

A UNIFIED ANALYSIS OF THE BA-CONSTRUCTION

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1. INTRODUCTION

The Ba-construction has been widely discussed by linguists studying Mandarin. The reason for this is partly due to its structural deviation from the canonical SVO word order in Chinese (Zou 1995; Norman 1988; Goodall 1987; Cheng 1986; Tsao 1987; Wang 1987; Li 1990; Sijbesma 1992) and is partly attributable to some syntactic and semantic constraints imposed on its verb and other components. The word order of the canonical Ba-construction is SOV as is shown below in (1).

- (1) Ta ba shui he .le.
He ba water drink. Asp¹
“He has drunk the water.”

In (1), the Ba-DP shui ‘water’ is the logical object of the verb he ‘drink’ but in the surface structure, it is in the preverbal position, which is different from the canonical SVO order as is exemplified in (2).

- (2) Ta he .le shui .
He drink. Asp water
“He has drunk water.”

Besides the word order, the Ba-DP in (1) also has a specific/definite reading while in (2), the DP shui ‘water’ is not necessarily specific or definite.

However, the Ba-construction is not limited to this type. There are some other types which have made the analysis of the Ba-construction more complicated. According to Zou (1995), Ba-constructions can be grouped into four types. They are the objective Ba-construction, the causative Ba-construction, the locative Ba-construction and the instrumental Ba-construction. I have also included other types of Ba-constructions like Adverb Ba-constructions, Zhe Ba-constructions as well as Negative Ba-constructions. So far, no satisfactory syntactic analyses have been presented. In this paper, I first review different approaches to the Ba-construction (2.1). Then my analysis of the status of Ba is presented (2.2). Also, the reanalysis of Ba-constructions (Section 3) is provided, which includes the properties of Ba-construction (3.1), and the syntax of Ba-constructions (3.2). Finally, conclusion is drawn (Section 4).

2. PREVIOUS APPROACHES

2.1 The different approaches to the Ba-construction

For scores of years the function of the Ba-construction in Modern Mandarin has been studied and analyzed from different perspectives by linguists working with different theoretical frameworks. They can be grouped together into the disposal analysis, topic-comment approach, and syntactic analysis as indicated below.

The disposal analysis (L. Wang 1945) is probably the earliest analysis of the Ba-construction. It studies what effect the action expressed by the verb has on the referent denoted by the Ba-DP. According to Wang, the function of the Ba-construction is to express a sense of disposal: what has happened to X, or what Y did to X, where X is denoted by the object of Ba. This disposal analysis later came under the notion transitivity, first applied to the Ba-construction by Thompson (1973) and later by Hopper and Thompson (1980). On this view, the Ba-construction expresses a sense of transitivity, which refers to the effects of the action that pass from the agent to the patient. The

¹ Asp= aspect marker

disposal/transitivity analysis also appears in works such as H.Wang (1957), Hashimoto (1971) and Y. Li (1974), among others. However, this approach can't explain the data shown in (3).

(3) a) Ta ba ni henshi.le.

he/she Ba you hate.death.ASP
 "He/She hates you to death."

b) Ta ba huoche wu.le.
 he/she Ba train miss..ASP
 "He/She has missed the train."

(3a) can't be an appropriate answer to the question 'What did he/she do to you?' and neither is (3b) appropriate to the question 'What did he/she do to the train?' (Liu 1997: 53-54), in which case Y (ta) didn't affect the X (BaDPs: ni; huoche) at all. So apparently, this approach can't offer us a clear explanation to the sentences in (3).

The Topic-comment approach focuses on the information structure of the sentence. According to this analysis, the Ba-construction presents a clear distinction between the topic and the comment. It treats the initial DP in the Ba-construction as the regular topic and the Ba-DP as a secondary topic of a special kind. Details of this approach can be found in Tsao, Hsueh (1987). A related contrast also having to do with the information structure is found in Mei (1978). Liu (1997) argues that it is not clear at all how one can make a sharp distinction between the DP before Ba and the Ba-DP. In other words, it is hard to draw a line between the topic and comment or between proposition and focus. In addition, it can't explain the negative Ba-construction. That is to say it can't explain why the negator can appear in the position before the Ba-DP. Is the negator part of the topic or comment? Furthermore, this analysis has not shown us how the choice of a sentence over a regular transitive sentence is motivated in context.

The representative works of the syntactic approach are those of Koopman (1984), A. Li (1985, 1990) Travis(1984) and Zou(1995). It focuses on the syntactic properties of the Ba construction: How does a Ba sentence relate to an ordinary transitive sentence? Are Ba sentences derived from movement? What status does Ba have with respect to theta theory and case theory? Although the works cited above didn't give us a satisfactory explanation, they share one assumption: the Ba-DP position is a theta position, theta-marked by the matrix verb (Koopman:1984; A.Li :1985; Travis:1984). For example, according to Travis (1984), Ba functions to absorb the internal theta role and thus block the realization of the internal argument, in which case the internal argument has to move to the Ba-DP position to get its theta role. However, this only works with the Objective Ba-construction but not other types. Zou (1995) analyzed Ba as a functional head which triggers both verb movement and DP movement. Zou explains that the verb raising is driven by the morphological necessity that the inflectional features of the verb must be checked against the features of the aspect phrase and agreement phrase in the checking domain of the AgrP; the DP-movement is forced by the case filter. This analysis, however, does not work with the negative Ba-construction which will be discussed below.

Liu (1997) took an aspectual approach to the Ba-construction, in which he examined the restrictions on the Ba-DP and on the predicate. He noticed that the restrictions on the Ba-DP and the predicate are closely related. Liu's analysis is based on Krifka's (1989) proposal that nominal reference and events are linked by thematic relations. He argues that the Ba predicate describes a bounded event. Whether an event is bounded in Chinese may depend on situation type only, or it may depend on both situation type and the aspect a situation is presented in. The Ba-DP must be specific and thus boundedness and specificity are related. He argues that boundedness and specificity are different manifestations of the same property that is inherent in the meaning of a Ba predicate. Liu suggested that the Ba-DP should be treated as an argument assigned by the entire predicate including the aspect marker. In this way, the Ba-construction is a good example of how aspect constrains both the predicate and an DP argument in Chinese. Although Liu didn't analyze it from a syntactic point of view, his aspectual approach has shed much light on the present research.

2.2 The categorical status of Ba

Whichever approach linguists take to analyze the Ba-construction, the status of Ba is of the primary controversy of all. So far, there are basically five different analyses of Ba in the previous literature: 1) Ba is a lexical or matrix verb (Hashimoto 1971); 2) Ba is a preposition (Travis 1984; Cheng 1986; Li 1990); 3) Ba is an inserted Case marker (Huang 1982 & 1992; Koopman 1984; Goodall 1987); 4) Ba is an inserted dummy head of the causative phrase (Sijbesma 1992); and 5) Ba is a head of the functional category (Zou 1995).

There has been strong argument against the analysis of Ba as a lexical verb (Li:1990; Zou:1995; Wang:1999). Normally, verbs can pass the three verbhood tests: (a) A verb can be followed by *bu* or *mei* 'not', and then another verb. This is the verb-not-verb test. (b) A verb can take an aspect marker. (c) A verb can also be used as a simple answer to a question. Ba, however, fails all the three tests for verbhood. First, unlike other verbs, it can't occur in the Verb-not-verb question. Second, it can't take an aspect marker, which is a typical verbal feature. Third, it can't function as a simple answer to a question while other verbs can.² Therefore, it is evident that it is not a verb.

The second analysis treats Ba as a preposition (Li & Thompson 1981; Li 1990). Audrey Li's arguments mainly rely on the fact that Ba fails the test for verb-hood. Li and Thomson treat Ba for the same reason: if it is not a verb, then it is a preposition. This is because Mandarin prepositions can be labeled as verb-prepositions in that verb-prepositions behave like verbs and prepositions. However, there is no proof at all that Ba is a preposition. As is known, a typical feature of Mandarin prepositions is that they can be used as a stative verb which can appear alone without the copula but this is not the case with Ba. Another argument against the analysis of Ba as a preposition is that prepositions³ after the verb can be reanalyzed as part of the verbal phrase when it occurs after the verb as is shown in (4). But this will never happen to Ba as is exemplified in (5).

- (4) Wo dai.zai jia.li
 I stay.at home.localizer
 "I stay at home."
 (5) *Wo dai.ba jia.li.
 I stay.Ba home.localizer

Furthermore, I have both the semantic and phonological evidence to show that Ba should not be reanalyzed as a lexical word but as a grammaticalized affix-like functor. Also, there is strong semantic evidence that Ba has lost its independence as a lexical word and become a bound morpheme. Like all other dependent affixes, Ba has a neutral tone or doesn't receive stress at all. This means that Ba's underlying tone is not realized at all at the surface level. This is a typical feature of Chinese bound morphemes. In addition, just like a dependent morpheme, its position is fixed. Ba can only appear before a lexical word.

The third analysis treats Ba as an inserted Case marker (Huang 1982) which says that the Ba-DP is base-generated pre-verbally to assign abstract accusative case to the Ba-DP. This can't be true in that in terms of lexical case assigners, only verbs or prepositions may assign accusative case. Zou (1995:65) thinks it is dubious to treat Ba as a Case marker.⁴ Wang (1999) also provides strong arguments against the analysis of Ba as a case marker. According to Wang, this analysis implies no movement takes place at all in order to derive the Ba-construction in that Ba is base-generated pre-verbally. If so, there is no need at all for us to spend so much time trying to analyze the Ba-constructions at all, not to mention to explain the relationship between the verb and the Ba-DP. What is more, the Ba-DP is not always an object. Finally, according to the Minimalist Program (Chomsky 1995), case is checked in Spec positions of Agr Phrases or other functional projections in MP; there is no need for the Ba insertion at all. This is because an important characteristic of an inserted Case assigner is that it doesn't change the c-command relations between a DP it assigns Case to and other elements in the same sentence (Li, 1990; Zou 1995).

In the fourth analysis, Ba is regarded as an inserted dummy head of a causative phrase. Zou (1995) argues that because of the grammaticalization of the word Ba, it is no longer a lexical verb but instead it is a functional

² For more information, please refer to Li (1990) and Zou (1995).

³ For more reference, please refer to Li (1990).

⁴ For further information, please refer to Zou (1995).

category. According to Zou, Ba doesn't have any substantial meaning in the Ba-construction along the line of Cao (1968). Zou's further argument is that Ba behaves just like the English verb 'have'.

They all have a causative reading in certain structures. At first glance, it seems fine for Zou to analyze the status of Ba as a functional category which is base-generated before the VP. But as we read on, a problem shows up. If "Ba selects an aspect phrase or resultative phrase, then how can we explain the relationship between Ba and its DP? Also his tree diagram didn't give us a reasonable analysis of the negative Ba-construction. He puts the negation phrase below the functional Ba-phrase. And later the head of negation has to move to adjoin to the head of Ba-phrase. Although he argues that one of the factors for the present analysis is that nothing intervenes between the two, I don't see any reason for the raising of the negator at all. What's more, Ba and the negator can't form a constituent as his analysis indicates, which is indicated by the sentence in (6).

- (6) Ta mei yi jian yi jian de ba shiqing shuo.qingchu.
 he/she not one.CL. one CL.DE BA things speak clearly
 'He/She didn't account for everything clearly.'

On the contrary, I argue that Ba and its DP actually form a constituent that can't be separated from each other at all. According to the recent analysis of the English word 'have' done by Ritter and Rosen (1993, 1997), we can see that Ba is by no means the same as 'have'. According to the analysis of Ritter and Rosen, the lexical entry 'have' lacks semantic specification whose meaning is therefore derived from the syntactic structure. They classify the verbs that contribute no thematic information as FUNCTOR PREDICATES, which means that these verbs get their interpretation from their syntactic function, rather than from their lexical semantics. It is true that just like 'have', Ba is meaningless unless it appears in the Ba-construction and also it is true that Ba always takes a DP and verb after it like 'have', but what makes it different is that the Ba-DP can either be the subject or object of the verb following it but not the DP after 'have'. The DP after 'have' must always be the subject of the verb following it, which means that 'have' together with the rest of the constituents in the structure denote a single event. What's more, according to their analysis, the DP complement of 'have' can denote either a temporary state or a permanent property⁵, but this is not the same case with Ba. The major drawback for Zou's analysis is that his tree diagram can't give a unified analysis of all the Ba-constructions.

Now, the question arises as to what Ba is? In view of the above arguments, I argue that Ba in the Ba-construction can be reasonably analyzed as an affix-like functional head due to its affix-like status, which can best explain the formation of the present Ba-constructions. However, unlike Wang's analysis, in which Ba is treated as an affix in Spec of FP-delimitation, I propose that it is not just a morpheme but a functor head which selects a Ba-DP as its complement. I further argue that Ba has an uninterpretable feature, namely the definite or specific feature; and this feature must be checked in the spec of AspP, which triggers the Ba-DP movement prior to spell-out to the spec of AspP to check its definite or specific feature. This best accounts for why the DPs without the affix Ba don't move and can remain in situ as will be presented in detail in Section 3.

3. THE REANALYSIS OF BA-CONSTRUCTIONS

3.1 The properties of Ba-construction

Although there exists a lot of dispute as to the status of Ba in the Ba-construction, people are not so divided over the properties of Ba-constructions. They are the aspectual features of the related verbs and the specific or definite feature of the Ba-DP. It has been observed by many linguists (Hashimoto, 1971; Mei 1978; Lu 1984; Lu and Ma 1985; Cheng 1986 & 1988; Li 1990; Liu 1992; Sijbesma 1992; Zou 1995; Liu 1997) that the Ba-construction is closely related to the aspectual feature reflected on its verb. On most occasions, the verb in the relevant construction needs to take either the perfective aspect marker -le or the progressive marker -zhe (although it doesn't necessarily mean that the -zhe in this case has the same function as a progressive marker does). It is this feature that differentiates the Ba-construction from non Ba-constructions in which the aspect markers are optional.

The property of this aspect marker is that it delimits the event or action conveyed by the verb and presents

⁵ Please refer to Ritter and Rosen (1993) for further information.

a specific or definite situation (Li & Thompson 1981; Cheng 1988; Zou 1995; Liu 1997). In other words, the relevant perfective aspect indicates the completion of a specific action or closure of a definite event, while the progressive aspect signifies a change of state resulting from the completion of a specific action or from the closure of a definite event. Another piece of evidence for this analysis is from the causative reading of Ba-construction. It has been noticed that only delimited events permit causativization (Rosen: 1996). In addition to the aspect markers, the verbal structure of verb plus resultative word has been widely used to denote the telicity of a specific event. And this verbal structure is always perfect with Ba-construction. In a word, the Ba-construction is only acceptable when the event is delimited or bounded. And arguments also play a key role in the delimited events. This is perhaps why Ba-DP always has a specific or definite reading.

A typical feature is that the Ba-DP always has a definite or specific reading in contrast to the non-Ba counter-parts. The DPs in the non Ba-constructions are ambiguous. They can either have a definite DP. It has been noticed that DPs, especially the one in the object position, have a key role to play in the delimited event together with the aspectual feature of the verb (Ritter & Rosen: 1998; 2001). In the Ba-construction, the Ba-DP not only has this responsibility but also differentiates itself from the DPs in other constructions with this specific referential feature. It has been noticed cross-linguistically that the DP appearing before the VP in a delimited event always has a specific or definite reading after they have moved out of the original position. Ba-DPs are no exception to this.

3.2 The syntax of Ba-constructions

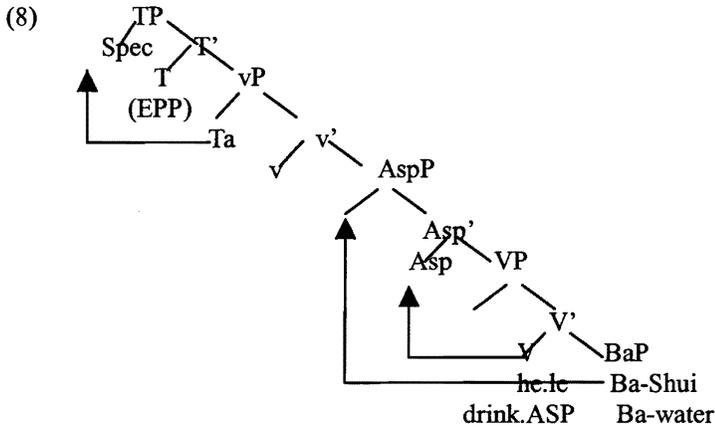
Because of the evident aspectual feature of the verb in the Ba-constructions, I propose that there is an aspect phrase in the structure and in accordance with the minimalist program, the verb has to move to check its aspectual, delimited or bounded verbal feature in the head of aspect phrase. Due to the specific or definite reading of the Ba-DP, I assume that there is a functional phrase namely BaP, in which Ba as a functional head has a formal feature of definiteness or specificity that can't be interpreted at its base level and has to move to the spec of AspP to check its specific or definite feature. And the DP selected by the Ba-head has to move together with Ba to the spec, AspP for the same reason: to check its specific or definite feature. This feature as we discussed above has a key role to play in the delimited or bounded event. Based on these assumptions, I will analyze the structures of all sorts of Ba-constructions in the following sections.

3.2.1 The analyses of the objective Ba-constructions

On the basis of the work done by other linguists, particularly, based on the research of Zou (1995), the objective Ba-construction can be further divided into four subtypes. The first type, single object Ba-construction, consists of a subject, Ba-phrase and a transitive verb. The Ba-phrase is the logical object of the verb which appears before the verb in the surface structure as is shown in (1) above and (7) below.

- (7) Ta ba shui he .le.
 he ba water drink. ASP
 "He has drunk the water."

For the structure of the objective Ba-constructions, I assume that the Ba-DP, which is the object of the verb, is base generated in the complement position of the verb. Because of the uninterpretable feature of the Ba-affix, it has to move to the spec of the aspect phrase to check its specific or definite feature. The verb, however, also has to move to check its delimited or bounded feature in the head of Aspect phrase. Following Travis' (1994, 2002) latest analysis of the structure of vP, the aspect phrase appears between VP and vP. The spec of AspP carries a specific or definite feature, while the head contains the verbal feature of telicity, delimitedness or boundedness. I adopt the idea that the subject originates in the spec of small vP and has to move up to the spec TP because of the EPP feature. The whole structure of the objective Ba-construction is shown in (8).



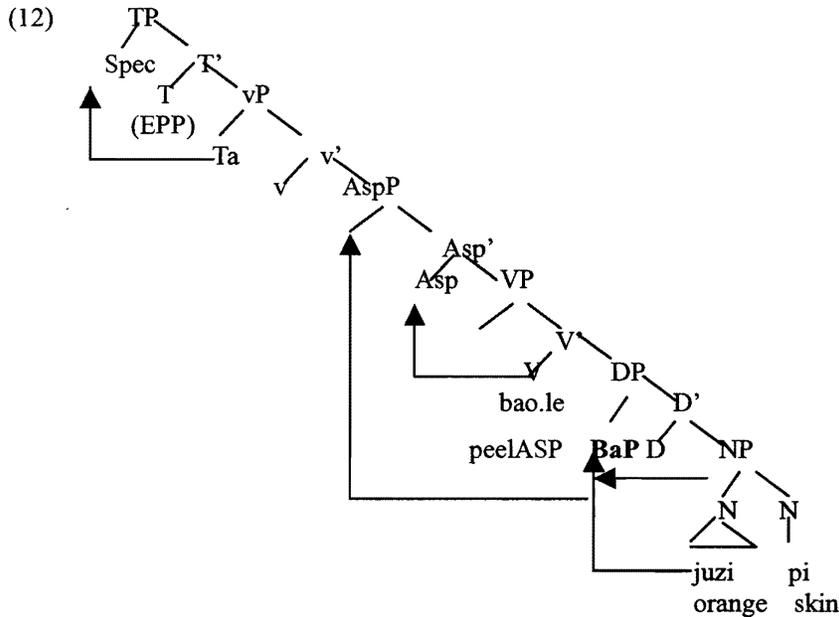
The structure in (8) can easily account for the Ba-object subtype of the objective construction. The subject (ta) is generated in the spec, vP. It has to move to the spec, TP due to the requirement of the EPP feature. With the Ba-DP (ba-shui) originating in the object position, it moves to the spec of AspP to check its specific feature while the verb (he.le) has to move to the head of AspP to check its aspectual feature.

The second subtype or the part-whole Ba-construction, is composed of a subject, Ba-DP, a transitive verb as well as a post-verbal DP. Both the Ba-DP and the post-verbal DP are the logical objects of the transitive verb. There is always an inalienable possessive or part-whole relationship between the Ba-DP and the post-verbal DP: that is, either the Ba-DP is an inalienable possessor and the post-verbal DP is a possessee or the Ba-DP denotes a whole entity and the post-verbal DP refers to its part as exemplified by (9) (10) and (11) below.

- (9) Ta ba juzi bao.le pi. (Possessor-possessee)
 He ba orange peel.ASP skin
 "He peeled the orange."
- (10) Ta ba juzi pi bao.le.
 he Ba orange skin peel. ASP
 "He peeled the orange."
- (11) a) Ta ba juzi de pi bao.le.
 He ba orange's skin peel.ASP
 "He peeled the skin of the orange."
 b) *Ta ba juzi de bao.le pi.
 He ba orange's peel.ASP skin
 "He peeled the skin of the orange."

The Part-whole subtype of objective Ba-construction shares the basic structure proposed above. The only difference lies in the internal structure of the BaP because of the inalienable possessive or part-whole relationship between the Ba-DP and the post-verbal DP. Take (9) as an example, the BaP starts off in the spec,DP. This DP selects a NP as its complement which consists of two heads due to prosodic process. The first head *juzi* 'orange' is a minimal word⁶ while *pi* 'skin' is not. Thus it has an internal structure of (2+1), namely $[[NN]_{N,N}]_{NP}$. Because of the unique internal structure of the NP, we can either merge the minimal word N head or the whole NP with the Ba-head and later they move up for the purpose of checking the specific or definite of the BaP feature required by the aspect phrase. If only the minimal word N head merges with BaP and moves to check the uninterpretable feature, the rest remains. I assume that (9) has one of the following structures as is indicated in the tree diagram (12) below.

⁶ Apparently, prosody is at work here. Since it is not my major concern of the present paper, please refer to Feng (2002) for reference.



From (12) we can see the reason why there are two surface structures shown in (9) and (10). For (11a), because of the Noun modifier (possessive) marker 'de', the internal structure of BaP is different from what we have discussed above. Juzi de Pi 'the skin of the orange' can't be analyzed in the same way as in (9) and (10) in that it is a constituent, which has to be moved at the same time. In (9) and (10), the DP without the noun modifier marker 'de' is treated as a compound at the head level, namely Noun + Noun. Hence it has more freedom to move either part or the whole constituent of the BaP to check its feature. (11a) very clearly shows that the whole Ba-DP as a constituent has to move all at once to the spec of Asp to check the specific /definite feature encoded in BaP since Ba selects the whole DP as its complement. The verb bao.le "peel" also moves to check the deleted aspectual feature in the head of AspP. This also accounts for the unacceptability of (11 b).

The third subtype, double-object Ba-construction, contains the same components, namely, it is also composed of a subject, a Ba-DP, a transitive verb and a post-verbal DP. Unlike the second subtype, the Ba-DP and the post-verbal DP in the third subtype are originally the direct object and the indirect object, and the verb is a ditransitive verb as is shown in (13).

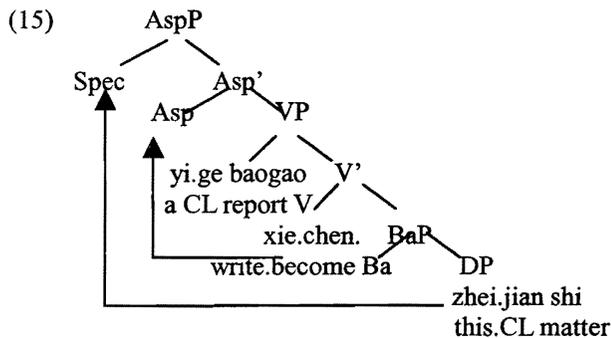
- (13) Wo ba zhei ben shu gei ni.
 I ba this CL book give you
 "I will give this book to you."

It involves the analysis of the direct and indirect objects. Again I propose that the Ba-DP, the direct object, originates in the object position and has to move to check its specific or delimited feature in the spec of aspect phrase while the indirect object is treated as goal, and is generated in the spec of V'. The verb will move to check its verbal feature as is mentioned above. In (13b), the direct object, Ba-DP zhei ben shu "this book" moves to the spec; AspP to check its specific or definite feature while the verb gei "give" moves from the head of VP to the head of AspP to check its deleted or bounded feature. The indirect object ni "you", the goal or benefactive, is in the spec of VP.

The fourth subtype, bare Resultative-construction is of the same structure of the Part-whole and Double-object constructions. What makes it different from the previous two is that the postverbal DP indicates the result of the verbal action.

- (14) Ta ba zhei jian shi xiecheng .le yi ge baogao.
 He Ba this CL matter write. ASP a CL report
 "He wrote a report about this matter."

In fact, this type of Ba-construction is the result of compound verb formation as will be explained more fully in future work. I assume that the Ba-DP originates in the complement position of V, from which it moves to check its uninterpretable feature in the spec of AspP. The DP baogao “a report” which originates in the spec of VP, can be treated as the result of the event, which doesn’t involve movement. The verb xie.cheng “wrote into” has to move to the head of AspP to check its verbal feature. The tree diagram is shown in (15).



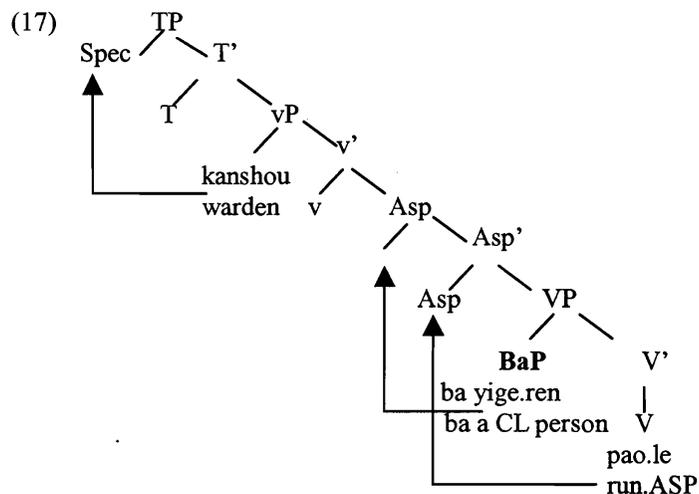
3.2.2 The Causative Ba-construction

This type of Ba-construction can also be divided into three subtypes according to the thematic relationships among the subject, Ba-DP and the verb. The first subtype, Subject Ba-construction, consists of a subject, Ba-DP and an unaccusative verb⁷. The Ba-DP, the causee, is the logical subject of the verbal phrase while the verbal phrase doesn’t have any thematic relationship with the matrix subject or the causer. In other words, the causer is not a selected argument of the verb but the causee is. Besides this, according to Zou (1995), there exists a causer-causee relationship between the matrix subject and the Ba-DP, in a sense that the former causes something to happen to the latter, as is shown in (16).

- (16) Nei ge kanshou ba yi ge zei pao.le.
 that CL warden Ba one CL thief run.ASP
 “That warden let a thief escape.”

Since the verb is unaccusative, the Ba-DP can be treated as an inner external argument which originates in the Spec of VP and has to move to check its DP feature. The DP in the subject position starts in the spec of vP and has to move to the spec of TP because of the EPP feature. That is to say, I treat the subject DP as the outer external argument which is generated in the spec of vP and the Ba-DP as the inner external argument which generates in the spec of VP. The Ba-DP, the causee, is the logical subject of the verbal phrase while the verbal phrase doesn’t have any thematic relationship with the matrix subject or the causer. In this way, the verb again has to move to the head of AspP to check its aspectual feature. As is shown in (17), although the causer kanshou ‘the warden’ is in the subject position of the sentence, it has no thematic relationship with the verb at all. The causee or Ba-DP is the actual subject or the inner external argument which starts off in the spec of VP and has to move to check its definite or specific feature. The unaccusative verb pao.le ‘ran’ also has to move to check its verbal feature in the head of AspP.

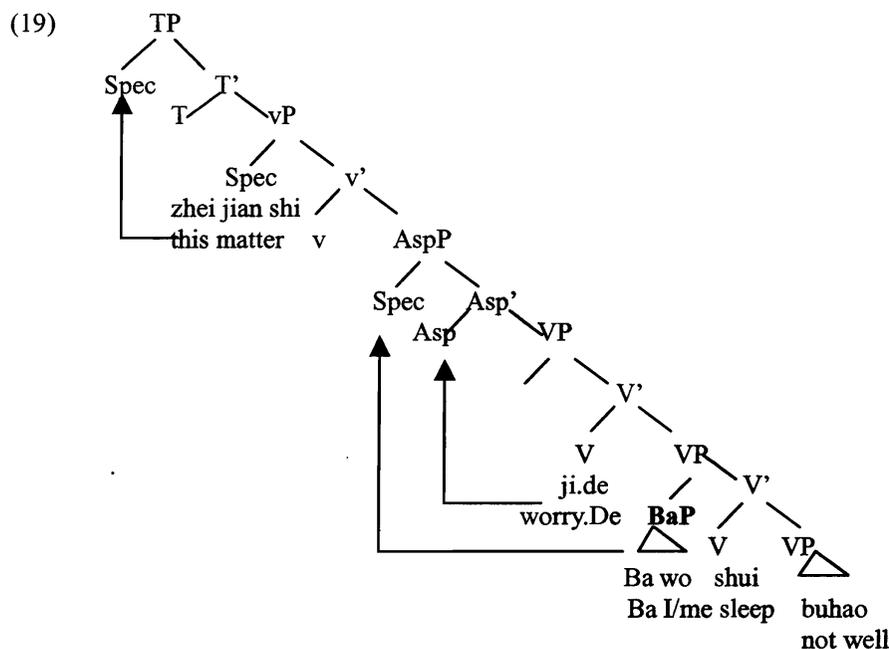
⁷ According to Zou (1995:41), in Chinese some verbs can be used as either unaccusative verbs or transitive verbs, depending on the meaning involved. For instance, when pao and zou are used intransitively, pao means ‘to run’ and zou means ‘to walk’. Please refer to Zou (1995) for further information.



The second subtype, Double-subject Ba-construction, is composed of a subject, a Ba-DP, an unaccusative verb and an embedded resultative clause. The Ba-DP, the causee, serves as both the logical subject of the matrix verb phrase and resultative clause, while the matrix subject, the causer, has no thematic relationship with the matrix verb. Just like the Subject Ba-construction, there is still the causer and causee relationship between the matrix subject and Ba-DP as is displayed in (18).

- (18) Zhei jian shi ba wo ji.de shui bu hao
 This CL matter Ba I/me hurry.DE⁸ sleep not well
 "This matter made me so anxious that I couldn't sleep well."

I argue that it has a similar structure to the objective Ba-construction in (8) except that it has an embedded clause. The structure of (18) is displayed in (19).



In (19), the subject zhei jian shi "this matter/thing" originates in the spec of VP and moves to the spec of TP to satisfy the EPP. The matrix verb ji.de "worried" which is in the head of VP has to move to the head of AspP to

⁸ DE= resultative marker

check its aspectual feature. The Ba-DP which originates in the spec of VP in the embedded clause has an uninterpretable DP feature that must be checked in the spec of the aspect phrase in the matrix clause.

The Resultative-clause Ba-construction consists of a subject, a Ba-DP, an intransitive verb, and a resultative clause. The Ba-DP acts as the logical subject of the resultative clause, and the matrix subject is the logical subject of the matrix verb phrase. There still remains the causer and causee relationship between the matrix subject and the Ba-DP as is exemplified in (20).

- (20) Lisi ba shoupa ku.de hen shi.
 Lisi Ba handkerchief cry.DE very wet
 "Lisi cried so much that the handkerchief got wet."

I assume that it has the same structure as the Double-subject Ba-construction. It consists of two clauses, namely the matrix and the embedded one. Ba-DP which is the logical subject of the resultative clause originates in the spec of vP and moves up to the spec of the AspP which must be checked in the matrix clause to check its uninterpretable feature. Since it has a similar structure of the Double-subject Ba-construction, I won't discuss it here in detail.

Zou (1995) roughly grouped the Ba-constructions into the above listed structures. As a matter of fact, however, there are more than these types as is discussed above. These other types are: Subj + Ba-DP + V + quantified phrase (Quantified Ba-construction); Subj +Ba-DP +Adv+V (Adverb Ba-construction) as well as Sub. +Ba-DP + V+zhe (Zhe Ba-construction). It is believed that these other types make the analyses of Ba-constructions more complicated. I argue that if we treat the complement DP in the Quantified Ba-construction, the Zhe in Zhe-Ba-construction and the adverb yi in the Adverb Ba-construction as the indicators of telic events, then their structures are easy to analyze. As for the Negative Ba-construction, I assume that there are two structures as is shown in (21).

- (21) a) Ta mei ba fan chi.wan, ta ba cai chiwan.le.
 he not Ba rice eat.finish, he Ba dish eatfinish.ASP
 "He didn't finish up his rice but the dish."
 b) Ta ba fan mei chi.wan, que ba cai chiwan.le.
 he Ba rice not eat.finish, but Ba dish eatfinish.ASP
 "He didn't finish up his rice but the dish."

The word mei 'not' can appear both precede and follow the Ba-DP. I argue that there are two structures for (21). First, I assume that there is a negative phrase above the vP in (21a). Namely, the NegP dominates the vP. The purpose of the movement of the Ba-DP and verb is the same as in other Ba-constructions. Second, I argue that for (21b), there exists the contrastive focus phrase which is above the Negative phrase. And Ba-DP first moves to the spec, AspP to check the specific or definite feature and then moves up to the head of the FocP to have its focus feature checked. That is the reason why the negative telic marker mei can appear both before and after the Ba-DP⁹.

4. CONCLUSION

Based on the data as well as the valuable previous studies of the Ba-constructions, I argue that Ba is a functor which selects a DP as its complement. Since it has an uninterpretable feature, it moves to check its feature in the spec of aspect phrase. I have also argued that the predicate the in the Ba-constructions has the aspectual property which has to be checked in the head of AspP. On the basis of Travis' (1991; 2000) analysis of the vP structure, I have presented a unified structural analysis of Ba that is neat and simple. With the present structure, it is evident that the Ba-DP may start out in different positions in the narrow syntax, but all move to the Spec, AspP position. Thus, all these seemingly disparate Ba constructions are unified in one approach involving the merger of a functional head Ba with a DP; and the feature that it introduces. In other words, the BaP moves to the Spec, AspP to check specificity. This is the most comprehensive and elegant structural analysis of the Ba-construction to date.

⁹ The fact that this negative marker mei can never co-exist with the aspect marker le further indicates that mei is an indicator of the negative aspect of the telic event.

REFERENCES

- Bauer, S. Robert. (1986). The Microhistory of a Sound Change in Progress in Hong Kong Cantonese. *Journal of Chinese Linguistics* Volume 14: No1.
- Chao, Yuren. (1968) *Grammar of Spoken Chinese*. University of California Press Berkeley, Los Angeles.
- Baxter, H. William. (2000). Did Proto-Mandarin Exist? *Journal of Chinese Linguistics* Volume 28. No1.
- Feng, Shengli. (2000). *Hanyu Yulun Jufaxue*, Shanghai Educational Publishing House.
- Feng, Shenli. (2001). Prosodic Structure and the Origins of Ba-construction. Hana Tiskova eds. Tone, Stress and Rhythm in Spoken Chinese, *Journal of Chinese Linguistics Monograph Series* 17, 119-167.
- Feng, Shengli.(2002). *The Prosodic Syntax of Chinese* Lincom Europa: 58-77.
- Gao, Qian. (1994). Resultative Verb Compounds and Ba-construction in Chinese. *Journal of Chinese Linguistics* Volume 25: No1.
- Grimshaw & Mester. (1988). Light Verbs and Theta-marking. *Linguistic Inquiry*, Volume 19: 205-232.
- Hashimoto, Anne Yue. (1971). Mandarin Syntactic Structures. *Unicorn* 8: Chinese Linguistics Project and Seminar. Princeton University.
- Hopper, Paul J. and Sandra A Thompson . (1980). Transitivity in grammar and Discourse. *Language* 56. 2: 51-99.
- Hsueh, Feng-sheng. (1987). The Ba Construction in Mandarin: An Integrated Interpretation *Language Teaching and Linguistic Studies* 1: 4-22.
- Huang, C.T.J. (1982). *Logical Relationships in Chinese and the Theory of Grammar*. PhD Dissertation, MIT.
- Huang, Shuanfan. (1986). The History of the Disposal Construction Revised-Evidence from Zen Dialogues in the Tang Dynasty. *Journal of Chinese Linguistics* Volume 14: No1.
- Karifka, Manfred. (1989). *Nominal Reference, Temporal Constitution and Quantification in Every Semantics Semantics and Contextual Expressions*. Foris, Dordrecht: 75-115.
- Koopman, Hilda. (1984). *The Syntax of Verbs*. Foris, Dordrecht.
- Li, Yen-hui Audrey. (1990). *Order and Constituency in Mandarin Chinese*. Kluwer Academic Publishers.
- Li, Ying Che. (1974). What does 'Disposal' Mean? Features of the Verb and Noun in Chinese. *Journal of Chinese Linguistics*. 2.2:200-18.
- Liu, Feng-Hsi. (1997). An Aspectual Analysis of Ba. *Journal of East Asian Linguistics* 6. 51-99.
- Mei Kuang. (1990). Tang Song Chuzhiju de Laiyuan (The Origin of the Disposal Constructions in the Time of the Tang and Song Dynasties.). *Zhongguo Yuwen* 216:3:191-206.
- Mei Kuang. (1978). "Ba Zi Ju: (Ba Construction) *Weishi Zhexue Bao* 27:145-180.
- Norman, Jerry. (1988). *Chinese*, Cambridge University Press. Cambridge.
- Peyraube, Alain. (2000). Westernization of Chinese Grammar in the 20th Century: Myth or Reality. *Journal of Chinese Linguistics* Volume 28: No1.

- Peyraube, Alain. (1989). Zaoqi "Ba" Ziji de Jige Wenti (Several Problems of the Early Ba Construction) *Zhongguo Yuwen* 1:1-9.
- Pulleyblank, G. Edwin. (2000). Morphology in Old Chinese. *Journal of Chinese Linguistics* Volume 28: No1.
- Pollock, Jean-yves. (1992). Notes on Clause Structure. *Journal of Chinese Linguistics* Volume 28: No1.
- Ritter & Rosen. (1998). Delimiting Events in Syntax. *The Projection of Arguments*. 135-164.
- Ritter & Rosen. (2001). The Interpretive Value of Object Splits. *Language Sciences* 23 : 424-451.
- Sun, Chaofen. (1993). Transitivity, the Ba Construction and its History. *Journal of Chinese Linguistics* Volume 23: No1.
- Tenny, Carol L. (1994). *Aspectual Roles and the Syntax-Semantic Interface*. Kluwer Academic Publishers.
- Thompson, Sandra A. (1973). Transitivity and Some Problems with the Ba Construction in mandarin of the Chinese. *Journal of Chinese Linguistics* 1.2:208-221.
- Trask, R. L.(1996). *Historical Linguistics*. London.
- Travis, Lisa. (1984). *Parameters and effects of word Order Variation*. PhD Dissertation MIT.
- Tsao, Feng-fu. (1987). A Topic-comment approach to the Ba-construction. *Journal of Chinese Linguistics* Volume 15: No1.
- Wang, Chuan-chih. (1999). *Delimitation: Evidence from Mandarin*. Ph. D. Dissertation.
- Wang, Huan. (1957). *Ba Zi Ju He Bei Zi Ju* (Ba construction and Bei construction). Hanghai Xin Zhishi Chubanshe, Hanghai.
- Wang, Huan. (1985). "Ba" Ziji Zhong "Ba" de Bingyu (The Objects of Ba in Ba construction). *Zhongguo Yuwen*: 1:48-51.
- Wang, Li. (1945). *Zhongguo Yufa Lilun*. Shanghai: Commercial Press.
- Wang, Li. (1958). *Hanyu Shigao II* (Adraft History of Chinese Grammar) Beijing:Kexue Chubanshe.
- Yen, Sian L. (1982). The Origin of Copula Shi in Chinese. *Journal of Chinese Linguistics* Volume 14: No2.
- Zhang, Ning. (1998). Object Shift in Mandarin Chinese. *Journal of Chinese Linguistics* Vol. 28. No.2.
- Zhu, Mingche. (1957). Zaoqi Chuzhishi (On the Early Disposal Form) *YuYan Luncong*: 1:17-33.
- Zou, Ke. (1995). The Syntax of the Chinese Ba-constructions and Verb Compounds: A Morpho-syntactic Analysis. Doctoral Dissertation.