

VERB, COMPLEMENT, AND CASE IN MANDARIN

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ABSTRACT

The question of word order has been a major topic in the study of Mandarin, as in many other languages. Two major theoretical studies have appeared in the last several years, proposing different accounts of word order in the Mandarin verb phrase. These works, Huang (1982) and Travis (1984), complement the more descriptively oriented, and more comprehensive, Li and Thompson (1981). This paper will examine Mandarin word order in light of Huang's and Travis' suggestions. Both will be shown to exhibit certain problems -in particular, in not adequately accounting for the relationships of preverbal and postverbal phrases to each other and to the verb. This paper will propose that the facts can be most clearly related to properties of Mandarin case assignment.¹

1. Introduction: Complements Obligarily Preceding the Verb

In an account of word order stated in terms of a parameter based on the distinction between head-initial and head-final phrases, Huang (1982) proposes that X^1 -level categories in Mandarin are head-initial (except for N^1), while all other categories in the language are head-final.² This suggestion, together with the standard assumption in X-bar theory that a lexical element and its complements occur as sisters, will lead to the prediction that a verb's complement(s) follow it, all else being equal. (All else is not fully equal, however, since Huang intimates (note 16, page 96-97) that a verb is limited to a single sister node within V^1 , with the possible exception of double object verbs and other verbs which subcategorize for two complements.)

The proposals in Travis (1984, chapter 2) lead to the same prediction, that, all else being equal, a verb is followed by its complements. Travis proposes two additional parameters besides the headedness parameter which have significant roles to play in determining the word orders found in language: parameters based on the direction of theta-marking, and of case assignment. She proposes that current Mandarin, though essentially head-final,

assigns both theta roles and case to the right, with a result similar to Huang's for verb phrases: only subcategorized for or case-marked phrases will follow the verb.³

It is well recognized by both Huang and Travis, and others, that under certain conditions apparent verbal complements may precede the verb. However, it is also generally understood that such instances represent variants of the 'basic' word order, which has the complement in a postverbal position. Thus we note the contrast in (1), involving the 'ba-construction.'

- (1) a. Wo nong-po le cha bei.
I make-broken ASP tea cup⁴
'I broke the teacup'
- b. Wo ba cha bei nong-po le.
I BA tea cup make-broken ASP
'I broke the teacup' (Li & Thompson 1981:466)

The idea that the (a) example shows the 'basic' word order is generally supported by the fact that not all sentences allow the alternation:

- (2) a. Ta xiang baba.
she resemble father
'She resembles her father'
- b. * Ta ba baba xiang
she BA father resemble
(She resembles her father) (Li & Thompson 1981:473)

Leaving aside this construction until the next section, neither Huang nor Travis points out that there are certain verbs which **must** have a preverbal complement. With these verbs there is no alternative with the complement occurring post-verbally. Some examples are given below.⁵

- (3) Wo wei guojiao fuwu.
I for country serve
'I serve the country'
- (4) Ta gei Lisi hexi.
he to (name) congratulate
'He congratulated Lisi' (Li & Thompson 1981:386)
- (5) Zhang yisheng gei Lisi kan-bing.
(name) doctor to (name) see-illness
'Dr Zhang is treating Lisi' (Li & Thompson 1981:386)

Three pieces of evidence support our claim that the underlined PPs in (3)-(5) are verbal complements. First, the head of the PP is strictly selected by the verb in each case. Thus, fuwu 'serve' must occur with a PP headed by wei 'for,' just as English rely must occur with a PP headed by on. This sort of selection is expected only with subcategorized elements. Second, in (3) and (4) the PP is required for grammaticality:

(3') *Wo fuwu
I serve
(I serve)

(4') *Ta hexi
he congratulate
(He congratulated)

This fact establishes the PPs as complements, since by definition complements of a lexical item are phrases which obligatorily accompany it. Third, the interpretation of the NPs guojiao 'country' and Lisi in these sentences seems to be in large part semantically dependent on the verb of the sentence. That is, in each case the NP seems to be a semantic argument of the verb. Undoubtedly, then, these examples contain verbal complements. These complements must precede the verbal head in their phrase. In either Huang's or Travis' view of Mandarin phrase structure, some very special provision must be made for such verbs. Our proposal will require no special statements except those concerning the idiosyncrasy of selection of each lexical item. Word order will be predictable from general principles.

2. Ditransitive Verbs

Huang and Travis predict that ditransitive (or double-object) verbs will allow or require both the direct and indirect object to follow the verb, Huang by his head-initial X^1 rule, and Travis by her generalization that theta-roles are assigned to the right in Mandarin. This pattern is illustrated by the following examples:

(6) Ta song le wo yi ding maozhi.
she send ASP I one CL cap
'She sent me a cap'

(7) Zhangsan gaosu le wo zhejian shi.
(name) tell ASP I this thing
'Zhangsan told me this thing'

- (8) Wo ying le ta zheben shu.
 I win ASP he this book
 'I won this book from him'
- (9) Ta tou le sangdie yi ge giezhi.
 she steal ASP store one CL ring
 'She stole a ring from the store'

With these ditransitives, we assume with Huang and Travis that the potential for two objects to follow the verb indicates that both objects are assigned theta roles by the verb; that is, both are arguments of the verb.

Ditransitive verbs may differ from each other in a number of respects. With some the indirect object has the theta role of goal, as in (6) and (7); with others it has the source theta role, as in (8) and (9). In all of these sentences the indirect object is expressed in a NP which immediately follows the verb. Depending upon the verb, an indirect object may or must be expressed in a prepositional phrase. When this is the case, it need not immediately follow the verb.

The examples below show PP goal arguments to ditransitive verbs. Goal PPs have the preposition gei 'to' as their head.

- (10) Ta song le yi ding maozhi gei wo.
 she send me one CL cap to I
 'She sent me a cap'
- (11) Wo fu gei ta liang bai kuai qian.
 I pay to he two hundred dollar money
 'I paid \$200 to him' (Li & Thompson 1981:377)
- (12) Wo shu le yi kuai qian gei ta.
 I lose ASP one dollar money to him
 'I lost a dollar to him' (Li & Thomspon 1981:375)
- (13) Ta huan gei ni yi wan rou.
 she return to you one bowl meat
 'She returned a bowl of meat to you' (Li & Thompson 1981:376)

As the order of constituents in the examples above suggests, indirect object phrases with the head gei 'to' and direct object NPs are freely ordered with respect to each other. Both follow the verb.⁶

When a source indirect object takes the form of a PP, it must precede the verb. This is quite unexpected without further elaboration of either Huang's or Travis' hypothesis about Mandarin VPs, since

according to both accounts, subcategorized arguments of the verb will follow it. Compare (8) and (9) above.

- (14) a. Wo cong ta nali ying le zheben shu.
 I from he SUF win ASP this book
 'I won this book from him'
- b. * Wo ying le zheben shu cong ta nali
 I win ASP this book from he SUF
 (I won this book from him)
- (15) a. Ta cong sangdie tou le yi ge giezhi.
 she from store steal ASP one CL ring
 'She stole a ring from the store'
- b. * Ta tou le yi ge giezhi cong sangdie
 she steal ASP one CL ring from store
 (She stole a ring from the store)

The ungrammaticality of (14b) and (15b) is what calls for explanation, under the assumption that all and only the arguments of a verb follow the verb. Why can the PPs which serve as source arguments not follow the verb as the goal arguments do in (10)-(13)? This particular question is not addressed by either Huang or Travis.

Our proposal, which we believe is quite novel, goes as follows. We suggest that gei in (10)-(13), unlike cong in (14)-(15), is not a preposition as is customarily assumed, but is instead a dative case marker. In other situations, to be discussed below, gei does function as a preposition. In having a dual existence gei resembles French à and Spanish a (Jaeggli 1986, and others). We would like to tentatively suggest that it shares this characteristic with two other items in Mandarin: zai 'in/at; LOCATIVE' and dao 'to; ALLATIVE.'⁷ These three 'prepositions,' unlike others in Mandarin, have the potential for occurring postverbally (Li & Thompson 1981:358). We assume that postverbally these items are not prepositions, but case markers. Our hypothesis about Mandarin phrase structure, based on this assumption, is that case is assigned to the right. Since the cases assigned by verbs in Mandarin are limited to those listed below:

(16) Mandarin case markers

- a. dative (zero or gei case marker),
- b. locative (zero or zai case marker),
- c. allative (zero or dao case marker),
- d. source (zero case marker), and
- e. accusative, used for themes (zero case marker).

- ii. Ta cong wo zheli jie le wu kuai qian.
 she from I ASP five dollar money
 'She borrowed five dollars from me'

Under our proposal concerning the directionality of case-marking, we can again consider the verbs discussed in the previous section. We assume that the verb fuwu 'serve' has the following lexical representation:

- (22) fuwu 'serve' [agent, benefactive]
 |
 P
 |
wei

Its syntactic properties (see (3), (3'), and note 3) then follow. The benefactive argument, not being case-marked by the verb, cannot follow the verb, but precedes it in a PP headed by the preposition which the verb selects, wei 'for (the sake of).'

Besides the examples already seen, the most well-known instance in Mandarin in which an apparent verbal argument precedes the verb is seen with the 'ba-construction,' in which a direct object can occur in a PP preposed to the verb, as in (23)-(25) below.¹⁰

- (23) Wo ba zhe bei jiu shang le ta.
 I BA this CL wine bestow ASP he
 'I bestowed this cup of wine on him'
- (24) Ta ba zhe jian shi gaosu le wo.
 he BA this CL thing tell ASP I
 'He told me this thing'
- (25) Lisi ba ta de qiche mai le.
 (name) BA he of car sell ASP
 'Lisi sold his car'

Cheng (1986, 1987) argues that ba assigns the theta role of 'affected theme' to its object,¹¹ and accounts in this way for the contrast in grammaticality between the (b) examples below.

- (26) a. Xiaomei xihuan Xiaohu.
 (name) like (name)
 'Xiaomei likes Xiaohu' (Cheng 1987)

object of ba. The theta role associated with the other lexical item, the verb, is said to be discharged through theta-identification, and as a consequence is not overtly expressed.¹² Thus it is ba which directly assigns the theta role to the NP Lisi in (16) and not the verb.¹³ We assume, further, that it is ba which case-marks the NP, thus accounting for the preverbal position of the phrase.

Our motivation for treating ba differently than the other preverbal prepositions discussed in this section depends on the claim that ba is primarily responsible for the theta role of its object in sentences in which it occurs, while with the other types of examples discussed so far, the verb has primary responsibility. We end this section with a brief discussion of adjunct PPs. They differ from both types of PPs already discussed in that they, as adjuncts, are fully independent of the thematic structure of the verb of their sentence, and are in no way selected by the verb, not even indirectly through the theta identification which is required with ba.

(30) Ta wei renming luni genzuo.
 he for people hard works
 'He works hard for the people'

(31) Wo ti _____ ni da ta.
 I in-place-of you hit he
 'I hit him for you'

(Cheng 1986:16)

(32) Ta chao dong zhan zhe.
 he facing east stand ASP
 'He is standing facing east'

(Li & Thompson 1981:357)

(33) Ta gei wo tiao le liu jian dayi.
 she to I select ASP six CL coat
 'She chose six coats for me'

(Li & Thompson 1981:387)

Example (33) contains an adjunct gei-phrase benefactive. The semantic distinction between preverbal and postverbal gei-phrases is well-illustrated by the contrast between the (a) and (b) examples in (34). (This contrast is noted by Li and Thompson 1975, 1981, and Travis, following Lin 1981.) The verb in these sentences mai 'sell' optionally selects a goal argument.

(34) a. Ta mai le chezi gei wo.
 he sell ASP car to I
 'He sold a car to me'

- b. Ta gei wo mai le chezi.
 he to I sell ASP car
 'He sold a car for me'

We assume that in (34a) gei is dative case marking, while in (34b) it is the preposition gei, which assigns the theta role of benefactive to its object. From these assumptions we predict the position and interpretation of all of the gei-phrases in the pages above.

It must be noted that some facts are troublesome for our account, as well as for others.' Thus Li and Thompson (1981:387) and Travis (1984:58, following Lin 1981) note that with some few verbs, questions of the dative and benefactive interpretation of gei-phrases are not resolved by position with respect to the verb:

- (35) Wo gei ta xie le yi feng xin.
 I to he write ASP one CL letter
 'I wrote a letter to him'
 for

Li and Thompson (1981:387) remark that examples like (35) 'are quite natural with either an indirect object or a benefactive interpretation.' Further, with some verbs, 'a benefactive interpretation is possible but not preferable' with a postverbal gei-phrase. The example they give is reproduced in (36).

- (36) Wo song le yi ben shu gei ta.
 I give ASP one CL book to he
 'I gave a book to him'
 for

Li and Thompson (p. 386) see the possibility for the underlined phrase in (35) to receive a dative reading as a reflection of an on-going change in Mandarin VPs from a head-initial to a head-final structure. We have no comments of our own to add to these speculations, except to wonder why (36) should also be susceptible to a benefactive interpretation, which would seem to go against such a trend. To this question we have no answer, unfortunately.

3. Locative and Allative Case

In this section we would like to pursue the idea proposed tentatively in (16b, c) above that the Mandarin prepositions zai 'at/in' and dao 'to' have another function as locative and allative case markers on verbal arguments holding the theta roles location and goal ('destination'). The evidence supporting this conception

of zai and dao is parallel to what was presented concerning gei. Only 'prepositional phrases' headed by these words may follow a verb in a sentence, and then only if the phrase is an argument lexically selected by the verb. Thus (37) below contrasts with (38).

- (37) Wo ba qianbi cha zai pingzi-litou.
 I BA pencil insert in vase-in
 'I put the pencils in the vase' (Li & Thompson 1981:391)

The zai-phrase in (37), which follows the verb, is selected by that verb as a 'location' argument. In (38), the zai-phrase is clearly an adjunct - and it precedes the verb.

- (38) Tamen zai fangzi-houmian xiuli dianshiji.
 they at house-behind repair television
 'They repair televisions behind their house'
 (Li & Thompson 1981:391)

The zai-adjunct phrase has a role 'specifying the general location at which that event or state occurs' (Li & Thompson 1981:398). The zai-argument phrase specifies the location of the theme argument as a result of the action of the verb (Li & Thompson 1981:399).

Similar observations can be made about directional phrases with dao. Verbs of motion may occur with a postverbal 'destination' argument - no other verbs can. A preverbal dao-phrase, in contrast, indicates 'that the subject moves to a destination where the event named by the verb takes place' (Li & Thompson 1981:410). Li and Thompson (1981:410) give the following near-minimal pair of examples:

- (39) Ta pao dao caochang le.
 she run to field Part
 'She ran to the field'
- (40) Ta mei tian dao caochang pao.
 she every day to field run
 'Every day she goes to the field to run'

We assume that cha 'insert' and pao 'run' have the following lexical specifications:

- (41) cha 'insert' [agent, theme, location]
 (42) pao 'run' [agent/theme, (destination)]

In the preceding sections we saw reasons for rejecting the hypothesis that all theta-marking is rightward. We would like to maintain here our own proposal that postverbal elements are case-marked by the verb. In support of this we observe that postverbal zai and

dao resemble dative case gei in that, with some verbs at least, case marking may be null. In (43) we repeat the relevant examples of datives, (6) and (10). In (43a) dative case marking is null; in (43b), it is gei.

- (43) a. Ta song le wo yi ding maozhi.
 she send ASP I one CL cap
 'She sent me a cap'
- b. Ta song le yi ding maozhi gei wo.
 she send me one CL cap DAT I
 'She sent me a cap'

In (44) we show that an argument locative phrase may correspondingly be marked with zero or zai.¹⁴

- (44) a. Wo meiyou zuo guo feiji.
 I not sit ASP airplane
 'I haven't been on an airplane yet'
 (Li & Thompson 1981:436)
- b. Ta zhu zai Zhongshan lu.
 he live LOC (name) road
 'He lives on Zhongshan Road' (Li & Thompson 1981:393)

As with zero dative or source case marking, the unmarked location argument must immediately follow the verb. In (45) we contrast marked and unmarked 'destination' arguments.

- (45) a. Ta lai le Jianada.
 he come ASP Canada
 'He came to Canada' (Cheng 1987)
- b. Ta lai dao women xuexiao.
 he come DEST we school
 'He came to our school' (Li & Thompson 1981:413)

(46) and (47) are additional examples showing unmarked 'destination' arguments. We provide them to balance the implication of Li and Thompson (1981:409) that all argument destination phrases must be headed by dao.

- (46) Jintian ni de haizi zhende qu xuexiao le ma?
 today you of child really go school Part Q
 'Did your children really go to school today?'
 (Li & Thompson 1981:553)

- (47) Ta meiyou qu guo Zhongguo.
 she not go ASP China
 'She hasn't been to China' (Li & Thompson 1981:434)

Our claim that zai and dao in (44)-(47) are case markers depends on the parallel with gei, and the following reasoning: in (44a) and (45a) the location and destination argument NPs are evidently case-marked by the verb with a null case-marker; in (44b) and (45b), so we suggest, the arguments are case-marked too - and in these examples case-marking takes an overt form.

At the end of section 2 we noted a couple of difficulties with our analysis, instances where our predictions are not met by the facts. With locative and directional phrases, there are rather more challenges. We will try to point out below some places where our assumptions to date need to be fleshed out, and also try to refine some questionable generalizations made by others.

One set of facts is quite reminiscent of the problem posed by (35) for analyses of gei. In that sentence, a preverbal gei-phrase may receive the unexpected dative interpretation (in addition to the expected benefactive reading). In a similar way, in (48) and (49) preverbal zai-phrases may somewhat unexpectedly receive locative argument interpretations.¹⁵ (These sentences are also grammatical when the zai-phrase follows the theme argument, and have the same interpretation. See (50) and (51) below.)

- (48) Wo zai mianbuo-shang mo huaiyou.
 I at bread-on spread butter
 'I spread butter on the bread'

- (49) Wo zai zhuoshang liou le fan cai.
 I at table leave ASP rice dish
 'I left rice and dishes on the table (for you)'

If we analyze the underlined phrases as prepositional phrases, not as case-marked NPs, in fact no real problem arises for our approach, since we only predict that all case-marked arguments will follow the verb. The difficulty comes in trying to justify one analysis of zai over another on independent grounds. With gei we had the dative/benefactive contrast to draw on for determining when gei was functioning as a case-marker (dative) or a preposition (benefactive). With source arguments, case-marking is zero, or otherwise the argument is expressed in a (preverbal) prepositional phrase. With zai, unfortunately, no such semantic or formal contrast exists, with the result that it seems an ad hoc matter of convenience to label zai in (44b) a case-marker, and in (48) a preposition.

Li and Thompson (1981:406) make a claim about location phrases which we consider to be incorrect or overstated. They assert that 'the postverbal locative phrase must immediately follow the verb [their emphasis].' Below we provide a number of examples which go against this generalization.

- (50) Wo mo huaiyou zai mianbuo-shang.
I spread butter LOC bread-on
'I spread butter on the bread'
- (51) Wo liou le fan cai zai zhuoshang.
I leave ASP rice dish LOC table
'I left rice and dishes on the table (for you)'
- (52) Ni diao le yi fen qian zai dishang.
you drop ASP one CL money LOC floor
'You dropped one cent on the floor'
- (53) Ta xie le jige zi zai heibanshang.
he write ASP a-few character LOC blackboard
'He wrote a few characters on the blackboard'
- (54) Wo fang le wu kuai qian zai zuoshang.
I put ASP five CL money LOC table
'I put five dollars on the table'

(These sentences also counterexemplify a strict reading of Huang's requirement that only one phrase follow the verb.) On our understanding of zai as a case-marker, and on the assumption that case-marked phrases may follow the verb, the structure of these examples is as we would predict.

Still other locative verbs exactly meet Li and Thompson's, or Huang's expectations. Consider the verb cang 'hide' in the sentences below.

- (55) a. Wo ba qian cang zai zuozi-li.
I BA money hide LOC desk-in
'I hid the money in the desk'
- b. * Wo cang qian zai zuozi-li
I hide money LOC desk-in
(I hid the money in the desk)

The status of these examples supports Li and Thompson's generalization quoted above: in the grammatical one, the postverbal location phrase immediately follows the verb. To account for the facts, we will claim that cang 'hide' has the potential to case-mark only

- (47) Ta meiyou qu guo Zhongguo.
 she not go ASP China
 'She hasn't been to China' (Li & Thompson 1981:434)

Our claim that zai and dao in (44)-(47) are case markers depends on the parallel with gei, and the following reasoning: in (44a) and (45a) the location and destination argument NPs are evidently case-marked by the verb with a null case-marker; in (44b) and (45b), so we suggest, the arguments are case-marked too - and in these examples case-marking takes an overt form.

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4. Verb, Complement, and Case

Previous analyses of Mandarin phrase structure in terms of (i) phrasal headedness (Huang), (ii) a template allowing one constituent following the verb (Huang), and (iii) directionality of theta role assignment (Travis) have seemed not wholly adequate for treating the facts we have considered in this paper. We recognize that only verbal complements may occur postverbally in the Mandarin VP. We have chosen to try to exploit another conspicuous fact, that apart from unmarked NPs - only three 'prepositional phrase' types may follow the verb, those headed by gei 'to (dative),' zai 'at (location),' and dao 'to (destination).' If these 'prepositions' can instead be considered to function postverbally as case-markers, the claim that only directly case-marked arguments follow the verb in Mandarin shows some promise in accounting for the facts to be observed.

FOOTNOTES

¹In this paper we do not treat the important issue of the place of 'extent phrases' in the Mandarin VP. Sun (1989) does consider extent phrases; we present here some examples of such phrases. We refer the interested reader to Huang (1982) for the issues which are at stake.

- (i) Wo baifang le ta san ge xiaoshi.
I visit ASP he three CL hour
'I visited him for three hours'
- (ii) Jin nian wo canjia bisai liang ci le.
this year I participate-in match two time Part
'This year I have participated in matches twice'
- (iii) Wo da tamen de che liang ci le.
I take they of car two time Part
'I have gotten a lift in their car twice'

²He puts forward the following phrase structure schema for Mandarin (page 41):

- a. $X^n \rightarrow X^{n-1} YP^*$ iff $n=1$ and $X \neq \text{Noun}$
b. $X^n \rightarrow YP^* X^{n-1}$ otherwise

These rules have the effect, for example, of producing VPs and NPs with the following structures:



³Travis (1984) recognizes two historical stages of modern Mandarin, MM1 and MM2, based on speculations of Li and Thompson (1981 and elsewhere), and provides analyses in terms of her parameters for both of them. Her description suggests the view that MM2 has not been achieved, but is imminent. She suggests that the variety of Mandarin that Huang (1982) describes 'most closely resembles MM2' (page 62). Our proposal resembles what she suggests in accounting for the word order facts of MM2 - that case is assigned to the right in Mandarin. We believe that Travis recognizes only unmarked case in Mandarin, not the overt case markers we propose. The effect of this difference is considerable. We do not have anything concrete to say about MM1 versus MM2.

⁴The following abbreviations are used in the interlinear glosses:

ASP	aspect marker	BA	<u>ba</u> preposition
CL	noun classifier	DAT	dative case
SUF	locational noun suffix	LOC	locative case
Part	clause-final particle	DEST	allative/'destination' case
Q	question marker		

⁵Note that an account of the preverbal position of the complement in these examples is not to be found in Huang's suggestion mentioned above that in the unmarked case at most one constituent may follow the verb. In (3) nothing follows the verb, but nevertheless the PP wei guojiao may not occur postposed:

- (i) *Wo fuwu wei guojiao
 I serve for country
 (I serve the country)

The same is true for (4), though in (5) it can be claimed that the second element bing 'illness' of the compound verb kan-bing 'treat' fills the single postverbal 'slot' envisioned by Huang.

⁶This statement will be qualified to some extent in discussion surrounding examples (35) and (36).

⁷Like most prepositions in Mandarin, these three items, gei, zai, and dao, also may function as verbs. See Li and Thompson (1981: chapter 9) and Cheng (1986: chapter 3).

⁸We mean here to be invoking the distinction between direct and indirect arguments introduced into government-binding theory in Marantz (1984) and further discussed in Levin and Rappaport (1986). In (17a), since both internal arguments receive case from the verb, both are direct arguments. In (17b) the theme is a direct argument, but the source is not, being assigned its theta role (and case) in conjunction with a preposition.

⁹It should be acknowledged that the source argument with ditransitive he and chi is probably not a source in precisely the same way as with verbs like tou 'steal' or jie 'borrow.'

¹⁰There is a very large literature on the ba-construction. We refer the reader to sources cited by our sources.

¹¹Compare Li and Thompson's (1981:468) discussion of 'disposal' in connection with the ba-construction.

¹²In Cheng and Ritter (1988) a slightly different approach to the ba-construction is taken.

¹³Essentially this analysis of the ba-construction is suggested too by Travis (1984:54-55), though in a considerably less detailed formulation.

¹⁴Li and Thompson (1981:414, note 2) assert that zai can only be omitted in this context when one location NP is contrasted with another. They give the following example.

- (i) Wo shui shafa; ni shui diban.
 I sleep sofa you sleep floor
 'I'll sleep on the sofa, and you sleep on the floor'

¹⁵Li and Thompson (1981:405) make the generalization that this possibility exists with any 'verb of placement,' in contrast with 'verbs of displacement,' for which it is impossible. We do not understand exactly what lies behind this contrast.

¹⁶The facts are quite intricate here. Cang 'hide' selects its location argument obligatorily, as the ungrammaticality of (i) indicates.

- (i) *Wo cang qian
 I hide money
 (I hid money)

In (56), then, zai fangzi-li 'in the house' must be serving as the required location argument. We note here, however, the ungrammaticality of the following sentence:

- (ii) *Wo zai zuozi-li cang qian
 I at desk-in hide money
 (I hid the money in the desk)

By Li and Thompson's generalization mentioned in the previous footnote, that verbs of placement (for example, cang 'hide') allow locative phrases preceding the verb to be understood with their argumental interpretation, it is difficult to understand why (49) is grammatical while (ii) is not. Sentence (ii), if it is interpretable, gives the odd impression that 'I' am in the desk. No parallel impression exists with (49) that 'I' am on the table. (Compare, however, Li and Thompson (1981: 405, example (45).)

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