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Author(s)	Watanabe, Shinichiro
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A Study of English Passives (I)
-- Review and Critique of Previous Analyses --

by Shin-ichiro Watanabe

Introduction

In the history of transformational-generative grammar it has been generally assumed that there is a syntactic rule called passivization: Chomsky (1957) demonstrated that grammar would be much simplified if the active-passive relationships were expressed in terms of a transformational rule. For the past twenty years a vast amount of literature has been devoted to refining or modifying the passive operation and there have been more than ten different analyses of English passives proposed. Indeed, there has been considerable diversity in the points of view expressed. However, the time is perhaps now ripe to identify the really significant questions that have been raised and to present a better analysis of English passives.

This paper, which will constitute the first part of a larger work on the syntax and meaning of English passives, will make a modest start toward the overall aim of the present study by presenting a critical review of four basic analyses of English passives proposed before the 1970's.

1. Review and Critique of Previous Analyses

The basic analyses of English passives that this paper is concerned with are those presented in Chomsky (1957), Chomsky (1965), Hasegawa (1968) and Fillmore (1968).

1.1 Chomsky (1957)

In Chomsky(1957) passive sentences are derived from their corresponding active sentences by an optional rule which reorders the subject and object NP's and inserts *be+en* and *by*. Chomsky gave two basic arguments for the existence of such a rule. First, active-passive pairs have the same selectional restrictions as can be seen below:[1]

(1) * Sincerity admires John.

(2) * John is admired by sincerity.

If they are to be treated without repetition of the same restrictions in the lexicon, one must be derived from the other. Second, phrase structure rules cannot adequately handle passive sentences if they are generated in the base. Suppose passive sentences are generated by phrase structure rules. Then, the rule will take the following form:

(3) Aux → C(M) (have+en) (be+ing) (be+en)

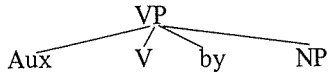
The problem is to specify when *be+en* is to be introduced. There would have to be some peculiar restrictions on the rule introducing *be+en*, while no other constituent of Aux is subject to such restrictions; that is, any of them can be optionally chosen. For instance, to account for the fact that *be+en* cannot occur with intransitive verbs, one needs a great deal of complication in phrase structure rules. Thus, Chomsky(1957) set up an optional passive rule as follows:

(4) $NP_1 - Aux - V - NP_2 \longrightarrow NP_2 - Aux+be+en - V - by+NP_1$

1.1.1 Some formal problems

There is a constituency problem with this analysis. The problem concerns the question of where *by* should be attached. The only well-established adjunction is sister-adjunction, which adjoins it under VP as a sister to V and NP. Then, the derived constituent structure will be:

(5)



However, this derived structure is obviously inappropriate, because the *by*-phrase in passives must be a prepositional phrase as can be seen in the following examples:

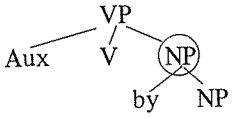
(6) It was by Mary that John was killed.

(7) By whom was America discovered ?

(8) Columbus, by whom America was discovered, was Spanish.

As is generally known, the focus element in the cleft construction like (6) must form a constituent, but the above derived constituent structure does not show that *by* plus NP is a constituent. (7) and (8) show that the *by*-phrase in passives is an ordinary prepositional phrase. Note that by definition transformations cannot create nodes;[2] otherwise the descriptive power of transformations would be too enormous. Thus, to circumvent this problem, Chomsky (1957) devised another type of adjunction which is now well known as Chomsky-adjunction. This adjunction creates a new, higher copy of the node; for instance, NP in this case. Then, the derived constituent structure will be:

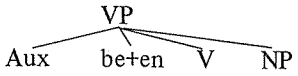
(9)



The circled NP is the one created by Chomsky-adjunction. It may not be unreasonable to regard PP's as NP's, but as I mentioned above, (7) and (8) suggest that the *by*-phrase in passives behaves more like PP than NP.

Another problem is where *be+en* should be attached. If it is introduced by sister-adjunction, the derived constituent structure will be:

(10)



It will be adjoined under VP and cannot be adjoined under Aux. To get the desired constituent structure, we need another type of adjunction, which is called daughter adjunction.

As we have seen, a passive rule, if there is one, is a rather complicated rule requiring two other dubious types of adjunction in addition to the well-established sister adjunction. In this section I have touched only on formal problems with the passive rule, but there are many questions which this analysis left unexplained: 1) what kind of verbs can be passivized ? 2) why does *be* mark passives ? 3) why are the subject and the object moved around ? These questions except for (1) may not be answerable in formal terms but any linguist concerned with investigating the passive construction must answer these questions. In short, formalism alone will get us nowhere in accounting for them.

1.2 Chomsky (1965)

Essentially, the revision made in Chomsky (1965) is an attempt to account for question (1) which I gave above. Not all transitive verbs can be passivized; for instance, the following verbs do not undergo passivization:

(11) fit, have, marry, resemble, weigh

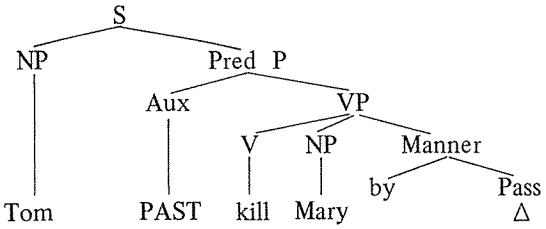
These verbs have been called middle verbs or mid-verbs in transformational grammar. Obviously, it is undesirable to mark these verbs as [−passive] in the lexicon, since this means that there is no generalization possible to passivizability. In this regard Chomsky notes that these mid-verbs do not take manner adverbials freely.

(12) * John resembles his father reluctantly.

Thus, to account for the correlation between manner adverbials and passives

Chomsky (1965) claims that the *by*-phrase exists in deep structure as a manner adverbial as is represented below:

(13)



Thus, a passive rule will be applied only when the by-Pass node exists in deep structure. The advantages of this analysis are as follows: 1) it solves the constituency problem concerning the *by*-phrase, 2) strict subcategorization is simplified by capturing the correlation between passives and manner adverbials; 3) it can account for pseudo-passives such as (14) and (15)[3]

(14) The new course of action was agreed on.

(15) This bed was slept in by Mary.

In the analysis proposed in Chomsky (1957) the passive rule was applied only when the verb was transitive, and so the above pseudo-passives had to be generated by a new transformation. On the other hand, in the analysis given in Chomsky (1965) pseudo-passives can be generated by the same rule that generates ordinary passives in so far as they take manner adverbials freely.

In short, this analysis predicts, though incorrectly, that only verbs which take manner adverbials freely can be passivized. The problem is that as Lakoff (1970) has shown,[4] there is a class of verbs which can be passivized but cannot take any manner adverbials; for example, *know*, *believe*, *consider*, *think*, *see*, etc. Yet, a more serious problem with this analysis, to my view, is this. As is stated above, verbs which cannot take manner adverbials freely cannot be passivized. Here, the word *freely* is crucial. Semantically, the verbs which take manner adverbials freely are only active verbs. Then, the

analysis in Chomsky (1965) wrongly predicts that only active verbs can be passivized. The so-called emotive verbs (e.g. *amuse, surprise, confuse, shock,* etc.) can be passivized, but they do not take manner adverbials freely. Besides, some stative verbs such as *cover*, *surround*, and *keep* do not take any manner adverbials, but they are most frequently passivized. It should also be noted that the mid-verb *marry*, which cannot be passivized, can take most manner adverbials as in (16):

(16) John married Mary { reluctantly. / willingly }

(17) *Mary was married by John.

Therefore, I conclude that Chomsky's purely syntactic analysis won't work. The only way to make it work is to mark some exceptional verbs as [−pass.] or [+pass.] in terms of a diacritic feature at the expense of any generalization. This makes a good case against any purely syntactic analysis based on superficial similarities of distribution. However, the analysis in Chomsky (1965) does raise some pertinent questions for an adequate analysis. To sum up:

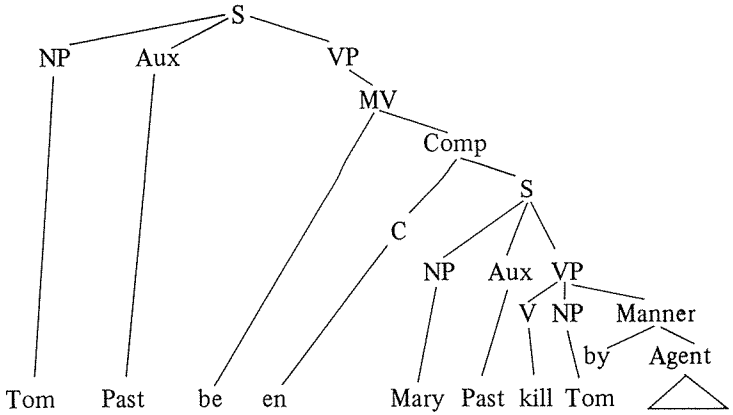
(18) a. The *by*-phrase as an instance of PP's comes from the same source as all other PP's in the base.

b. This analysis shows that passives cannot be adequately analyzed without recourse to their semantics.

1.3 Hasegawa (1968)

In the analysis proposed in Hasegawa (1968) the passive morpheme *be* exists in underlying structure, and the underlying structure Hasegawa postulates for (19) is as follows:

(19) Tom was killed by Mary.



There are three major steps involved in the derivation. First, the subject NP of the complement sentence is moved to the place of the dummy. Second, *en* is attached to the complement verb as a special case of complementizer insertion. Third, the complement object NP is deleted by Equi-NP deletion under identity with the subject NP of the main sentence. He claims that *be* is not a verb but something which marks passives. The advantage of this analysis is that it can express a relationship between be-passives and get-passives like (20):

(20) Tom got killed by Mary.

The verb *got* in (20) can hardly be inserted by rule, since such a rule would change the cognitive meaning. In Hasegawa's analysis, the two types of passives are structurally related, the verb choice being optional.

Of all these three operations mentioned above, the most dubious is the Equi-NP deletion which deletes the object NP of the complement sentence under identity with the NP in a higher clause. No such rule has been shown to be necessary in any other complex structure constructions (except in those of Japanese), and if it is the case that the rule is needed only for passives, the whole analysis will collapse. To solve this problem, the object NP must be

preposed before the Equi-NP deletion. But then, we have built in practically the whole passive transformation in the complement, excluding only *be*-insertion. What this analysis actually did was to separate a complex passive transformation into several simple operations, one of which is, as I have argued, not independently motivated. A close examination of the above underlying structure shows that part of the structure is *ad hoc*. For instance, the Agent node does nothing but give us the right constituent structure.

Besides, there are several kinds of examples that cannot be accounted for by this analysis. First, as has been first noted by Lakoff (1971), the following examples are serious counterexamples to Hasegawa's analysis:[5]

(21) Tabs were kept on the students by the CIA.

(22) A great deal of headway was made.

The subject NP's 'tabs' and 'headway' do not occur as the subject in other constructions, since they are part of the idioms and not independent lexical items. Yet, in the analysis of Hasegawa (1968) they must be postulated as the underlying subject nouns.

I presume that the same can be said of the so-called existential-*there* construction in (23):

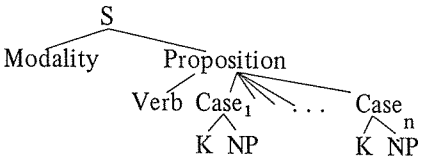
(23) There is believed to be a unicorn in the garden.

There is a great deal of evidence which supports the view that *there* is not an underlying subject but a derived subject. Here again Hasegawa's analysis must have *there* occur as the subject in underlying structure.

1.4 Fillmore (1968)

Fillmore's case analysis of passives was long considered to be a major break-through. Case grammar, which Fillmore proposed in 1968, invented tree structures like (24):

(24)



K = case marker

In case grammar, as is now well known, the subject NP and the object NP are derived by movement rules from the underlying structure where each NP has its own inherent case marker. Thus, there is no passive transformation *per se* in this grammar, but rather, a series of operations, some motivated on other grounds, generate passive sentences. The derivation of a passive sentence in this analysis is as follows. First, verbs which are to be passivized must be marked as [+passive] in terms of a diacritic feature by some rule about which Fillmore has nothing to say. Second, this feature has three effects: the verb loses its object-preposition deletion property, the regular subject choice hierarchy is overridden, and the verb marked as [+passive] loses its ability to absorb the tense; thus, *be* must be inserted as part of the modality constituent to absorb the tense. The advantages of this analysis are as follows. First, since the inherent preposition of the Agentive noun is *by*, no constituency problem of the type discussed in 1.1 arises in this analysis. Second, many processes for the generation of passives are independently motivated.

However, this analysis has the following problems. First, there are passive sentences with *by*-phrases that are not Agentive. Observe (25) and (26):

(25) Mr. Yamada is known by everybody.

(26) Tom was seen by his teacher.

In Fillmore's case system, *everybody* and *his teacher* are considered to be Dative NP's the inherent preposition of which is *to*. Then, *by*-insertion is not automatic in these examples; that is, a special rule of *by*-insertion is still

needed.

Second, Fillmore says, "... it [a verb marked as [+passive]] loses its ability to absorb the tense (requiring the automatic insertion of a *be* in the M constituent), ... "[6] However, there is no reason why a verb marked as [+passive] should not be able to absorb the tense. This is an arbitrary statement, missing the generalization that it is when some elements such as modals or *not* intervene that the tense cannot be absorbed by a verb. The important question to be raised here is why the verb *be* must be used in passives rather than *do*, which is the usual (auziliary) verb which marks the tense when the main verb does not. Thus, Fillmore's statement that *be* must be inserted to absorb the tense is simply *ad hoc*, and no explanation is offered for the insertion of a *be* in passives in this analysis.

Third, the serious problem has to do with the switching of subjects and objects. In Fillmore's case system, the switched constituents are neither subjects nor objects; they only become such by late rules, that is, subject-formation and object-formation rule. The generalization that what can be passive subjects/objects are active objects/subjects is not to be captured in Fillmore's system, and two different kinds of subject and object choice hierarchy are needed in the grammar proposed by Fillmore: one for actives and the other for passives.

(27) For actives

Subject Choice Hierarchy: Agent Instrument Object Dative

Object Choice Hierarchy: Object Dative Instrument

For instance, we have:

(28) a. *John* opened the door with the key.
Agent Object Instrument

b. The key opened the door.
Instrument Object

c. The door opened.
Object

(29) For passives
Subject Choice Hierarchy: Object Dative Instrument
Object Choice Hierarchy: Agent Instrument Object Dative

(30) The door was opened with the key by John.
Object Instrument Agent

As can be seen above, the two hierarchies are simply reversed. If case relations are basic and the grammatical relations such as subject and object are derived by rule, then the grammar must state two different kinds of subject and object choice hierarchy, missing the generalization that the subject and the object are simply switched in passives. Finally, it should be noted that the arbitrary statement that passive subjects must be chosen from the active object-choice hierarchy won't do, simply making the whole system arbitrary (to be continued).

Notes:

1. In Chomsky (1957) (1) and (2) were considered to be grammatical but low in grammaticalness.
2. This is a very important restriction on transformations. Without this restriction, transformations would be much too powerful.
3. cf. Chomsky (1965) p. 105
4. cf. Lakoff (1970) p. 156
5. cf. Lakoff, Robin (1971) p. 152
6. cf. Fillmore (1968) p. 37 The words in [ ] are mine.

References:

Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.
Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, Mass: The MIT Press.

Fillmore, C. (1968). "The Case for Case." In Bach, E. and R. Harms (1968). *Universals in Linguistic Theory*. pp. 1-67 New York: Holt, Rinehart and Winston.
Hasegawa, K. (1968). "The Passive Consturction in English." *Language* 44, pp. 230-43.
Lakoff, G. (1970). *Irregularity in syntax*. New York: Holt, Rinehart and Winston.
Lakoff, R. (1971). "Passive Resistance." *CLS* 7, pp. 149-62.