GRAMMATICALIZATION OF MANDARIN TRANSFER
VERBS GEI AND BEI AS PASSIVE MARKERS

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In Mandarin, it has been noticed that historical changes in serial verb constructions have played a role in the process of grammaticalization (Li & Thompson 1974a, Sun 1996). Traditional analyses have tended to analyze different senses of a linguistic item independently and their inter-relatedness was largely neglected. Not many investigations have been conducted in traditional analyses to explore relatedness between its lexical use and grammaticalized use of the same item. Since its metaphorical extended senses or functions were not searched for in most traditional analyses, any motivation behind the semantic/functional extension was largely unexplained.

This paper proposes that Mandarin passive markers are derived from two related transfer verbs: bei ‘receive’ and gei ‘give’ and that their development is motivated on several grounds. Therefore, the focus of this paper is on the grammaticalization of these two transfer verbs and their motivations. Nothing has been done before to explore the inter-relatedness of these two transfer verbs to develop into passive markers. In fact, Mandarin gei 'give' and the original verb meaning of bei 'receive', from which passive constructions are derived, have the same conceptual base which involves three participants: the giver, the thing, the receiver. Change of control and possession is often associated with verbs of this category (Newman 1996). However, the meanings of gei and bei constructions are not identical and these two passive constructions are not interchangeable on some occasions. The bei construction is neutral and can express favorable or unfavorable conditions while the gei construction is more likely to be used in unfavorable or detrimental situations. Such differences are motivated by their different original verb meanings. In fact, the grammaticalization of bei and gei as passive markers is not random, but motivated. Their grammaticalization can be viewed as functional extensions from their verb meanings. The fact that bei and gei can be used in different kinds of passive conditions reflects traces of their original verb meanings.

1. The Role of Serial Verb Constructions in Grammaticalization

Hopper and Traugott (1993) claim that grammaticalization is the study of grammatical forms and it can be viewed as entities undergoing processes rather than as static objects. In Mandarin, historical changes in serial verb constructions have played an important role in the process of grammaticalization. For example, in Old Chinese prior to the Tang Dynasty, ba was a lexical verb meaning ‘take or take hold of’ and it could be used as the only predicate in a sentence such as (1) or in a serial verb construction as in (2):

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(1)  Zuo shou ba qi xiu.
left  hand  hold  his  sleeve
'The left-hand holds his sleeve.' (Sun 1996: 61)

(2)  Yu qing ba tian zhi ruiling yi zhen you Miao.
Yu  himself  heldheaven POSS^1  mandate  to  conquer  PART  Miao
'Yu himself took hold of the mandate of heavy to conquer Miao.'
(Mezi, 5th C. BC, Li & Thompson 1974b: 202)

In Middle Chinese, ba became increasingly associated with a serial-verb construction (Sun 1996).

(3)  Zui ba hua kan yi zi shang.
drunk  hold  flower  watch  more  self  hurt
'Drunk, I look at the flower by holding it, even more broken-hearted.'
(Bai Juyi, Sun 1996: 62)

In (3), ba is used as a lexical verb meaning 'take hold of' and it is used as the first verb in a serial verb construction.

In the seventh to ninth century, ba occupied an ambiguous status between being a verb and a preposition-like case marker. The following example suggests two possible interpretations:

(4)  Zui ba zhu-gen-zi xi kan.
drunk  BA  dogwood-tree  careful  look
a. 'While drunk, (I) took hold of the dogwood and carefully looked at it.'
b. 'While drunk, (I) carefully looked at the dogwood.'
(8^th  C. AD, Du-fu poem, Li & Thompson 1976: 485)

Example (4) provides the staging for a reanalysis of the former verb ba 'take hold of' as a marker of the object of the verb and the collapsing of what had once a serial verb construction (with two clauses, interpretation 4a) into a single clause (interpretation 4b) (Hopper & Traught 1993).

Li and Thompson (1974b) observed that the process of grammaticalization of ba as an object marker began in the late Tang Dynasty (around 9^th C. AD). The following example from the Tang Dynasty illustrates the use of ba as an object marker:

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1 The abbreviations used in this paper are the following: POSS=possessive; PART=particle; CL=classifier; PERF=perfective.
Most of grammaticalized changes in Mandarin are said to be unidirectional from the major category—verb to the minor category—preposition. In order to define the deverbalized category, a new term—coverb was created to refer to it. The following are some representative items with glosses of both their verbal meanings and their coverb meanings.

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>(OLDER) VERBAL MEANING</th>
<th>COVERB MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>bei</td>
<td>to cover, to receive</td>
<td>by—passive marker</td>
</tr>
<tr>
<td>ba</td>
<td>to take hold of</td>
<td>preverbal object marker</td>
</tr>
<tr>
<td>na</td>
<td>to grasp</td>
<td>with (instrumental)</td>
</tr>
<tr>
<td>gei</td>
<td>to give</td>
<td>for, to, passive marker’</td>
</tr>
<tr>
<td>wei</td>
<td>to do</td>
<td>benefactive for’</td>
</tr>
<tr>
<td>gen</td>
<td>to follow</td>
<td>with (comitative)</td>
</tr>
<tr>
<td>dui</td>
<td>to face</td>
<td>to, toward’</td>
</tr>
<tr>
<td>yun</td>
<td>to go along</td>
<td>along</td>
</tr>
</tbody>
</table>

In order to define this new deverbalized category in Mandarin, originally either from serial verb constructions or from other lexical verbs, which have undergone grammaticalization, a new term, coverb, has been created to refer to it. However, traditional analyses have tended to analyze different senses of a linguistic item independently and the inter-relatedness among its different senses was largely neglected. Since metaphorical or extended senses or functions of lexical or grammatical items were not seriously considered in most traditional analyses, motivations behind the semantic and functional extension were largely unexplained.

In recent years, some research (e.g. Newman 1996) has been conducted which has explored the relatedness of various senses of a given item. However, the case system in Mandarin Chinese has not been adequately investigated. The relatedness of the source items and the target items in the process of grammaticalization of Mandarin case markers should deserve more study than it has received.

2. Motivations of Grammaticalization of Transfer Verbs

This paper proposes that Mandarin passive markers are derived from two related transfer verbs: bei ‘receive’ and gei ‘give’ and that their development is motivated on several grounds.

(a) Human beings tend to conceive of the world as being populated by discrete objects. Motion and dislocation of discrete objects are basic human concepts. Transfer verbs which reflect human interactions and manipulations with the objects are good candidates for indicating interactive relations between participants.
Using transfer verbs as case markers is also motivated by the concept of transfer in motion and in transitivity. Motion often involves energy transfer and it is also the case with the transitivity in which the agent transfers energy to the theme, which often changes its state as the result of such transfer (Rice 1987).

Although the fact that Mandarin case markers basically come from transfer verbs is not predicted this kind of development often makes sense when it takes place.

3. Semantic Relatedness of Gei ‘Give’ and Bei ‘Receive’

3.1 Action Chain

An action chain refers to an interaction network and each link in the chain involves one participant transmitting energy into a second, in turn transfers energy to a third, and so on. The initial energy source is the HEAD of the chain and the ultimate energy sink is the TAIL (Langacker 1991a).

In energetic interactions involving an instrument to form an action chain, it is often the case that three participants fall into the scope of predication of a finite clause. The three participants instantiate the canonical agent (AG)---volitional energy source, instrument (INSTR) and the patient (PAT)---energy sink. Prototypically, the agent is chosen to be the subject while the patient the object. The subject is considered to be the "head" of the profiled portion of the action chain. The object is the tail of the profiled portion of the action chain (Langacker 1991b).

3.2 Profile

Langacker (1988) proposes that a semantic structure derives its value through the imposition of a profile on a base. As the basis for its meaning, an expression evokes a certain body of conceptual content, called its base. Within its overall conception, it directs attention to some particular substructure---the profile. The profile comprises those portions of the base which the entity designates or refers to. Some facet of the base is raised to a distinctive level of prominence, and serves as its focal point and this substructure is the predication’s profile (Langacker, 1988).
As in Figure (1), the base for Husband and Wife is the same: a male (M) and a female (F) have a certain kind of relationship indicated by a line between them. The differences lie in the profile: for Husband, male is profiled indicated by bold in the figure, but for Wife female is profiled (Langacker, 1988).

3.3 Relatedness of Gei ‘Give’ and Bei ‘Receive’

Nothing has been done before to explore the inter-relatedness of these two transfer verbs to develop into passive markers. In fact, Mandarin *gei* ‘give’ and the original verb meaning of *bei* ‘receive’, from which passive constructions are derived, have the same conceptual base which involves three participants: the giver, the thing, the receiver. Change of control and possession is often associated with verbs of this category (Newman 1996).

*Gei* ‘give’ involves an energy flow, which is initiated by the giver (the energy source) and ends up with the recipient (the energy sink). *Bei* ‘receive’ focuses more on the later stage of this transfer and the receiver acts as the primary participant, the trajector with this verb. The semantic differences lie mainly in profiling the different elements or substructures in the base. Langacker (1991a) proposes the following figure to capture the contrast of semantic structures of *give* and *receive* constructions:

(a) GIVE

![Diagram of GIVE and RECEIVE](image_url)
The major participants in both give and receive predications are an agent (AG), a mover (M) and the receiver. The receiver is not only the final possessor (POS), but also the experiencer (EXP) who perceives the change of possession. In give constructions, the agent is the subject (S) while in receive constructions, the receiver is the subject. In both give and receive the mover is the object (O). The dashed-line circles represent entities over which the agent and the receiver exercise dominion.

For both verbs, the agent exerts some force to impel the mover from its own domain of control to that of the receiver. The double arrow represents the energy transmission and the single arrow depicts the path of the resulting motion. The dashed-line arrows indicate the complex nature of the interactions involved between the receiver and the mover when the latter changes possession (Langacker 1991a). The boldface stands for the profiled elements or structures.

The semantic contrast of give and receive constructions lies less in conceptual content than in profiling and grammatical relations (Langacker 1991a). As illustrated in Figure (2), in give constructions, the subject is an agent that heads the action chain and the initial portion of the action chain is more prominent in the interactive network but in receive, the subject is the receiver and the later portion of the action chain is more prominent. Langacker (1991b) suggests that the receiver represents a highly marked choice of subject because its role is seemingly passive—the donor is agentive but the receiver does not necessarily do anything at all. Therefore, in both giving and receiving, the giver basically is in control and the receiver plays a relatively passive role in the transfer act.
4. Grammaticalization of Transfer Verbs *Bei* 'Receive' and *Gei* 'Give' as Passive Markers

4.1 Motivation of Verbs *Gei* and *Bei* as Passive Markers

In both *give* and *receive* the mover is the object. For both verbs, the agent exerts some force to impel the mover from its own domain of control to that of the receiver. In both giving and receiving, the giver basically is in control and the receiver plays a relatively passive role in the transfer act. It is the implication of the passive role of the recipient from the semantics of the original verb *bei* 'receive' and *gei* 'give' that motivates the extension of the passive *gei* and *bei* constructions.

4.2 Grammaticalization of *Bei* 'Receive' as Passive Marker

In Old Chinese, *bei* was originally a verb meaning 'receive'. The following two sentences illustrate its verbal use in Old Chinese:

(7) a. *Bei* shui han zhi hai
receive water cold of damage
'Receive damage from flood and cold.' (Siji, Sun 1996: 63)

b. *Bao* zhe bei huichou.
immoral people receive punishment
'Those who are immoral will receive punishment.'
(5th C. BC, Mezi, Li & Thompson 1974a: 204)

One possible explanation for the emergence of *bei* as a passive marker was a consequence of a word-order neutralization concerned with two sets of verbs that formally distinguished actor and undergoer subjects. In Old Chinese, for certain verbs there was a word-order constraint on the subject positions (Mei 1991, Sun 1996). Certain verbs allowed only actor subjects while other verbs allowed only undergoer subjects. The sentences in (8) and (9) illustrate these two types of verbs respectively.

(8) An beng jin ya-sha wozhe
bank break all press-kill sleepers
'The bank gave away, killing all the sleeping people.'
(Shiji Waiqi shijai, Sun 1996: 64)

(9) Bai yu ren tan beng jin ya-si
hundred more people mine break all press-die
'More than one hundred people were killed in the collapse of the mine.'
(Lunheng Mingyi, Sun 1996: 64)

In (8), the verb compound *ya-sha* 'press-kill' as V-*sha* type in Old Chinese requires an actor as its subject while in (9), the verb compound *ya-si* 'press-die' as a V-*si* type needs an undergoer as its subject.
Sun (1996) claims that such a distinction became neutralized in Middle Chinese. The following example shows that an actor subject appears before a V-si type verb, which was not allowed in Old Chinese:

(10) Zhuren yu da-si zhi.
    master want hit-die him

'The master wants to kill him.'  (Taiping guangji, Sun 1996: 64)

Mei (1991) observed that the process of such neutralization began in the Han period (206 BC-220 AD) and stabilized in the Tang period (7th C. AD-9th C. AD). When the changes were under way, the neutralization process might have created serious ambiguity in communication, because the word order used to determine the semantic relationships of the nominal no longer distinguished actor and undergoer subjects. That is, the subject for the V-si could be either the person who actually was killed or the person who caused others to die (Sun 1996). "The grammaticalization of bei right at this time functioned to mark the passive construction. In a way, it functioned to alleviate a potential communicative problem by indicating that the subject was not an actor" (Sun 1996: 65).

(11) Du zuo tang shang, ye bei ci-si.
    alone sit hall up night BEI stab-die

'Sitting alone in the hall, (he) was stabbed to death at night.'  (Chaoyejianzai, Sun 1996:65)

In (11), the subject, which happened to be a zero anaphora, of a V-si type verb compound, was clearly indicated to be non-agentive by the passive marker bei.

There is some evidence to suggest that the process of neutralization and the development of the bei as a passive marker began almost at the same time. During the Han dynasty (206 BC-220 AD), when the neutralization began to emerge, bei started to function as a grammatical marker and at that stage the bei-construction did not necessarily have an overt agent reading (Li & Thompson 1974a) as the following example shows:

(12) Zhong er bei bang.
    loyal yet BEI villify

'Loyal and yet was villified.'  (1st C. BC, Shiji, Li & Thompson 1974a: 203)

Consequently at an early stage of its grammaticalization, bei might simply have functioned to indicate that the nominal preceding bei was not an actor, but a patient. This may have temporarily resolved a potential ambiguity. Then, according to Wang (1958), during the Tang Dynasty bei started to emerge as a grammatical element which could introduce an actor besides its passive marker function:
(13) \[\text{Chang bei lao Yuan tou ge-lu.}\]

\[\text{often pass old Yuan steal rhyme-scheme}\]

'(My) prosodic scheme was frequently stolen by Old Yuan.'

(Bai Juyi, Sun 1996:64)

In (13), a verb reading, meaning 'receive' for \(bei\) is not available and instead, \(bei\) marks the passive construction and also indicates that the NP immediately follows \(bei\) is an actor.

The \(bei\) construction began to emerge relatively early and it has gone through one intermediate stage to simply mark a passive construction without introducing an actor before developing into its present form to mark an actor as well (Li & Thompson 1974a).

4.3 Grammaticalization of Gei 'Give' as Passive Marker

Newman (1993) claims that the different meanings associated with gei 'give' though unpredictable, are indeed motivated and related. The typical case of gei 'give' is that someone who has something passes it with his hands to another person. As Figure (2) illustrates, though the focus of give is on the source part---the initial portion of the action chain, the complicated relations between the receiver and the thing being moved is also included in the base. "In most cases, the semantic extension brings into focus some facet of the basic human experience of giving something to someone" (Newman 1993: 479). There are different ways to extract subparts of the literal meaning of give or to extend the meaning metaphorically in order to apply the verb to other semantic fields (Fagerli 2001). For example, in the case of the verb gei 'give' in Mandarin Chinese, the mover (the THING participant) can be extended to denote abstract entities. Therefore, when gei is used as a full lexical verb the THING participant can be either a concrete object as in (14) or an abstract entity as in (15).

(14) \[\text{Wo gei le ta yi ben shu.}\]

\[\text{I give FERF him/her one CL book.}\]

'I gave him/her a book.'

(15) \[\text{Laoshi gei le wo yi ge hao zhuyi.}\]

\[\text{Teacher give FERF me one CL good idea}\]

'The teacher gave me a good idea.'

In addition to being used as a full verb, gei can function as a passive marker.

(16) \[\text{Yu gei mao chi le.}\]

\[\text{fish passive marker cat eat FERF}\]

'The fish has been eaten by the cat.'

In the case of \(be\) used as a passive marker, it has developed from a verb meaning 'receive' to a full-fledged case marker. In modern Mandarin the verb reading for \(be\) 'receive' is no longer available though the passive implication from this verb is carried over in the \(be\) construction. As for the transfer verb gei 'give', it can be used either as a full lexical verb or as a case marker. When it is
used as a grammatical element, it can act as a passive, benefactive or recipient marker. Since *gei* is used freely to serve multiple functions in modern Mandarin, I assume that this transfer verb has long ago developed into a case marker while it still retains its verb status when it is used as a main predicate. If it is used with another verb in a sentence, it is often interpreted as a case marker.

5. **Differences between Gei and Bei Used as Passive Markers**

The meanings of *gei* and *bei* constructions are not entirely identical and these two passive constructions are not interchangeable on some occasions. The *bei* construction is neutral and can express favorable conditions while the *gei* construction is more likely to express detrimental situations. Such differences are motivated by their different original verb meanings.

The semantics of *bei* ‘receive’ is usually benefactive to the receiver and thus, it can be used in favorable passive constructions (e.g. *bei biaoyang* ‘be praised’; *bei tisheng* ‘be promoted’).

However, the semantics *gei* ‘give’ is often to offer something at the giver’s cost instead of being benefactive to the giver. Thus, it is often used in unfavorable or detrimental passive situations (e.g. *gei piping le* ‘was criticized’; *Yu gei mao chi le* ‘The fish was eaten by the cat.’).

These differences in the use of the two passive constructions have been confirmed by the corpus data. The corpus Data used in this paper are from Sinica Balance Corpus of Modern Mandarin Chinese. I obtained 2000 hits which contain the key word *gei*. Since *gei* can serve different functions, out of the 2000 hits there are 119 hits in which *gei* is used as a passive marker. Table (1) illustrates the number and the percentage of different passive conditions with *gei* as a passive marker.

<table>
<thead>
<tr>
<th>Gei</th>
<th>favorable</th>
<th>neutral</th>
<th>Unfavorable or detrimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>3</td>
<td>27</td>
<td>89</td>
</tr>
<tr>
<td>percentage</td>
<td>2.5%</td>
<td>22.7%</td>
<td>74.8%</td>
</tr>
</tbody>
</table>

Table (1)  Number and percentage of different passive conditions with *gei* as a passive marker

Form Table (1) it can be seen that the statistic tendency is very obvious. *Gei* tends to be used as a passive marker which expresses unfavorable or detrimental conditions (or situations) to the patient while it is very seldom used as a favorable passive marker. In analyzing unfavorable or detrimental predicates in detail, it has been found that some verbs or verbs phrases are frequently used in these conditions as indicated in Table (2).
Bei in modern Mandarin is basically used to indicate passive constructions and I randomly selected 119 hits of bei which are used as a passive marker. Table (3) displays different passive conditions with bei as a passive marker.

<table>
<thead>
<tr>
<th>Bei</th>
<th>favorable</th>
<th>neutral</th>
<th>Unfavorable or detrimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>number</td>
<td>40</td>
<td>41</td>
<td>38</td>
</tr>
<tr>
<td>percentage</td>
<td>33.6%</td>
<td>34.5%</td>
<td>31.9%</td>
</tr>
</tbody>
</table>

Table (3) Different passive conditions with bei as a passive marker

Bei as a passive marker can be used for all these three conditions. It seems that bei is almost evenly distributed across these three categories.

6. Conclusions

It has been demonstrated that main Mandarin case markers have basically developed from transfer verbs. Transfer verbs usually involve an energy flow along an action chain. They reflect human interactions and manipulations with the objects. In that sense, transfer verbs can be good candidates to be used to indicate interactive relations between participants.

The grammaticalization of bei and gei as passive markers is not random, but motivated. Mandarin gei 'give' and the original verb meaning of bei 'receive', from which passive constructions are derived, have the same conceptual base. It is the implication of the passive role of the recipient from the semantics of the original verb bei 'receive' and gei 'give' that motivates the grammaticalization of gei and bei as passive markers. However, there are some semantic differences between these two passive markers, which lie mainly in profiling different elements or substructures in the base. The semantics of gei and bei constructions is not identical and these two passive constructions are not interchangeable on some occasions. The bei construction is neutral and can express both favorable and unfavorable conditions while the gei construction is more likely to express unfavorable or detrimental situations. In fact, the grammaticalization of the two transfer verbs can be viewed as functional extensions from their verb meanings. There is certain relatedness between the source item (the original verb) and the target item (the case marker). The fact that bei and gei can be used in different kinds of passive conditions reflects traces of their original verb meanings.
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