- (53) a. Dave ba zi xie zai-heiban-shang
 Dave BA character write on-blackboard
 “Dave wrote the character(s) on the blackboard.”
 b. 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
(Intended meaning “Tom hates the thief.”)
c. Tom ba wenti xiang qingchu le.
Tom BA issue think clearly ASP
“Tom has got a clear understanding of this issue.”
d. *Tom ba wenti xiang le.
Tom BA issue think ASP
(Intended meaning “Tom thought about this issue.”)

Hen “hate” (in 57a, b) is an emotion verb, and *xiang* “think” (in 57c, d) is a cognition verb. Both types of verbs are states, and cannot be used in the BA construction because of nondelimitedness (57b, d). However, (57a) and (57c) are grammatical. Comparing the four sentences, we see that the two grammatical sentences both involve a resultative postverbal constituent (Sybesma 1999). The resultative postverbal constituents denote that the BA NP is also “affected”. Thus, the criteria for “affectedness” is not restricted to physical affectedness; it also involves resultative postverbal constituents. We argue that meeting one of the two criteria, the NP is affected.

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 verb¹¹. NPs are affected when that are physically affected or affected by involving resultative postverbal constitutes.

¹¹ 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.”

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

b. Ta dao-sao-le fangjian.
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.

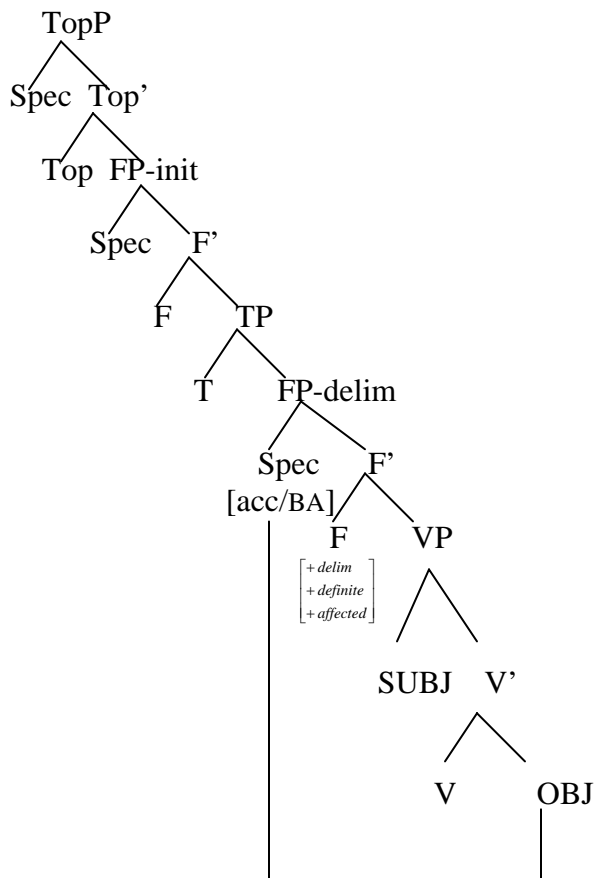
This assumption is supported by Borer's (1994, 1996) and Ritter and Rosen's (2000) proposal that event structure is grammaticalized through function projections (FP) dominating the predicate. Ritter and Rosen, following Borer, argue that there are two FPs (initiating FP and delimiting FP), and when either 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:

$$\begin{bmatrix} + \textit{delim} \\ + \textit{definite} \\ + \textit{affected} \end{bmatrix}$$

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

- | | | | |
|--|--|--|--|
| (60a) chezi | (60b) yi-kui qiaokeli | (60c) pi | (60d) Sonya |
| $\begin{bmatrix} - \textit{delim} \\ + \textit{definite} \\ + \textit{affected} \end{bmatrix}$ | $\begin{bmatrix} + \textit{delim} \\ - \textit{definite} \\ + \textit{affected} \end{bmatrix}$ | $\begin{bmatrix} + \textit{delim} \\ + \textit{definite} \\ - \textit{affected} \end{bmatrix}$ | $\begin{bmatrix} + \textit{delim} \\ + \textit{definite} \\ - \textit{affected} \end{bmatrix}$ |

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, it is always the theme argument that moves out of the VP, and the goal argument stays in the VP.

- (61) a. Dave gei le Sonya shi-kuai qian.
 Dave give ASP Sonya ten-dollar money
 “Dave gave Sonya ten dollars.”
 b. Dave ba shi-kuai qian gei le Sonya.
 Dave BA ten-dollar money give ASP Sonya
 “Dave gave ten dollars to Sonya.”
 c. *Dave ba Sonya gei le shi-kuai qian.
 Dave BA Sonya give ASP ten-dollar money.
 (Intended meaning “Dave gave ten dollars to Sonya.”)

If we follow our discussion, (61b) is grammatical because the features of *shikuai qian* “ten dollars” agrees with the features of FP-delim.

shi-kuai qian

$$\begin{bmatrix} + \textit{delim} \\ + \textit{definite} \\ + \textit{affected} \end{bmatrix}$$

(61c) is ungrammatical because the features of Sonya do not match the features of FP-delim.

Sonya

$$\begin{bmatrix} - \textit{delim} \\ + \textit{definite} \\ - \textit{affected} \end{bmatrix}$$

As we can see, the reason why the goal argument stays in the VP is that it does not denote delimitation, neither is it affected by the verb.

Based on Event Structure (Vandler 1967; Tenny 1992, 1994) and the functional projection analysis of event structure (Borer 1994, 1996; Ritter & Rosen 2000), the BA construction can be satisfactorily accounted for in terms of its delimitedness property and the claim that BA is a Case marker. The syntactic representation of the BA construction as an eventive structure supports that BA is an accusative Case marker because [Spec, FP-delim] assigns an accusative Case to the argument which moves to the position.

5. Conclusion

This paper has explored the characteristics of the BA construction, and analyzed the grammatical status of BA. We have discarded the claim that BA is a verb because (1) the negation in front of the BA phrase is not to negate the BA NP, while a negation in front of a VP is always to negate the VP; (2) negative morphemes are allowed to appear in front of two VPs in a sentence, but not allowed between the BA phrase and the VP; and (3) BA cannot stay alone; for example, it cannot answer a yes/no question, while verbs can.

We have also investigated why BA is not a preposition either. The BA phrase is different from a PP in that (1) Mandarin allows two preverbal PPs, not two BA phrases; (2) the BA phrase obligatorily appears in a preverbal position, while a PP can appear preverbally, postverbally, and sentence-initially; (3) the BA phrase cannot behave as the subject of a sentence, while a PP can; (4) BA is not a Case assigner, while a

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 [+delim, +affected, +definite] for delimited event can be moved out of the VP to the [Spec, FP-delim] position, we argue that the argument also takes an overt accusative Case marker BA, which is checked by FP-delim, when they move out of the VP.

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