

Analyzing Passive Constructions in the Finite State

Dianyu Li

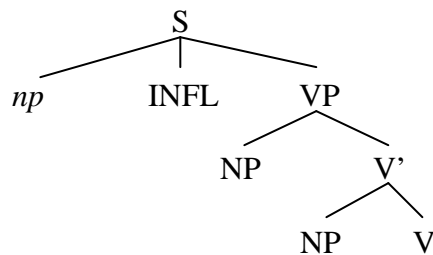
Ashland Community and Technical College
Tianjin Foreign Studies University

He (1996) provided strong evidence in his GB analysis for that the Chinese BEI passive construction is not the counterpart of ordinary active construction because they have distinct deep structures. And it is hard to take GET in the English GET passive construction as a marker only (cf. Langacker 1991). In this paper, I propose that BEI construction be analyzed in the finite state where the (process) verb-form with the result-denoting element is treated, like the past participle in GET passive construction, as denoting the resultant state subsequent from the process and BEI as the predicate for restructuring the event.

1. Introduction

One of the important findings in Chinese *bei* passive construction is the discrepancy between its deep structure and that of the active. He (1996) used the Government and Binding approach in his analysis of the Chinese *ba* and *bei* constructions. He found that the deep structure of *bei* passive construction is not the same with that of the canonical active construction as shown in his example below:

(1)



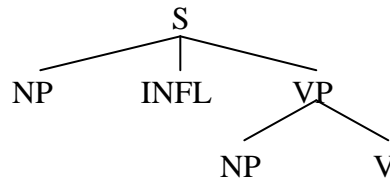
(passive: *xin bei wo shao le* The letter was burnt by me.)

From (1) above, He found that [NP (ex.), VP] is disallowed to move to [np, S].

He also found that [NP, S] and the [NP (ex.), VP] in (2) below are counterparts.

LI: PASSIVE CONSTRUCTION

(2)



(active: *wo shao le xin* I burnt the letter.)

The different deep structures of *bei* and the canonical constructions show that canonical active construction is not the counterpart of *bei* construction. Such finding has strengthened the assumption implied in many active and passive comparative studies that, structurally, passive construction is not necessarily the counterpart of the canonical active construction in many world languages.

A canonical construction in Chinese might not have a corresponding *bei* construction. For example, though the above canonical construction *wo shao le xin* (I burnt the letter) does have *xin bei wo shao le* (The letter was burnt by me), for the canonical construction *wo mei tian shao yi feng xin* (I burn a letter every day), the insertion of *bei* will yield an unacceptable sentence as **mei tian yi feng xin bei wo shao* (*A letter be burnt by me every day). It is clear here that one of the most important constraints of *bei* construction is that the event must have been completed with a result. Another example shows the same: *wo bu xi yan* (I don't smoke) → **yan bu bei wo xi* (*Cigarette be not smoked by me). Therefore, it is improper to use ordinary active construction as the base to derive the *bei* passive construction.

As is well accepted in Chinese, *ba* construction, in the active voice in the traditional terminology, rather than any non-*ba* active construction is commonly compared to *bei* construction as an active-passive pair.

The *bei* construction and the *ba* construction seem to have been, in most cases, convertible. Even in negative case, the two ungrammatical *bei* sentences also have ungrammatical *ba* sentences: **wo mei tian ba yi feng xin shao*; **wo bu ba yan xi*.

However, not all *ba* sentences have *bei* alternations. For example, the experiential type of *ba* sentence like *tamen ba ge zhu jiao bing le* (They had the main role sick) cannot be altered to **zhu jiao bei tamen bing le*. The causative type of *ba* sentence cannot either: *xiao zi shu ba yanjing kan hua le* (The book in small prints got the eyes blurry through reading) → **yanjing bei xiao zi shu kan hua le*.

More examples are provided below which seem to show that accusativity must be involved which in turn must be concerned with delocation in the formation of *bei* passive sentences:

- (3) a. *Laoshi ba di san ke jiang wan le*
 The teacher has had Lesson Three (discussed) finished.

- b. **di san ke bei laoshi jiang wan le*
 Lit: *Lesson Three got/had been (discussed) finished by the teacher.
- (4) a. *Da huo ba senlin hui le*
 The big fire got/had the forest destroyed.
- b. *Senlin bei da huo hui le*
 The forest got/had been destroyed by the big fire.

The verb *jiang* (to lecture) in (3) does not express delocation while the verb *hui* (to destroy) in (4) does.

The accusativity and delocation constraints for the formation of *bei* passive construction are consistent with the semantic interpretation of passive construction: the resulting state requires an action that leads to the resulting state; delocation implies disposal and transfer. In other words, without accusative action, there will be no resulting state and thus no receipt of that state to talk about. And, without delocation, there will be no transfer of the resulting state to the receiver of the state.

2. Predicates

The idea of the derivation of the passive construction from the canonical active construction was based on the fact that, in most cases, the world events described in the two constructions are the same. Now, moving our focus from process/action in the world event described in both active and passive constructions to the distinct grammatical functional structures of the speaker's recounts of the event, we have two different types of predicates:

- (i) process verb followed by an aspectual marker as in canonical constructions;
- (ii) light verb without aspectual marker as in constructions of complex predication.

To our main concern in this paper, we concentrate on the second type of predicate.

In the analyses of the *ba* construction treating *ba* as the predicate, the grammatical functional structure is composed of a subject, an object and a complex predicate with a complement. This complement semantically serves as one of the two arguments. The process verb-form and the resultative element constitute the syntactic complement.

In literature, *bei* has been recognized, in terms of its syntactic category, as preposition, verb and passive marker under different approaches. The present study supports the verb hypothesis. Here, *bei* is treated as the predicate. The grammatical functional structure of the *bei* construction is composed of a subject, an optional indirect object and

a complex predicate. Like in the *ba* construction, here the process verb-form and the resultant state denoting element form part of the predicate of which *bei* is the other part.

3. The Finite State Hypothesis

We may take *bei* as the relator, a predicate that denotes the relation between the patient, optionally the agent of the event, and the event itself. This approach corresponds to the last category in the following list.

- (i) *bei* as a preposition introducing the agent of the action; (world event)
- (ii) *bei* as a passive marker marking the case of the verb form; (language)
- (iii) *bei* as a verb denoting the relation. (speaker)

In terms of perspective from which analysis initiates, (i) takes the perspective of world event; (ii) takes the perspective of language and; (iii) takes the perspective of speaker.

Apart from perspectival differences, the above three functions of *bei* in the *bei* construction, correspond to three levels in linguistics analysis, namely, (i) to phrase level; (ii) to word level; (iii) to sentence level. We, as grammatical analysts, have the freedom to make a choice. And sometimes, we may choose more than one at a time and possibly mix them up to some extent.

In the present study, I have adopted the last approach because I find that both the defining feature of Event (Nordenfelt 1977) and the pragmatic features of utterances strongly support the instantaneity of linguistic expressions and these observations may help us to find some solutions to the problems in analyzing passive constructions.

The Swedish philosopher Nordenfelt defined ‘event’ as the “the coming about of a new state” or “the entering into a new state”. This means that ‘event’ is instant transfer of state. (For this, both English and Chinese provide evidence. For example, “*shijian fa-sheng zai yi jiu yi jiu nian wu yue si hao*” (The incident happened on May 4th, 1919). For similar Swedish examples, refer to Allwood in Allwood & Gardenfors 1999.

To try an analogy, we might as well take an utterance as a photo ‘shooting’ the on-going activity with the result of a scene. The construal of a static situation is not difficult when we have *haizimen zai jia ne* (The children are at home). But it becomes difficult to construe the situation when the children are at home playing as a state as in *haizimen zai jia wanr youxi ne* (The children are at home playing games). The reason, I assume, is that we tend to associate what we read with world state of affairs simply because our cognition is automatically or near-automatically functioning while we read the sentence. We do not feel it problematic until we analyze the sentence for its syntactic structure since grammatical analysis is neither encoding nor decoding of the sentence. Overall, I assume that there is a crucial distinction between interpreting a sentence and analyzing a sentence. In interpreting a sentence, we associate what we read in a sentence

with the world states of affairs while in analyzing a sentence, we often do, as in reading, use our cognitive ability to associate what is in the sentence with the corresponding world affairs. However, as is shown below, it is necessary to restrain to the structural anchoring point of that moment of “shooting the scene”. That is so to speak, the focal point of utterance. Therefore, I propose analyzing sentences, like passives, in the finite state.

The English *get* passive construction and the Swedish *blir* passive construction can also be analyzed in the finite state.

Both English and Swedish have passive constructions which mean that the subject entity *has come to be in* or *get into* some specific sort of state resulted from an action. In English, *get* can be used (instead of *be*) in situations where something happens. For example:

(5) Our flight got cancelled.

(6) I got paid today.

The ‘something has happened’ in *get* passive seems to be consistent with the defining feature of event. Apart from the instant happening, Langacker (1991) discussed the sense of the original meaning of *get*, that is, to ‘obtain’ is still retained in *get* passive. This seems to be close to the Chinese *bei* in *bei* passive which has been interpreted as ‘receiving’ the result.

In Swedish, the typical passive is with the verb *blir*. For example:

(7) Polisen blir uppringd av en orolig person.
The police BLI called up by a worried person

(8) Representanten forsokte bli omvald.
The representative tried BLI reelected

The word *blir* means ‘become’. Though it differs from *get* and *bei*, what follows *blir* is quite the same, that is, usually the past participle of the verb which denotes a resultant state.

We know that there is the active counterpart of *get* which is also *get* as in (9) and (10) below:

(9) The thief got arrested by the police. (passive)

(10) The police got the thief arrested. (active)

The counterpart of *blir* is *få* which means *get* and very close to *ba*: it is also used as a measure word which means ‘a few’.

There are other passive constructions in the three languages, such as the *wei.....suo* in Chinese, *be* passive in English and *-s* form in Swedish. We can categorize them as one other type. Due to the limited space of this paper, this type will not be dealt with here.

The finite approach introduced in this paper is assumed to be applicable to analyzing most types of sentences and the Chinese double object *gei* construction is an example. This will be briefly discussed in Section 6.

4. Focal Point and Thematic roles

A sentence, so long as is uttered, has an anchoring just like a photo which shoots a scene with one particular static state of a continuous, going-on process. That is to say, any utterance expresses a state, a point in time of a process but not the process itself. This might sound strange. But if you look at the following sentences, you will find they can hardly be said to describe any processes:

- (11) Each of us talked for 20 minutes.
- (12) Mary works 6 hours a day.
- (13) By midnight, John had driven continuously for 10 hours.

In (11), if the whole sentence is taken to be describing a dynamic event, then how do we explain the multiple *talkings* of *each of us*? If the sentence is taken to be reporting a fact and the *20 minutes* as the total amount of time for each of us talking, it is more reasonable and then the whole sentence no longer expresses a dynamic event. As for (12), it is hard to say that the sentence expresses an action or process. The whole sentence also expresses a routine. And with (13), since *midnight* is a point of time, *12 hours* must be a total amount of time to match *midnight*.

The above analyses are crucial because, in constructing the argument structure, we have two choices: the valence of the action verb in terms of world state of affairs or the arguments of the predicate of the sentence. If we consider the world, we tend to take the main verb as having a certain number of arguments. But if we consider the sentence as the speech which shows the speaker's conceptualization, we would then take the predicate as the core lexical item of its thematic structure. I propose that a passive sentence be analyzed at two-levels though within one clause. That is, the process verb takes its arguments (participants) while the passive predicate verb takes its arguments. Goldberg & Jackendoff (2004) pointed out that the adjective and the preposition used as resultative complement can be treated as a kind of non-nominal argument of a structural event instead of a verb event. And its semantic role is 'property' or 'path'. I assume that the past participle and its neighboring element, if there is one, form a unit which plays the role of either a PROPERTY or a PATH.

5. Multifunctionality

Shi & Hu (2005) propose that *bei* have multifunctions: as both passive marker and preposition. It is reasonable since in English *get* passive sentence, there are *get* and *by* while in Chinese, there is only *bei*. These two functions apply to the agent object on the one hand and the ‘passive sense’ of the verb on the other hand. My analysis departs from their analysis in that I do not posit two functions in this way. Instead, I take the semantics of *bei* as metaphorically containing the sense of ‘befall’ and ‘bestow’ due to the meaning potential (cf. Allwood 2000) of the word *bei*.

According to the meaning potential approach, *bei* (*get* as well) is polysemous and its meaning is context-sensitive. That is, its meaning is decided when it is co-activated with the neighbouring elements. To make it simpler, the meaning potential is all the uses of a word in the speaker’s memory. The multiple meanings of *bei* and *get* can be found in most of the dictionaries. Therefore, they will not be introduced here.

I posit three functions of *bei*:

- (i) introducing the agent of initiating the befall/bestow if there is one;
- (ii) indicating the resultativeness of the verb form in the COMP;
- (iii) relating the befallen-upon/bestowed-upon, the agent if there is one, and the result.

The focal point in the finite state and the instant nature of event all explain why it is so though world state of affairs are on-going and language is linear. The relator or predicate that denotes relation naturally functions as introducing the following entity being related. That is why a single *bei* has multiple functions.

Another aspect of the peculiarity in *bei* construction concerns the semantics of *bei* and the predication of the subject of the construction. We know that the original meaning of *bei* is ‘cover’ or ‘to cover’. I use befall/bestow instead in order to show the unexpectedness of the construction as well as both the positive and negative possibilities of the event happened. Obviously, these terms are used on the part of the result. That is, the result befalls or bestows upon the subject of the *bei* sentence. But if we consider the subject, we have to change befall/bestow into ‘receive’ or ‘suffer’ as some scholars used. So, how to account for this? Can we say that it is inherit and true that any relator relates in two directions or non-directional? Or can we say that the senses of ‘befall’ and ‘receive’ are mutually directed? I leave this question for further research.

6. Concluding Remarks

The finite approach is assumed to be applicable in analyzing most linguistic constructions. For example, with the double object construction, if we take ‘transfer’ as the general meaning of *gei* (give), then, the verb denotes the manner of transferring. We will have no problem in interpreting the difference between each of the two sentences below:

- (14) a. The doctor **gave** Mary an attractive skin.
 b. The doctor gave an attractive skin **to** Mary.
- (15) a. John taught the students English.
 b. John taught English **to** the students.

The cognitive semantics of *gei* is denoting a relation between the giver and the receiver. And the relation is an abstract concept and it is a state. The construction can be analyzed in the finite state as well.

Simpler syntax hypothesis (Culicover & Jackendoff 2005) aims at finding out a reasonable explanation for the syntax-semantics interface issues. It is a simpler syntactic theory that is able to account for the semantic and pragmatic properties. I have shown that sentences are structured with focal points and analyzing sentences should not be mixed with decoding of the sentences. Passive construction can be analyzed in the finite state dealing with interface issues of semantics, pragmatics and syntax. To some extent, we have moved a step further towards this direction.

REFERENCES

- Allwood, Jens. Semantics as Meaning Determination with Semantic-Epistemic Operations. In Allwood & Gardenfors 1999. *Cognitive Semantics – Meaning and Cognition*. Benjamins.
- Allwood, Jens. 2000. Meaning potential and context – some consequences for the analysis of variation in meaning. ms. Department of Linguistics. Gothenburg University.
- Culicover, Peter.W. & Ray. Jackendoff. 2005. *Simpler Syntax*. Oxford University Press.
- Goldberg, Adele & Ray Jackendoff. 2004. The English resultative as a family of constructions. *Language* 3: p532-568
- He, Yuanjian. 1996. *An Introduction to Government-Binding Theory in Chinese Syntax*. Lewiston: The Edwin Mellen Press
- Langacker, Ronald. 1991. *Concept, Image, and Symbol: The Cognitive Basis of Grammar*. Mouton de Gruyter.
- Nordenfelt, Lennart. 1977. *Events, Actions, And Ordinary Language*. Doxa.
- Shi, Dingxu & Hu, Jianhua. 2005. “被”的句法地位 (The syntactic status of *bei* 被) in «当代语言学» (*Contemporary Linguistics*) Volume 7 Number 3. Journal of the Institute of Linguistics, the Chinese Academy of Social Sciences.
- Tang, Sze-Wing & Thomas Hun-tak Lee. 1999. Focus as an Anchoring Condition. <http://www.cbs.polyu.edu.hk/tang/HANDOUT%20focus.doc>.