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Citation

Cheng, L. L. (1987). On passive in Mandarin Chinese. Retrieved from <https://hdl.handle.net/1887/2457>

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Note: To cite this publication please use the final published version (if applicable).

On The 'Passive' Construction in Mandarin¹

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1. Introduction

In both traditional grammars and more recent analyses of Mandarin, sentences containing bèi have always been treated as passives. It is generally agreed that the bèi construction indicates that the patient is adversely affected (Li and Thompson (1981) and Lin (1981)). In addition, there are sentences without bèi that are said to indicate a non-adverse passive.

In this paper, I will argue that bèi is not a passive marker, but rather an adversity marker. I will show that there is no syntactic passive in Mandarin. The so-called bèi-less passives are simply sentences with unaccusative, or ergative, verbs (Perlmutter 1978, Burzio 1986).

2. The Data

Let us first consider the various types of sentences which have been called passives.

2.1. Passives with bèi

First there are sentences with bèi, the so-called 'passive' marker. Sentences in which bèi occurs are translated as English passives. Some examples are given in (1)-(3).

- (1) nèixiē jiǎozi' bèi gǒu chī-diào le
those dumplings dog eat down ASP
'Those dumplings got eaten up by the dog.'
- (2) nǐ de bēizi' bèi tā dǎ-pò le
you COMP glass he hit-broken ASP
'Your glass was broken by his hitting it.'

¹ This is a revised version of a paper presented at the Chinese Linguistics Workshop in Connecticut in May, 1987. I thank Yung-O Biq for organizing the Workshop. I am grateful to James Huang, Zi-Xiang Shi, Jerome L. Packard and Claudia Ross for comments and suggestions. Also, thanks to Elizabeth Cowper for many suggestions on both form and content and Peter Avery for the final formatting.

- (3) Zhāngsān bèi Xiǎomíng dǎ-shāng le
hit-wounded ASP
'Zhangsan was hit by Xiaoming and he is wounded.'

Sentences (1)-(3) show that bèi occurs in the structure in (4).

- (4) NP₁ bèi NP₂ verb

The NP following bèi, NP₂, is the logical subject of the verb and the agent of the action. The NP preceding bèi, NP₁, is the logical object of the verb and the patient of the action.

It should be noted that NP₂ may be absent in bèi-sentences. For example, sentences (5) and (6) are grammatical sentences lacking an overt NP₂.

- (5) Zhāngsān bèi shā le.
kill ASP
'Zhangsan was killed.'
- (6) wǒ de biǎo bèi tōu le.
I COMP watch steal ASP
'My watch was stolen.'

The agent of the action [shā] 'kill' in (5) and [tōu] 'steal' in (6) is not specified.

Furthermore, bèi does not occur with all verbs, as shown in sentences (7)-(9).²

- (7) ?*nǐ de yīfú bèi tā xǐ-gānjìng le
you COMP clothes he wash-clean ASP
'Your clothes were washed by him and they are now clean.'
- (8) ?*tā de fángjiān bèi nǐ shōushí-hǎo le
he COMP room you arrange-finish ASP
'His room was arranged well by him.'
- (9) ?*nǐ de shū zúotiān bèi tā sòng-lái le
your COMP book yesterday him deliver-come ASP
'Your book was delivered here yesterday by him.'

It appears that verbs occurring with bèi all indicate an adverse situation, as shown in sentences (1)-(3). In contrast, the verbs in (7)-(9) do not indicate any adversity. Clothes being washed clean, a room being well-arranged and books being delivered do not normally involve adversity.

² These sentences sound weird or unacceptable. For instance, (7) is acceptable only if you do not want him to wash your clothes and make them clean.

2.2. Passives without *bèi* (*bèi*-less passives)

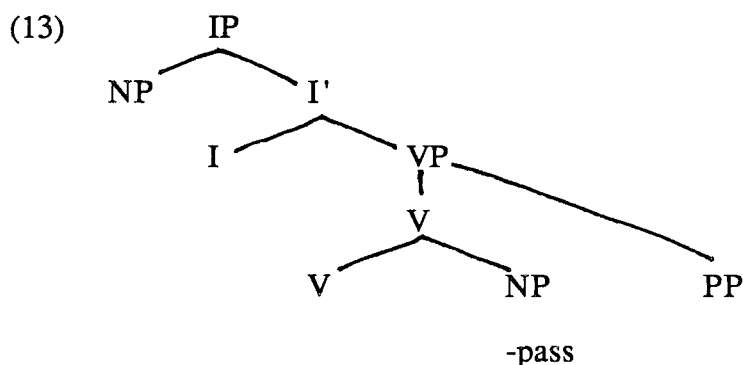
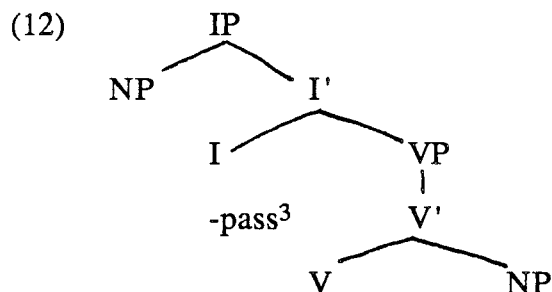
There are sentences in Mandarin which lack *bèi*, but which are normally translated into English as passives, as shown in sentences (10) and (11).

- (10) a. tā de xīn shū chūbǎn le
he COMP new book publish ASP
'His new book was published.'
- b. *tā de xīn shū bèi chūbǎn le
he COMP new book publish ASP
'His new book was published.'
- (11) a. nǐ de kǎoxiāng yǐyīng xiūlǐ-hǎo le
you COMP oven already fix-finish ASP
'Your oven was already fixed.'
- b. *nǐ de kǎoxiāng yǐyīng bèi xiūlǐ-hǎo le
you COMP oven already fix-finish ASP
'Your oven was already fixed.'

From sentences (10b) and (11b), it is clear that the verbs [chūbǎn] 'publish' and [xiūlǐ-hǎo] 'finish fixing' do not occur with *bèi*. If *bèi* is present, the only possible interpretation is that there is something adverse.

3. Analysis

Within a recent Government and Binding framework, Baker (1985) proposes an incorporation analysis for passive constructions. Passive constructions are usually characterized as having Case-absorption and externalization of the internal theta-role. Baker, however, proposes a universal structure for passive constructions which involves a passive morpheme, either in INFL or in a nominal position later incorporated into INFL, as shown in (12) and (13).



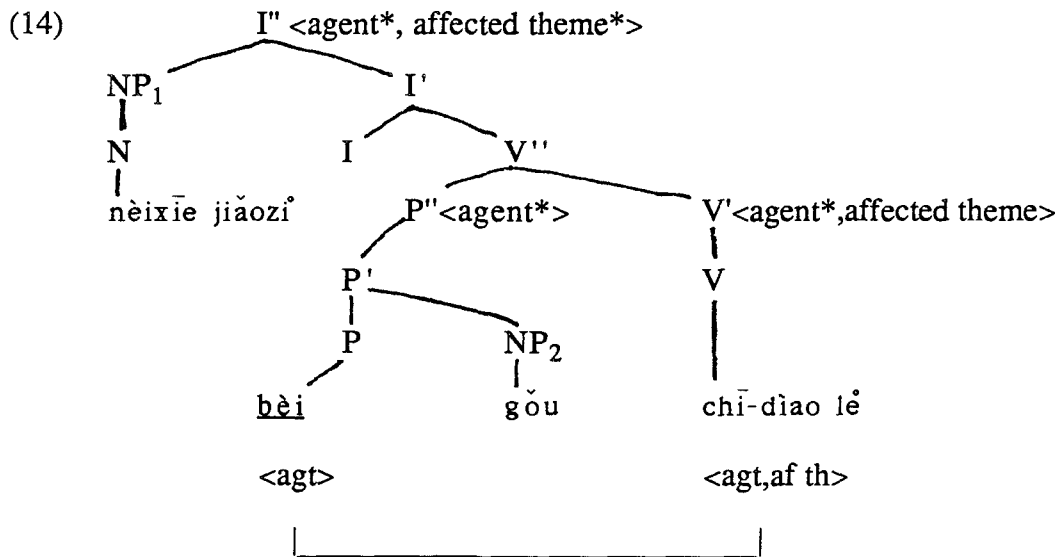
The presence of a passive morpheme in INFL accounts for the morphology of passives in many languages (see Baker (1985) for examples). While such an analysis might be considered for Mandarin, Mandarin morphology does not support the existence of a passive morpheme, since no such morpheme ever appears overtly. This suggests an alternative analysis to an empty passive element in INFL, namely that there is no passive structure in Mandarin. In the remainder of this paper, I argue for this proposal.

3.1. Passives with bèi

Let us first consider passive sentences with bèi. In Cheng (1986), I argue that bèi is a preposition. Following Higginbotham (1985) and Sproat (1985), I assume that theta-roles must be discharged. Sproat (1985) states that "thematic grids are percolated up the tree from the heads....At each node where a thematic role is discharged, we notate that fact by placing an asterisk next to the appropriate role" (Sproat 1985:155). There are three methods of discharging theta-roles: theta-marking, theta-binding and theta-identification. In theta-identification, when two theta-roles are identical, one is discharged by the other.

³ The hyphen here indicates that it is a passive morpheme.

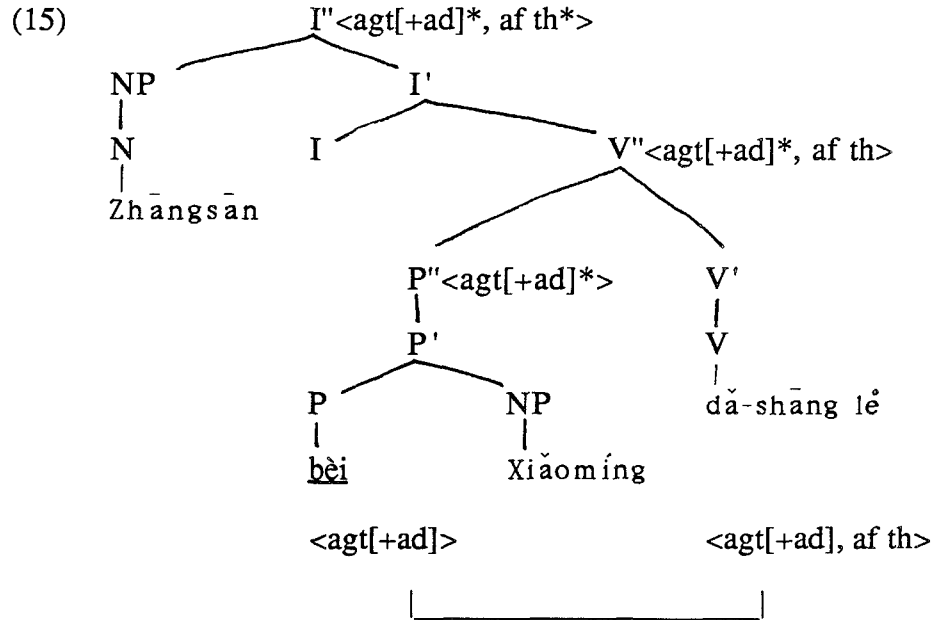
Like other prepositions in Mandarin, bèi theta-marks the NP following it. Since the NP following bèi is always the agent of the action, let us assume that bèi assigns the <agent> theta-role to the NP following it. Consequently, with verbs which assign an <agent> theta-role, the theta-role of the verb can be discharged through theta-identification with the theta-role <agent> of bèi. Thus, sentence (1) has the representation in (14).



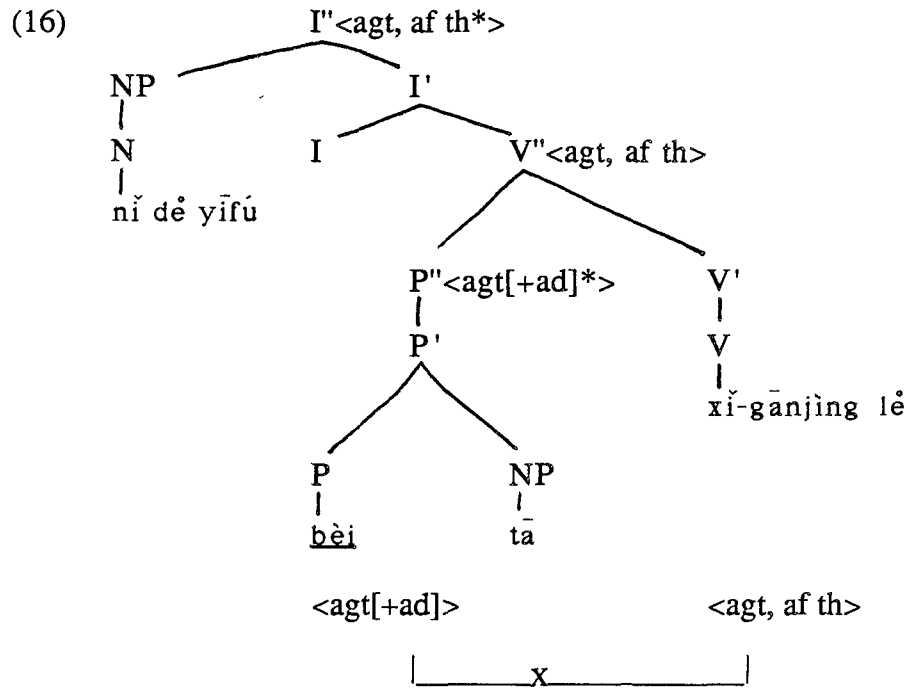
'Those dumplings got eaten up by the dog.'

The <agent> theta-role of the verb [chī-dào] is discharged through theta-identification with the <agent> theta-role of bèi. The <agent> theta-role of bèi is assigned to NP₂ [gǒu] by theta-marking.

As shown earlier, bèi does not occur with all verbs. The ungrammaticality of sentences (7)-(9) is attributed to the fact that bèi only occurs with verbs indicating an adverse agent. This indicates that the theta-role assigned by bèi should be <agent>, specified with a feature [+adversative] ([+ad]). Thus, sentence (3) has a representation in (15), while sentence (7) has a representation in (16).



'Zhangsan was hit by Xiaoming and he is wounded.'



'Your clothes were washed by him and they are now clean.'

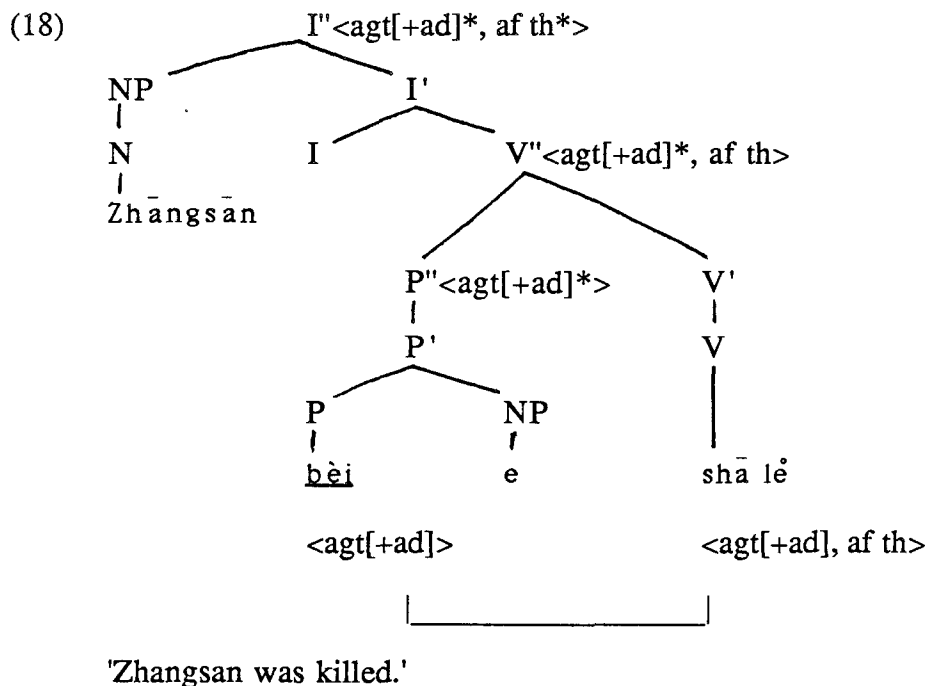
In (15), the <agent [+ad]> theta-role of the verb is discharged by the <agent [+ad]> of the preposition bèi. In contrast, in (16), the <agent> theta-role of the verb cannot be discharged through theta-identification with the <agent [+ad]> theta-role of bèi. Thus, although the NP 'tā' is assigned the <agent [+ad]> theta-role by bèi, the undischarged

<agent> theta-role of the verb violates the theta-criterion stated in (17).

(17) Theta-criterion (Sproat 1985:158)

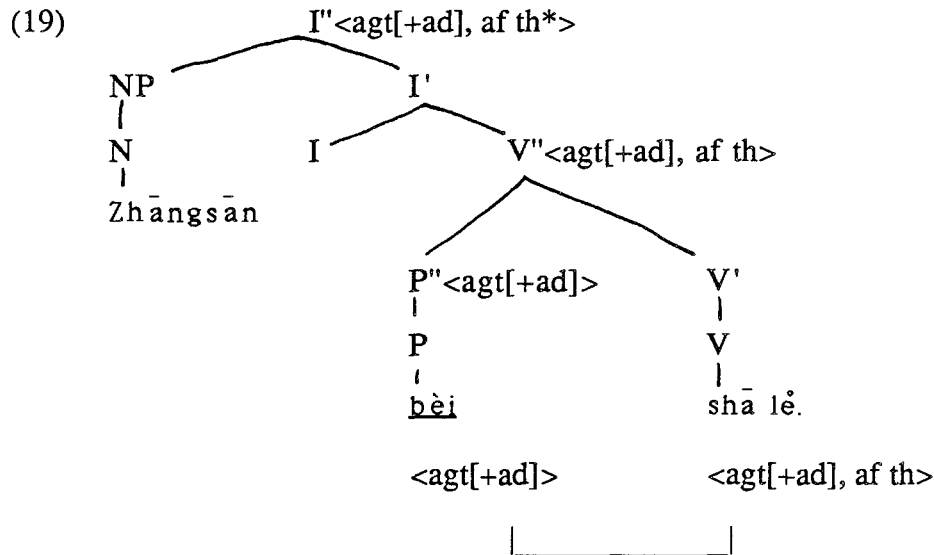
- i) If a discharges a thematic role in b, then it discharges only one.
- ii) Every thematic position is discharged.

As shown in examples (5) and (6) earlier, the NP following bèi is optional. It should be noted that sentences in which NP₂ does not occur might violate the theta-criterion. The structure for a sentence such as (5) might be thought to be (18).



The <agent [+ad]> theta-role of [shā] 'kill' can be discharged through theta-identification with <agent [+ad]> bèi. The question which arises is whether the theta-role <agent[+ad]> of bèi is assigned to the empty NP [e]. The empty category [e] here cannot be PRO because it is governed by the preposition bèi. It cannot be pro because of the interaction between the Disjoint Reference Condition and the Generalized Control Rule stated in Huang (1984)⁴. Furthermore, if [e] is a variable, it is a free variable. Thus, [e] here cannot be present at S-structure. The S-structure of (5) must therefore be as shown in (19).

⁴ DJR: a pronoun must be free in its governing category.
GCR: coindex an empty pronominal with the closest nominal element.



'Zhangsan was killed.'

In (19), although the theta-role <agent [+ad]> of the verb is discharged by theta-identification, the <agent [+ad]> theta-role of bèi is left undischarged. Consequently, the theta-criterion is violated.

Consider further the sentences in (20) and (21).

- (20) a. tā dè qián zài jīchǎng bǐ rén tōu lè
 he COMP money at airport person steal ASP
 'His money was stolen by someone at the airport.'
- b. tā dè qián zài jīchǎng bǐ tōu lè
 he COMP money at airport steal ASP
 'His money was stolen at the airport.'
- (21) a. tā dè qián bǐ rén zì jīchǎng tōu lè
 he COMP money person at airport steal ASP
 'His money was stolen by someone at the airport.'
- b. *tā dè qián bǐ zì jīchǎng tōu lè
 he COMP money at airport steal ASP
 'His money was stolen at the airport.'

The sentences in (20) further illustrate the optionality of the NP following bèi. When there is a PP before the bèi-phrase, the NP following bèi is not obligatory, as shown in (20b). Sentence (21a) shows that a prepositional phrase may intervene between the bèi-phrase and the verb. However, when there is an intervening PP, the NP following bèi is obligatory, as shown by the ungrammaticality of (21b). Sentences in which bèi lacks an overt object

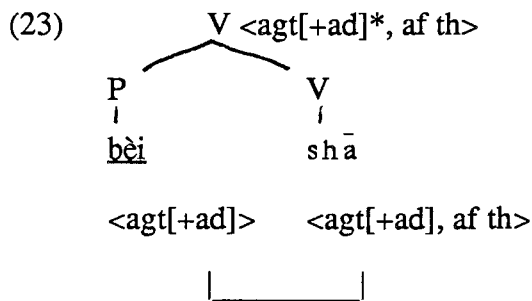
are normally grammatical (recall (5) and (6)). The question which arises, then, is what conditions the ungrammaticality of (21b).

Following Hornstein and Weinberg (1981), I propose that there is a reanalysis rule, given in (22), which applies to sentences such as (5), (6), (20) and (21a).

(22) $VP[P + e + V] \rightarrow V[P V]$

(22) states that in the domain of VP, a preposition which is followed by an empty NP is reanalyzed as part of a compound verb. Thus, the VP [bèi + e + shā] is reanalyzed as $V[\underline{bèi} + shā]$.

After reanalysis has taken place, the compound verb [bèi-shā] has the structure in (23).



Through theta-identification, the <agent [+ad]> theta-role of the verb [shā] is discharged. Since bèi is not the head of the compound verb [bèi-shā], the theta-role of bèi cannot percolate. Therefore, the only theta-role left undischarged is the <affected theme>. This theta-role will ultimately be discharged to the subject NP, satisfying the theta-criterion. (21b) on the other hand is ungrammatical because bèi is not adjacent to the verb and thus cannot be reanalyzed as part of a compound. Therefore, the <agent [+ad]> theta-role is left undischarged and the theta-criterion is violated.

The above analysis of bèi-sentences shows that bèi indicates an adverse agent and that sentences with bèi indicate an adverse situation.

3.3. Passives without bèi

Li and Thompson (1981) claim that sentences such as (10) and (11) represent topicalization structures rather than passives. That is, (10) would have the structure given in (24).

- (24) tā de xīn shūj, e_i chūbǎn e_j lě
 he COMP new book publish ASP
 'His new book was published.'

The agent of the action [chūbǎn] 'publish' is implied but not specified. While sentences such as (10) and (11) present no particular problems for a topicalization analysis, this view cannot account for the ungrammatical sentences in (25) through (27).

- (25) ?*yífú xǐ-huài lě⁵
 cloth wash-damage ASP
 'The clothes were damaged by being washed.'

- (26) *Lǐ Xiǎojiě yāoqǐng lě
 Miss invite ASP
 'Miss Li was invited.'

- (27) *Zhāngsān mà lě
 scold ASP
 'Zhangsan was scolded.'

There is no reason to exclude sentences (25)-(27) under a topicalization analysis. Sentence (25), for instance, would have the structure in (28).

- (28) yífúj, e_i xǐ-huài e_j lě
 clothes wash-damaged ASP
 'The clothes were damaged by being washed.'

The ungrammaticality of sentences (25)-(27) shows that the topicalization analysis cannot be correct, since this structure should be uniformly available.

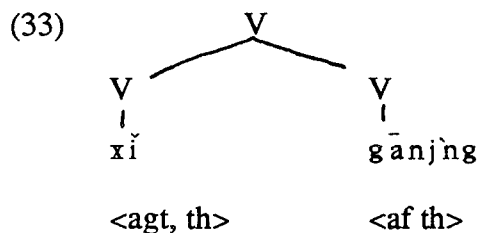
Now consider sentences (29) through (32).

- (29) a. *tā de yífú xǐ lě
 he COMP cloth wash ASP
 'His clothes were washed.'

⁵ This sentence is not absolutely acceptable. On the other hand, 'yífú xǐ-hǎo lě' is perfectly acceptable.

- b. tā de yīfú xǐ-gānjìng le
he COMP cloth wash-clean ASP
'His clothes were cleaned by washing.'
- (30) a. *nèifāng xìn xiě le
that letter write ASP
'That letter was written.'
- b. nèifāng xìn xiě-hǎo le
that letter write-finish ASP
'That letter was written.'
- (31) a. *mén lā le
door pull ASP
'The door was pulled.'
- b. mén lā-kāi le
door pull-open ASP
'The door was pulled and opened.'
- (32) a. *nèidòng fángzi gài le
That building build ASP
'That building was built.'
- b. nèidòng fángzi gài-hǎo le
that building build-finish ASP
'That building was built.'

The verbal compounds in (29b)-(32b) have been called "resultative compounds" (Thompson 1973). That is, they consist of an action verb and a resultative verb. While (29a)-(32a), which contain simple action verbs, are ungrammatical, the corresponding (b) sentences, which differ only in that they contain resultative compounds, are grammatical. Let us therefore examine the structure of the resultative compound. The compound [xǐ-gānjìng] 'wash-clean' has the structure shown in (33).



The verb [xǐ] 'wash' is transitive. Therefore, it has an argument structure consisting of

two theta-roles, one external and the other internal. [gānjìng] 'clean', on the other hand, is an intransitive verb with only an external argument. What is the argument structure of the compound verb?

Following Williams (1981), I assume the Right-hand Head Rule, stated in (34).

- (34) In morphology we define the head of a morphologically complex word to be the right-hand member of that word.
(Williams 1981:248)

The features and argument structure of the head percolate up to become the features and argument structure of the compound. The features and argument structure of the non-head may not percolate. In other words, the argument structure of [gān-jìng], which is the head of the compound [xǐ-gānjìng], percolates up. The whole compound should therefore have only one external argument, which should be assigned an <affected theme> theta-role.

Now consider sentence (35).

- (35) wǒ bǎ nǐ de yīfú xǐ-gānjìng le
I you COMP clothes wash-clean ASP
'I washed your clothes and they are now clean.'

Bǎ is a preposition which assigns the theta-role <affected theme>. The <affected theme> theta-role of the verb is discharged through theta-identification with the <affected theme> of bǎ. The NP [nǐ de yīfú] 'your clothes' is assigned the theta-role <affected theme> by bǎ. However, if the compound verb [xǐ-gānjìng] has only one theta-role available, we would expect (35) to be ungrammatical, since the subject NP (external argument) would not receive a theta-role, violating the theta-criterion. However, (35) is perfectly well-formed. This means that the compound verb [xǐ-gānjìng] must also have an <agent> theta-role to assign.

The <agent> theta-role of a resultative compound verb is assigned to an argument in a sentence like (35), but is not assigned in sentences (29b) through (32b). If there is an <agent> theta-role available which is not discharged, the theta-criterion ought to be

violated. This situation mirrors the middle verb construction in English, an example of which is given in (36).

- (36) a. The butcher cuts the meat.
b. The meat cuts easily.

In (36a), the agent is explicit and the <agent> theta-role is discharged to the external NP 'the butcher'. In contrast, in (36b) the verb cut has an implicit agent, even though the <agent> theta-role is not discharged to any syntactic argument.

Guerssel et. al. (1985) propose that verbs like cut in English have only one argument linked to them in the argument structure. The agent theta-role is present but not linked,. When an agent theta-role is required, it can be linked and assigned to an argument. A verb like cut therefore has the structure given in (37).

- (37)
- | | |
|--------|--------|
| cut | |
| | |
| <agent | theme> |

Only the <theme> theta-role is linked to the verb. Thus, when there is one argument in the sentence, <theme> is assigned to it. If there are two arguments, <agent> can also be linked.

Let us now compare verbs like cut with Mandarin resultative compound verbs. When these verbs occur with one argument, the argument gets the theta-role <affected theme>. However, these verbs may take a second argument which bears the agent theta-role. It therefore appears that the compounding process involved here causes both the <affected theme> from the head, and the <agent> from the non-head, to percolate. Since an analysis of this compounding process is beyond the scope of this paper, I will assume that the derived compounds in question have the argument structure <agent, affected theme> with the <affected theme> theta-role linked and the <agent> theta-role unlinked.

When a theta-role is unlinked, it is invisible to the theta-criterion. Thus, in sentences (29b)-(32b), the theta-criterion is satisfied. In contrast, verbs like [xǐ] 'wash'

and [xiě] 'write' are purely transitive. Their argument structure consists of two linked theta-roles. When one of the theta-roles is left undischarged, the theta-criterion is violated as illustrated in (29a)-(32a).

Notice that sentence (25) also has a resultative compound verb, and yet the sentence is ungrammatical. This contrasts with the grammatical sentences in (29b)-(32b). The difference between [xǐ-huài] 'wash-damaged' and the verbs in (29b)-(32b) is that [xǐ-huài] 'wash-damaged' assigns an adverse agent theta-role. I propose that a filter, stated in (38), serves to rule out (25).

- (38) *<agent [+adversative]>

(38) applies at S-structure. Any <agent [+ad]> theta-role, either linked or unlinked, is ruled out if it is not discharged. In other words, (25) is ungrammatical because the <agent [+ad]> theta-role is not discharged.

It appears, then, that 'bèi-less' sentences should not be treated as topicalized structures. Verbs which occur in bèi-less sentences are verbs with an argument structure such as (37).

3.3. Case and resultative compounds

I have shown that resultative compounds must have an argument structure consisting of two theta-roles, one linked, the other unlinked. Since the derived argument structure of the compounds differs from the argument structure of a simple transitive verb, the question arises as to whether these compounds behave like transitive verbs. A transitive verb normally assigns accusative Case to its object NP. For instance, in the sentence [wǒ dǎ nǐ] 'I hit you', the pronoun [nǐ] is assigned accusative Case by the verb [dǎ]. The sentences in (39) and (40) show that resultative compound verbs do not behave like transitive verbs with respect to case assignment.

- (39) a. *Zhāngsān xǐ-gānjìng le nǐ de yīfú
wash-clean ASP you COMP clothes
'Zhangsan washed your clothes and they are clean.'

- b. nǐ de yīfú xǐ-gānjìng le
 you COMP clothes wash-clean ASP
 'Your clothes were washed and they are now clean.'
- c. Zhāngsān bǎ nǐ de yīfú xǐ-gānjìng le
 you COMP clothes wash-clean ASP
 'Zhangsan washed your clothes and they are clean.'
- (40) a. *tā xiūlǐ-hǎo le nǐ de biǎo
 he fix-good ASP you COMP watch
 'He fixed your watch and it is fine now.'
- b. nǐ de biǎo xiūlǐ-hǎo le
 you COMP watch fix-good ASP
 'Your watch was fixed and it is fine now.'
- c. tā bǎ nǐ de biǎo xiūlǐ-hǎo le
 he you COMP watch fix-good ASP
 'He fixed your watch and it is fine now.'

Sentences (39a) and (40a) are ungrammatical although the theta-roles are properly discharged, as discussed earlier. It appears that the NP's following the resultative compound verbs do not have Case, leading to the ungrammaticality of (39a) and (40a).

A similar situation arises in other languages. As shown by Burzio (1986), Belletti (1986), and Safir (1985), many languages contain a class of unaccusative verbs, which take an internal argument but cannot assign accusative Case to that argument. The resultative compound verbs appear to be similar to the unaccusative verbs. Under this analysis, (39b) and (40b) have D-structure (41) and (42).

- (41) e xǐ-gānjìng le NP[nǐ de yīfú]
 wash-clean ASP you COMP clothes
- (42) e xiūlǐ-hǎo le NP[nǐ de biǎo]
 fix-good ASP you COMP watch

The post-verbal NPs, [nǐ de yīfú] 'your clothes' and [nǐ de biǎo] 'your watch' in (41) and (42) are assigned the <affected theme> theta-role by the verb. However, since the verbs are unaccusative and cannot assign accusative Case, the NPs must move to subject position to receive nominative Case. The same NPs in (39a) and (40a) cannot move

because subject position is lexically filled. The sentences are therefore ruled out by the Case filter. Sentences (39c) and (40c) are grammatical because bǎ is a Case assigner. The object NPs in (39c) and (40c) are assigned the <affected theme> theta-role and Case by bǎ. The subject NPs in these two sentences get nominative Case as usual.

The 'bèi-less passives' are therefore not passives at all, but rather sentences with unaccusative verbs. The Case-assigning property of the verb is lost through the process of compounding, rather than through passive formation.

4. Conclusion

In summary, it is clear that bèi is an adversity marker rather than a passive marker. As such, bèi does not absorb the external theta-role of the verb. The bèi-less 'passives' are sentences with unaccusative verbs. The subjects in these sentences are not base-generated in the preverbal position. Instead, they are generated in the post-verbal position and later move to subject position to receive Case. There is no evidence for an empty passive morpheme in INFL since bèi-sentences and bèi-less 'passives' do not require a passive morpheme to absorb Case or theta-role.

The question which arises is whether the bèi-sentences and bèi-less passives are in fact passives. As Chomsky (1981) states, the term passive does not refer to a unified phenomenon. It simply provides a useful way to describe a range of phenomena which seem to share similar functional properties. Therefore, the term passive has been used to describe the two kinds of structures in Mandarin discussed above. We may still use the term passive to identify these two kinds of structures. However, we should keep in mind that neither bèi-sentences nor bèi-less passives involve any passive morphology, nor do they have the usual structural characteristics of passives found in other languages.

The above discussion also shows that verb-verb compounds in Mandarin, in particular resultative compounds, present problems for the Right-hand head rule in morphology. Future research is required to determine the derivation of the compounds. Chinese is usually considered to be a language without much morphology. However, from the behavior of the resultative compounds, it is clear that there is much more to be said about Chinese morphology.

REFERENCES

- Baker, Mark C. (1985) Incorporation: A Theory of Grammatical Function-Changing. MIT PhD Dissertation.
- Belletti, Adriana (1986) "Unaccusatives as Case Assigners." Lexicon Project Working Papers #8. MIT.
- Burzio, Luigi (1986) Italian syntax: A Government-Binding Approach. D. Reidel Publishing company.
- Cheng, L. L-S (1986) Clause Structures in Mandarin Chinese. M.A. Thesis. University of Toronto.
- Chomsky, N. (1981) Lectures on Government and Binding. Foris. Dordrecht.
- Guerssel et. al. (1985) "A cross-linguistic study of transitivity alternations." CLS 21, papers from Parasession on Causatives and Agentivity. p.48-63.
- Higginbotham, J. (1985) "On Semantics." Linguistic Inquiry 16.4:547-593.
- Hornstein, N. and Weinberg, A. (1981) "Case theory and preposition stranding." Linguistic Inquiry 12.1:55-91.
- Huang, James C.-T. (1984) "On the distribution and reference of empty pronouns." Linguistic Inquiry 15.4:531-574.
- Li, C. and Thompson, S. (1981) Mandarin Chinese: A Functional Reference Grammar. University of California Press. Berkeley.
- Lin, Helen T. (1981) Essential Grammar for Modern Chinese. Lucky Book Ltd. Taiwan.
- Perlmutter, David M. (1978) "Impersonal passives and the unaccusative hypothesis." Berkeley Linguistic Society. p.157-189.
- Safir, Kenneth J. (1985) Syntactic Chains. Cambridge University Press.
- Sproat, Richard W. (1985) On Deriving the Lexicon. MIT PhD Dissertation.
- Thompson, Sandra A. (1973) "Resultative verb compounds in Mandarin Chinese: a case for lexical rules." Language 49.2:361-379.
- Williams, E. (1981) "Argument structure and morphology." Linguistic Review 1:81-114.