THE BA CONSTRUCTION AND EVENT STRUCTURE[*]

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This paper provides a syntactic-semantic analysis of the BA construction on the basis of Event Structure (Vendler 1967; Dowty 1979; Tenny 1992, 1994) and Functional Projection Hypothesis (Borer 1994, 1996; Ritter & Rosen 2000). 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.
         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."

In (1a), BA together with the object of the verb appears in a preverbal position. The sentence has a focus interpretation of the NP after BA[1], and a delimited reading that the apple is finished. (1b) does not emphasize the NP following the verb, and the sentence means either that the apple is finished or that there is still some apple left. The complexity of the structure is not limited to the above two examples. A schematic representation of a BA construction is [NP + BA + NP +V +X], in which X could be an aspectual marker, a resultative complement, a directional complement, a duration phrase, etc.

There have been four major proposals about the grammatical status of BA: BA is a verb, a preposition, a Case assigner, or a Case marker. This paper will support the argument that BA is an overt ACCusative Case marker.

1.   BA as a Verb

Some linguists argue that the BA phrase (BA with the NP following it) is a verb phrase (VP) (e.g., Ding 2001; Rhys 1996; T. Tang 1986; S. Yang 1995). The following subsections will investigate their arguments one after another.

1.1   Historical Trace

The etymological meaning of BA as "to hold" and "to take" can be traced to as early as the 5th to the 3rd centuries B.C (e.g., Bennett 1981; Xing 2003; S. Yang 1995). 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.

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[1] The NP after BA will be referred to as BA NP thereafter.

(2)   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. In a study of grammaticalization of twenty-five Chinese verbs, including BA, Xing (2003) proposes that all the verbs have undergone three stages of syntactic and semantic change. In the case of BA, in the first phase the etymological meaning "to hold something in one's hand" (3a) changed to a more general meaning "to take something or somebody", facilitated by a directional complement (3b). In the second phase, the physical action meaning was fading (3c). In the last phase, the physical action meaning is completely lost, and the grammatical meaning is well developed (3d).[2]

(3)   a.   Bi   gong   ba   xiao yue
            name revered   hold small weapon
            'The revered Mr. Bi held a small weapon.'
                                              (1st century BC, *Shiji*, p. 20)

      b.   Qu   ba   na   feng shu   lai
            go   hold/take   that Cls   letter come
            'Go to get that letter.'
                                              (7th century, *Bianwen*, p.564)

      c.   huan ba   shen.xin   xi   shi   zhi
            again take body.heart carefully examine   3rd person
            'carefully examine his heart and body again'
                                              (7th century, *Bianwen*, p.583)

      d.   Baoyu mang ba   Xiangyun   chou le   yi.yan
            name busy BA   name   look Asp   one.eye
            'Baoyu quickly took a look at Xiangyun.'
                                       (17th century, *Hong Lou Meng*, p.230)
                          (Adapted from Xing 2003, p.123-126, her (10a, 10c, 14, 18))

Xing categorizes BA as a preposition after grammaticalization, but she does not account for why it is a preposition, not another functional category.

1.2   Negation of the BA Construction

Ding (2001) argues that BA is a verb because a **Neg**ative morpheme is placed right before BA. Ding observes 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, illustrated in (4) and (5) (Ding 2001, p. 118-119; his (24) & (25)):

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

(4)   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.'

(5)   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.
                child Neg   BA   cake   eat   finished
                'The child(ren) has(have) not eaten up the cake(s).'

        c.   *Haizi   ba   dan'gao   mei(you)   chi   guang.
                child   BA   cake   Neg   eat   finished
                'The child(ren) has(have) not eaten up the cake(s).'

However, the distinction between the position of negation in the BA construction and in a sentence with a preverbal PP can only suggest that BA does not behave like a preposition. It cannot be used as evidence to support that BA is a verb.

1.3   Verbhood Tests

One way to form a general question in Chinese is to duplicate a word with a negation between them. For example,

(6)   ni   qu-bu-qu   tushuguan?
        you   go-Neg-go   library
        'Are you going to the library?'

According to S. Yang (1995) and Rhys (1996), the copied form is a test to see whether a word is a verb or not. BA can be used in the BA-Neg-BA form with either *bu* or *mei*, as seen in (7a, b) although it may not apply to every verb.[3] So these linguists claim that the BA construction is a VP.

(7)   a.   Ni   ba-bu-ba   shu   gei   ta?
                you   BA-Neg-BA book   give   3SG
                'Are you giving the book to him/her?'

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[3] Y. A. Li (1990) does not accept the grammaticality of BA-Neg-BA. In this paper, we will accept its grammaticality, but will see that it is not an appropriate verbhood test.

b. Ni   ba-mei-ba   shu   gei   ta?
    you   BA-Neg-BA   book   give   3SG
    'Have you given the book to him/her?'

However, the duplicated form is not a proper verbbood test. Besides *ba* 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 general A-Neg-A question form.

(8) a. 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."

     b. A as an adjective
         Jintian   tianqi   hao-bu-hao
         Today   weather   good-Neg-good
         'Is today's weather good?'

     c. A as an adverb
         Tom   jing-bu-jingchang   qu   tushuguan?
         Tom   often-Neg-often   go   library
         'Does Tom often go to the library?'

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 (Tian 2006). Therefore, we have to apply other diagnostic tests. We will look at the answer to a general question first. The content word is used to answer such questions. In the case of a verb as a content word, "(Neg) verb" is the form to answer a yes/no question.

(9) a. Tom   dao-mei-dao?   b.   Dao   le./Mei   dao
         Tom   arrive-Neg-arrive   arrive Asp/Neg   arrive
         'Has Tom arrived?'   'Yes/No.'

However, the answers to a general question of the BA construction are never "BA" or "Neg BA"; on the other hand, it is always the verb.

(10) a. Tom   ba-mei-ba   shu   gei   ta?
          Tom   BA-Neg-BA   book   give   3SG
          'Has Tom given the book to him/her?'

      b. Gei   le.   /Mei gei.
          give   Asp   /Neg give
          'Yes/No.'

      c. *Ba   le.   /*Mei ba.
          BA   Asp   /Neg BA

The above test shows that BA is not a full verb. Then, there is suspicion as to whether BA is similar to a causative verb, which cannot be used to answer a general question either, such as *shi* and *ling* "cause, make".

(11) a.   Tom shi   ni   shang.xin   le   ma?
            Tom cause you hurt.heart Asp Q-marker
            'Did Tom make you sad?'

      b.   Shi   de.[4] /Meiyou.
            Be   De /Neg
            'Yes./No.'

      c.   *Shi le.   /*Mei shi
            cause Asp   /Neg cause

      d.   *Shang.xin le.   /*Mei shang.xin.
            hurt.heart   Asp   /Neg hurt.heart

However, a close scrutiny reveals that BA and *shi/ling* do not behave alike. An answer to a general question of the BA construction is always the verb following the BA phrase, as in (10b). Whereas neither *shi/ling*, as in (11c), nor the other verb, as in (11d), can answer a general question of the causative sentence. This contrast demonstrates that BA is different from causative verbs.

Another test is a negation test. Mandarin allows two VPs in a sentence. A negative morpheme can precede either VP or even both VPs, as seen in (12).

(12) 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.'

      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 (12b), it is the verb *jiao* "to call" that is negated; in (12c), it is the verb *lai* "to come" that is negated; and in (12d) where the negative morphemes appear twice, both *jiao* "to call" and *lai* "to come" are negated. When looking back to example (5), we see that a negative morpheme can only appear before BA, not

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[4] *Shi* in (11b) has a fourth tone, meaning "be". It is different from *shi* in (11a), which is a third tone and denotes a causative meaning.

before the verb following the BA phrase. In addition, a negative morpheme cannot appear twice, namely, before BA and before the verb (13).

(13) *Haizi.men mei   ba   dan'gao   mei   chi   guang.
      child.pl.   Neg BA   cake   Neg   eat   finished
      (Intended meaning 'The children have eaten up the cake(s)."')

The different behavior between the BA construction and a sentence with two VPs suggests that the BA construction does not consist of two verb phrases, and BA is not a verb. It also leads us to a conclusion that [BA NP V X] as a whole is a constituent, and [BA NP] and [V X] are not two constituents.

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

2.   BA as a Preposition

Some linguists argue that BA is a preposition (Y. A. Li 1990, 2006; K. Mei 1972) because the BA phrase behaves the same as a preverbal PP in the following three ways. First, the negation of a sentence with a preverbal PP and of the BA construction precedes the PP (14) or the BA phrase (15).

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

(15) Tom **mei**   ba   shu   gei   ta.
      Tom **Neg** BA   book give 3SG
      'Tom didn't give the book(s) to him/her.'

      Second, similar to the answer to a general question of the BA construction, the answer to a general question of a preverbal PP sentence adopts the verb, rather than the preposition (16).

(16) a.   Tom zai-mei-zai-zhuozi-shang xie   zi?
               Tom on-Neg-on-desk   write character
               "Did Tom write characters on the desk?'

      b.   Xie   le.   /Mei xie.
               write Asp   /Neg write
               'Yes/No.'

      c.   *Zai le.   /*Mei zai.
               on   Asp   /Neg on

Thirdly, Y. A. Li (1990) argues that BA is a preposition because the BA phrase can be coordinated with a PP, as seen in (17).[5]

(17) 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))

According to Y. A. Li (1990), *you ... you* "and … and" is a coordination marker, requiring that the coordinated elements be of the same lexical category. Since the coordinated constituents have to be in the same category, it will not be surprising to expect to see that the sentence is still grammatical if the two constituents switch the order. If both marginally acceptable sentences in (17) had coordinated PPs, the sentences would still be acceptable when we change the order of the two PPs.

(18) a.   *Ni   you   gen   ta   you   wei   ta   jie
            qian,   shi   sheme yisi?
            you   and   from   3SG   and   for   3SG   borrow
            money,   be   what   meaning

      b.   *Ni   you   ba   ta   you   wei   ta   qiang qian,
            shi   sheme yisi?
            you   and   BA   3SG   and   for   3SG   rob   money,
            be   what   meaning

Both sentences become ungrammatical when we do so. Therefore, even the two PPs in (17a) are not in a coordinated position, so Y. A. Li's (1990) evidence to claim that the BA phrase is a PP is problematic. In addition, the similarity between the BA phrase and a preverbal PP is not sufficient to lead to a conclusion that BA is a preposition.

The BA phrase does not have some features that PPs have. In Mandarin, there can exist more than one preverbal PP, as seen in (17a). However, it is not

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

possible for a sentence to have more than one BA phrase (Ritter & Rosen 2000). In (19b), having two BAs preceding two NPs separately is not acceptable.

(19) a. Wo   ba   yanjing   he   maozi diu   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

Secondly, when a PP appears preverbally, a position where BA appears, it has the semantics of an adverbial, and is not an argument of the verb, as is BA.

(20) 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 dealership.'

      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 dealership.'

In both sentences, the preverbal PP *zai chehang* "at the car dealership" does not get a thematic role, but the BA phrase in (20b) is a theme argument of the verb *mai* "sell". The PP *gei wo* "to/for me" may also appear before the verb; however, both the meaning of the sentences and the role of the PP are changed.

(20) c. Ta   zai   che.hang   gei   wo   mai   chezi le.
          3SG   at   car.office   for   me   sell   car   Asp
          'S/he is selling cars for me at my car dealership.'

      d. Ta   zai   che.hang   gei   wo   ba   chezi mai   le.
          3SG   at   car.office   to   me   BA   car   sell   Asp
          '"S/he sold my car for me at the car dealership.'

The PP *gei wo* "to/for me" is a goal argument in both (20a) and (20b), but is not an argument of the verb when it appears before the verb (20c) and (20d). However, the preverbal BA phrase is always an argument of the verb following it. This leads us to a conclusion that BA is not a preposition.

3.   BA as a Case Marker

This section will investigate the following issues: (a)What is the BA phrase in relation to the verb following it? (b)What is BA in relation to the NP following it? (c)What are the special features of the BA construction? and (d)What role do these special features play in the derivation of the BA construction?
      Before moving 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 proposed by Borer (1994, 1996) and Ritter and Rosen (2000).

3.1   Event Structure

Vendler (1967) and Dowty (1979) classify 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. Activities are durative; they relate to processes, but they are atelic, meaning there is no inherent endpoint. Both accomplishments and achievements are telic, but they differ in that accomplishments are developments, while achievements are punctual occurrences. Some examples of the four aspectual classes of verbs are given as follows (Dowty 1979; Tenny 1992; Vendler 1967):

(21)   Examples of verbs of the four aspectual classes
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 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" is atelic; but "walk home" is telic because it has an inherent endpoint. Tenny (1992, 1994) has found that all telic predicates ("delimited" in her terminology) 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)),

(22)   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 (22a) is nondelimited, and (22b) 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 is to see if the phrase "in X time" can be attached to the sentence (Dowty 1979; Vendler 1967; Dahl 1981). Since sentences with a delimited reading have an endpoint, they can be used with "in X time"; while nondelimited events are related to a period of time, so the nondelimited sentence can only take "for X time". To explore the Mandarin phrases equivalent to "in X time" and "for X time", we can go back to how Vendler (1967) and Dowty (1979) distinguish the two phrases. "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:

(23) 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   tui   che?
          3SG   use   Asp   how.much   time   push   cart

      c. *Ta   ba   che   tui   dao   Niu   Yue   tui   le
          duoshao   shijian?
          3SG   BA   cart   push   arrive New   York   push   Asp
          how.much   time

      d. Ta   yong   le   duoshao   shijian   ba   che   tui
          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?'

      e. Ta   ba   che   tui   dao   Niu   Yue   yong   le
          duoshao   shijian?
          3SG   BA   cart   push   arrive New   York   use   Asp
          how.much   time
          'How long did it take him to push the cart to New York?'

(23a) is a proper question to ask about nondelimited events. A verb phrase repeating the main verb to lead *duoshao shijian* "how much time" is the appropriate form. Sentences (23d, e) ask questions about delimited events. A verb phrase *yong le duoshao shijian* "use how much time" is adopted to ask this type of question. The two verbs phrases will be used in the later section to explore the eventiveness of the BA construction.

3.2   Functional Projection

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 is related to the subject (van Voorst 1988). Borer (1994, 1996) proposes a syntactic approach to address the relationships and argues that Aspectual projections (AspP), or the clausal functional projections (FP), determine the event structure of a sentence. 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 only necessary to activate either FP-initiation ($Asp_{OR}P$) or FP-delimitation ($Asp_{EM}P$). They identify two classes of languages: Delimitation (D-) language and Initiation (I-) language. D-language, including English, Finnish, Mandarin, and Haitian Creole, requires that a predicate is eventive if and only if it is

delimited. I-language, including Icelandic, Irish, and Japanese, requires that a predicate is eventive if and only if it has an initiator. For D-language, the delimiting object moves to [Spec, F-delim], identifies the delimiter of the event and receives ACC checked by FP-delim, and the non-delimiting object remains inside the VP and receives inherent Case.

3.3   Features of the BA Construction

3.3.1 Delimitedness of the BA Construction

The BA construction has certain aspectual restrictions. It is bounded and has a clear endpoint; namely, the construction is a delimited structure.

Tui "to push" in Mandarin is an activity, and cannot be used in the BA construction alone (24a). By including a goal argument, such as *dao hou.yuan* "to the backyard" (24b), or some other resultative expression, such as *zou* "away" (24c), the sentence has an endpoint and is grammatical.

(24) a.   *Tom ba   chezi tui.
             Tom BA   cart   push
             (Intended meaning 'Tom pushed the cart.')

      b.   Tom ba   chezi tui   dao   huo.yuang   le.
             Tom BA   cart   push   arrive back.yard   Asp
             'Tom pushed the cart to the backyard.'

      c.   Tom ba   chezi tui-zou   le.
             Tom BA   cart   push-away   Asp
             'Tom pushed the cart away.'

The BA construction can also pass the delimitedness test, "in X time" versus "for X time".

(25) a.   Tom yong le   wu   fenzhong   ba   che tui-zou le.
             Tom use   Asp five   minutes   BA   cart push-go Asp
             'Tom pushed the cart away in five minutes.'

      b.   *Tom ba   che   tui-zou   tui   le   wu   fenzhong.
             Tom BA   cart   push-go   push Asp five   minute

The BA constructions can be modified by *yong le X shijian* "in X time" (25a), but not *V le X shijian* "for X time" (25b).

3.3.2 Referentiality of the BA NP in the BA Construction

Mandarin NPs are not always clearly marked for definiteness. A bare NP can be used to refer to an indefinite, a definite, a singular, a plural, or a generic noun, depending on the context. The indefinite NP in Mandarin can refer to either a specific NP or an unspecific NP. For example, "an apple" can mean any apple

or a particular apple. Li and Thompson (1981) refer to specific NPs as "something particular that the speaker has in mind but about which the hearer does not necessarily know", and refer to definite NPs as "something about which the speaker believes the hearer knows" (p. 465).

(26) a.　Dave　ba　yi-kuai　qiaokeli　gei　le　Sonya.
　　　　　Dave　BA　one-bar　chocolate　give　Asp　Sonya
　　　　　'Dave gave Sonya a bar of chocolate.'

　　　b.　Dave　ba　tade　qiaokeli　gei　le　Sonya.
　　　　　Dave　BA　his　chocolate　give　Asp　Sonya
　　　　　'Dave gave Sonya his chocolate.'

So long as the BA NP is specific, it can be used as the BA NP (a detailed discussion of this matter may also be found in Sybesma 1999). The often-used concept of "definiteness" is not appropriate to restrict the BA NP. The definite, or the specific indefinite NPs are all "referential" NPs, meaning that they are NPs referring to particular NPs that the speaker knows clearly in mind when s/he utters the sentence. The fact that a bare NP in the BA construction can only be interpreted as a definite NP suggests that delimitedness takes precedence over referentiality of the NP in the BA construction.

3.3.3 Affectedness of the BA NP in the BA Construction

The BA NP has to be the NP that is affected by the action of the verb. Tenny (1987) relates affectedness to "change of state". In (27), *zi* "character" is the theme of the verb *xie* "to write", while *heiban* "blackboard" is the location, and both of them can be used in the BA construction.

(27) 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.'

　　　Affectedness does not necessarily imply that the NP has to be "physically" affected (Li & Thompson 1981, p.474). The semantics of disposal can be added when there is some postverbal constituents to achieve the disposal effect.

(28) 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

Hen "hate" is an emotion verb, and cannot be used alone in the BA construction because of nondelimitedness (28b) However, (28a) is grammatical because it involves a resultative postverbal constituent (Sybesma 1999), which denotes that the BA NP is also "affected" to reach an "affected" state. To be more explicit, in (28b), although Tom hates the thief, the thief is not affected by Tom's hating him/her, so the sentence is not acceptable. However, the addition of a resultative component in (28a) indicates that Tom hates the thief so much that he would rather the thief dies, or that Tom hates the thief to such an extreme extent that the thief will be affected (at least Tom hopes so).

The examples in this subsection reveal that the BA NP is always "affected" by the verb phrase following it. The "affectedness" is not restricted to physical affectedness; it may also involve resultative postverbal constituents, as suggested by Li and Thompson (1981), Sybesma (1999) and Y. A. Li (2006). Both types of affectedness involve "change of state".

To summarize the features of the BA construction, the predicate has to bear an aspectual property of delimitedness. Besides the delimitedness, the BA NP has to be referential and affected by the verb phrase.

3.4 The Phrase Structure of the BA Construction

Ritter and Rosen (2000) suggest that Mandarin is a D-language and BA may be an overt realization of accusative Case checked by FP-delim. Based on the FP analysis of event structure, we support Ritter and Rosen's (2000) argument that BA is the accusative Case associated with the [Spec, F-delim] position.

(30) Phrase Structure of the BA construction (based on Ritter & Rosen 2000)
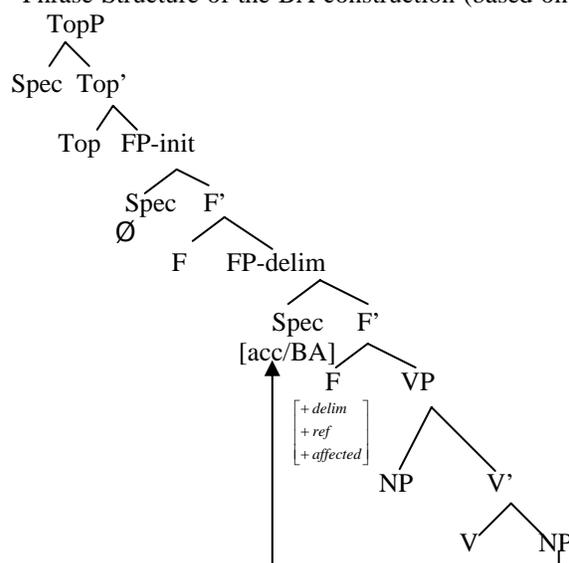
When FP-delim is not projected, there is no BA construction. When FP-delim is projected, BA checks the delimitation features and denotes a delimited event. As discussed earlier, it is always the argument that measures out the event that is moved out of the VP; this means that the delimiting argument has an abstract feature [+delim] (Ritter & 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, F-delim] position and be checked ACC.

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

The ungrammaticality of the BA sentences we have seen before can be explained by our analysis. They are ungrammatical because they do not meet all the three requirements of the FP-delim. It is the failure of the feature agreement that leads to the unacceptability of the sentences of the BA construction.

When revisiting the question why there is only one BA phrase in the BA construction, our proposal can provide a satisfactory answer as well. Because there is only one FP-delim dominating the VP, the affected arguments can take only one Spec position.

4.   Conclusion

This paper has explored the special features of the BA construction and argues that the BA NP has to meet the requirements of [+delim, +ref, +affected]. These features play a significant role in the derivation of the BA construction, because the feature agreement selects the appropriate NP to raise to the Spec postion of the FP-delom for Case checking. BA is, as suggested by Ritter and Rosen (2000), an overt ACC Case marker. It only surfaces when FP-delim is projected. In terms of the relation between the BA phrase and the verb following it, the BA phrase can be either the direct internal argument of the verb or some other arguments, such as location, goal, instrument, etc. It may be even the subject of a small clause within the VP. Although there seem to be many possibilities in terms of what the NP actually is, the BA NP has to be the one that the verb c-commands.

The paper has also visited the claims that BA is a verb, a preposition and a Case assigner. By explicitly discussing the problems of the arguments that BA belongs to a grammatical category other than Case, the paper has provided sufficient evidence to discard these claims.

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