

A NOTE ON PASSIVE

Yoshiko Masaki

要約

受け身構文についての一考察

正木 芳子

受け身構文は生成文法においてよく議論されているが、本稿では Wasow (1977) の受け身には adjectival passive と verbal passive の 2 種類があり、前者は語彙部門で、後者は変形部門で生成されるとする提唱と Jaeggli (1986) の受け身接辞が格と意味役割を吸収するという提案に基づいて、この 2 つの受け身がともに深層構造では動詞プラス過去分詞を作る形態素 (V-en) という形としているとし、過去分詞と adjectival passive の意味の相似点よりそれを支持する。さらに adjectival passive から変形にかかわる verbal passive が導き出されるというのはそれぞれの習得時期の違いからも支持される。2 つの受け身の違いの多くは Levin and Rappaport (1986) が指摘するように一方が形容詞に層するため格付与ができないのに対し、他方は動詞に層するため inherent Case を与えることができるという違いに帰結されよう。また believe 型の動詞が adjectival passive を作ることができないのは、adjectival passive の意味構造を考えるとそれらの動詞が完了を表わして EVENT を STATE に変える PERF 演算子を取ることができないからであると言える。

1. INTRODUCTION

Passive construction has been discussed repeatedly in generative grammar. Wasow (1977) points out that there are two kinds of passives: verbal passive and adjectival passive. And he claims that verbal passive formation takes place in the syntax whereas adjectival passive formation takes place in the lexicon, which accounts for the idiosyncrasy of the adjectival passives. He does not go further enough to formulate the transformation, however. Are the adjectival passive formation and the verbal passive formation the same except the level of their application?

In this paper, I will investigate the status of the suffix *-en* noticing that adjectival passive and verbal passive are morphologically related with past participle.

2. JAEGLI'S (1986) PROPOSAL

Jaeggli takes care of only verbal passive presupposing that adjectival passive is formed in the lexicon without mentioning it. He suggests that verbal passive transformation has only one stipulation, namely, having a suffix *-en*. Other properties of passive construction, he claims, naturally follow from this morphological operation by help of Theta-Criterion and Case filter.

He supposes that "theta-roles and subcategorization are 'linked' wherever possible" (588), and suggests the lexical entry such as follows (Jaeggli's (3)):

- (1) a. hit : s
 d = [__ NP]
 b. put : s
 d = [__ NP]
 l = [__ P NP]

He does not specify clearly what s, d and l signify, but just define them as theta-roles assigned to the subject of a predicate, to direct object, and to locative respectively. Theta-roles which do not have subcategorization feature are the external theta-role which is not "linked".

He then claims that *-en* is a suffix which absorbs a theta-role and a Case. It absorbs only the external theta-role because it is the only one which is not linked. Linked theta-roles must be linked to the argument to which it is registered to be linked. The absorbed theta-role is assigned to *by* phrase through the suffix *-en* unless *-en* does not take a *by* phrase. Since *-en* is not an inherent theta-role assigner but just transfers a theta-role, if *-en* does not take *by* phrase, the theta-role which is absorbed remains with *-en*. And this theta-role works as an implicit argument in so-called "agentless passive" which can be a controller of PRO in a purpose clause and modified by agent-oriented adverbs (Jaeggli's (52b) and (53b)) :

- (2) a. The price was decreased to help the poor.
 b. The price was decreased willingly.

At a glance, Jaeggli's proposal sounds good enough. Even though it seems unnatu-

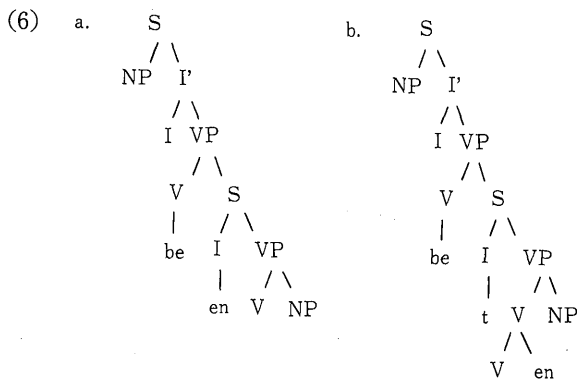
ral for a suffix to get a theta-role and a Case, he defends his suggestion claiming that even though theta-roles are typically assigned to NPs, assignment of theta-roles is a function of the linking of theta-roles with subcategorization frames in the lexicon, and that an unlinked theta-role can be assigned to a suffix if it does not violate the Projection Principle.

There are some problems, however. First of all, where should the suffix *-en* originate and what is the status of *-en*? Jaeggli suggests that V and *-en* are sisters at D-structure, but if so, *-en* cannot absorb the theta-role of "subject of the predicate" at D-structure because this theta-role should be assigned by VP. As Marantz (1984 : 25-27) notes, the choice of [NP, VP] affects the meaning of the subject (example taken from Marantz).

- (3) a. NP throws a party.
- b. NP throws a baseball.
- c. NP throws support behind a candidate.
- (4) a. A pary was thrown.
- b. A baseball was thrown.
- c. Support was thrown behind a candidate.
- (5) a. John throws NP.
- b. The social director throws NP.

Accordingly, if *-en* receives a theta-role of "subject of the predicate", which seems to be the case as the passive counterpart of (3) indicates, it must receive it from a VP.

There are two ways to solve this problem. One is to argue that *-en* originates under INFL as Baker, Johnson and Roberts (1989) do. They propose the configuration as (6) :



Supposing that *-en* is an argument, they take Jaeggli's idea that *-en* absorbs the theta-role of "subject of predicate" and a Case in theirs. At D-structure, which is represented as (6a), VP assigns a theta-role to *-en*, which is outside of VP. Being an argument, *-en* is forced to get an abstract Case by the Visibility Condition (Chomsky (1981)). It is assigned a Case from V when it is suffixed to V by S-structure, which is represented as (6b).

This proposal accounts for the problem just raised, but we must face two problems instead. First, the verb *be* must be subcategorized as taking I' headed by *-en* or *-ing*. The auxiliary verbs as *be* and *have* should have some special features in any case, so we

may leave this as a stipulation. The second problem is that it does not account for the similarity between adjectival passive and verbal passive. As Bresnan (1982) notes, there is considerable similarity between adjectival passive and verbal passive. The form is the same: both of them are participle of a verb. And both of them have direct argument¹ of the transitive verb counterpart as their external argument.

The second way to solve the problem of *-en* receiving a theta-role of "subject of predicate" being a sister of V is to claim that *-en* does not receive the theta-role of "subject of predicate" from the first. *-En* being a sister of V, the similarity between verbal passive and adjectival passive can be easily accounted for.

- (7) a.
$$\begin{array}{c} V \\ / \backslash \\ V \quad en \end{array}$$
 b.
$$\begin{array}{c} A \\ / \backslash \\ V \quad en \end{array}$$

The important consequence of *-en* receiving a theta-role of "subject of predicate" is that it can transfer this theta-role to *by* phrase and it can work as an implicit agent if it does not take *by* phrase. These consequences can be drawn by adopting Roberts' (1987) and Zubizarreta's (1985) proposal.

Roberts argues that implicit agent is an existential quantifier. He tries to catch the parallelism between agentless passive and passive with *by* phrase proposing the representation as follows.

- (8) a. Mary was killed.
 b. $Mary_i$ was kill en_i t_j IMP_i
 c. $\exists x_i$ $Mary_j$ was kill en_i t_j t_i
- (9) a. Mary was killed by John.
 b. $Mary_j$ was kill en_i t_j by $John_i$

His argument for the implicit agent as an existential quantifier is persuasive, but the presence of IMP does not seem to be necessary.

Zubizarreta claims that the external argument in passive is lexically present but syntactically absent, and that lexical external argument of the passive verb may be specified by an adjunct adverbial phrase. She suggests that in English, *by* is a dummy preposition which does not restrict its object semantically but transfers the lexical external argument of the verb to its object.

Notice that *by* phrase is optional and that it is adjoined to VP.

- (10) a. John [[failed miserably] and [was laughed at by everyone]] .
 b. John was [[taken for a fool by everyone] and [subjected to much ridicule by his relatives]] .
 c. John was [both [regarded with total contempt] and [subjected to much ridicule]] by his relatives.

(McCawley (1988 : 78)

If the external theta-role of a verb remains in V, it can percolate up to VP semantically even though it cannot be realized as an argument. Percolating up to VP, the lexical external theta-role can get the status of "subject of predicate", and *by* phrase, which c-commands VP, can specify the referent of the "subject of predicate". If there is no *by*

phrase, the referent of the “subject of predicate” being arbitrary, it works as an existential quantifier as Roberts suggests.²

3. ADJECTIVAL PASSIVES AND VERBAL PASSIVES

Considering the above argument plausible, let us investigate the relation between adjectival passive and verbal passive. Bresnan accounts for the similarity between the verbal passive, adjectival passive and past participle by formulating the rules as follows:

(11) Verbal Passive Formation³

Functional change: (SUB) → O/(BY OBJ)

(OBJ) → (SUB)

Morphological change: V → V_[Part]

(12) Adjectival Passive Formation⁴

Morphological change: V_[Part] → [V_[Part]]_A

Operation on lexical from:

P(...(SUB)...) → STATE-OF P(...(SUB)...)

SUB = theme of P

This accounts for the similarity between verbal passive and adjectival passive, and at the same time, it takes care of the difference between them, too. Bresnan names the latter rule as “Participle–Adjective Conversion”. As this naming indicates, this rule also takes care of the cases as follows (Bresnan’s (47a) and (47b)):

(13) a. elapsed time (time, that has elapsed)

b. fallen leaves (leaves that have fallen)

If the subject of the verb is Theme, its past participle can be an adjective. Noting that past participle and passive participle are in the same form, Bresnan proposes the rule as (12).

However, as Levin and Rappaport (1986) remark, not only Theme but Goal can be the subject of adjectival passive also. Furthermore, Theme cannot be the subject of some adjectival passive (examples taken from Levin and Rappaport):

(14) a. The pillow remained stuffed.

b. *The feathers remained stuffed.

c. The feathers remained stuffed in the pillow.

(15) a. The car remained unsold.

b. *The customer remained unsold (a car).

Adjectival passive formation is known to have more restrictions or idiosyncrasies than verbal passive formation, but as Levin and Rappaport claim, they all follow from the categorical difference. As an adjective, adjectival passive cannot assign Case. Therefore, only the verbs which do not have obligatory indirect arguments can go through Adjectival Passive Formation. In the cases in (14) and (15), the verb *stuff* has lexical entry as (16) while the verb *sell* has the lexical entry as (17).

(16) *stuff*: A. agent <*material*, location>

B. agent <<(material), location>

(17) *sell*: A. agent <*theme*, (goal)>

B. agent <theme, goal>

Stuff A is subcategorized for [__ NP PP] while *sell* B is subcategorized for [__ NP NP]. Accordingly, the obligatory argument location can receive Case through a preposition in the case of *stuff* A, but theme in *sell* B cannot, hence the ungrammaticality of (15b). Since distribution of direct argument and indirect argument, and optionality of arguments are properties of each verb, there is hardly any rigid rule which accounts for the idiosyncrasies of adjectival passive.

With the lexical representation proposed by Levin and Rappaport and the suggestion by Jaeggli, Zubizarreta and Roberts that the suffix *-en* absorbs a Case and blocks the syntactic realization of external theta-role, we can account for the data in (14) and (15). However, the data in (13) will be the problem. One way to get around this problem is to go back to Bresnan's proposal revising the rules as (18) and (19):

(18) Verbal Passive Formation

Morphological change: $V \rightarrow V_{[Part]}$

Change in Lexical Representation:

External theta-role \rightarrow must remain unlinked

Direct argument \rightarrow External argument

(19) Adjectival Passive Formation

Morphological change: $V_{[Part]} \rightarrow [V_{[Part]}]_A$

Operation on lexical from:

$P(\dots(SUB)\dots) \rightarrow \text{STATE-OF } P(\dots(SUB)\dots)$

SUB = Direct argument of V

This captures the descriptive adequacy, but does not capture the explanatory adequacy so well as the proposal made above. Is there any way to get these two together?

4. JACKENDOFF'S PROPOSAL FOR ADJECTIVAL PASSIVES

Jackendoff (1987) suggests the adjectival passive formation as follows. Using the operator SUCH, he proposes a complex property conversion rule as (20) (his (73)) in order to change the STATE into PROPERTY.

(20) $[_{State} \dots [Y] \dots] \langle == \rangle$

$[BE_{Ident}([Y], [AT_{Ident}[_{Property} \text{ SUCH } [_{State} \dots []_x \dots]])]$

Jackendoff (1987) states that the argument indexed χ in adjectival passives "corresponds to direct object indexed j in the related verbs" (24–25) in order to take in Levin and Rappaport's remark. The index i being assigned to Y, the argument originally assigned the index i loses the index. This captures the properties of passive: external theta-role remains with the verb syntactically unrealized and direct theta-role is externalized.

What is left to be stated is how an Event can become a State. He asserts there are two strategies for this. One is "to strip the outer functions CAUSE and INCH off the verb's conceptual structure to arrive at a bare stative BE function⁵" (25); and the other is to embed the Event structure of the verb under a Perfective operator, which is plausible since passive morpheme is the same as past participle morpheme. For example, the adjectival passive formed from *load* is represented as (21) (Jackendoff (1987: (79))).

(21) loaded

a. [_{Property}SUCH[_{State}BE([],[ALL IN[]x])]] (stative)

b. [_{Property}SUCH[_{State}PERF[_{Event}CAUSE([], [INCH[BE([], [ALL IN[]x])]]]]]]
(perfective)

(21a) is exemplified by (22a) and (21b) is exemplified by (22b).

(22) a. This truck is loaded and that one is empty.

b. the truck loaded on Tuesday and emptied on Friday

(Jackendoff (1987: (80)))

Can we account for the data (13) using Jackendoff's (1987) proposal? At a glance, it cannot since the verbs in (13) do not have an argument indexed *j* since it does not have a subcategorized direct object. What is the difference between the intransitive verbs that can form an adjectival passive and those that cannot? The answer seems to lie on the Action tier (Jackendoff (1990)). The intransitive verbs which can undergo adjectival passive formation do not have Affector, but have Patient. Furthermore, notice that the adjectival passives in (13) cannot be used predicatively:

(22) a. *The time is elapsed.

b. *The leaves were fallen.

On this ground, I suggest that deverbal adjectives in (13) should be called "perfective adjectives" rather than "adjectival passives". The Event structure of the verbs is embedded in PERF and SUCH operator and becomes a Property, but since there is no argument indexed *j*, it cannot undergo the rule (20). Adopting the proposal of Masaki (1990), I suggest that the perfective adjectives have the conceptual structure as (24).

(24) fallen:

[BE([_{Property}SUCH [_{State}PERF [_{Event}GO([]^a, [ON THE GROUND])]]], [AT[*a*]])]

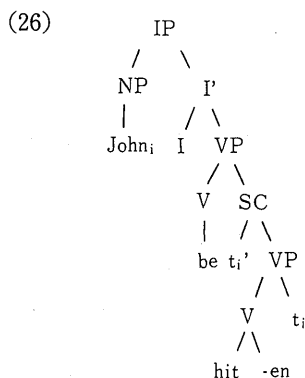
In other words, the adjectival passives formed from intransitive verbs should characterize the reference that they modify. Accordingly, Affector, which is not to be characterized by the Event, cannot be a modified argument.

5. WHAT IS -EN?

The second strategy captures the morphological similarity between adjectival passives and past participles as seen above. What about the morphological similarity between adjectival passives and verbal passives? Borer and Wexler (1987) report that adjectival passives are acquired before verbal passives reducing it to the maturation of the A-chain formation. I would rather suggest that verbal passive formation is derived from adjectival passive formation. Notice that the argument indexed *i* is eliminated in the strategy one and the index *i* is deleted from it in the strategy two. This is the same thing as saying that *-en* blocks the assignment of the index *i*. In verbal passive formation, the syntactic category being unchanged, operators as PERF or SUCH do not play any role. However, being the same inflectional suffix as past participle, verbal passive suffix *-en* cannot get an inflectional suffix which bears tense. Accordingly, it cannot head a VP which is the sister of I; rather, considering that not only *be* but also *get* and other causative verbs can take verbal passives, I suggest that it constitutes a small

clause with a subject which moves up to the Spec of IP.

- (25) a. John was insulted.
 b. John got insulted.
 c. Mary had her hair cut.



Since *-en* blocks the assignment of the index *i* and a structural Case⁶, an internal argument which is not assigned Case should move up to the subject position of small clause. Therefore, intransitive verbs cannot be passivized in English. On the other hand, languages like German that permit impersonal subject which does not constitute any chain allow unergatives to undergo passivization.

- (27) Es wurde getanzt.
 it be dance-en
 "They danced"

In this case, without an argument to be moved up, impersonal subject *es* is inserted at [NP, SC] .

6. CONCLUSION

In this paper, I proposed that both adjectival passive and verbal passive have the structure *V-en* at D-structure and that the difference between them can be reduced from their categorical difference. Being an adjective, the former has the conceptual structure of PROPERTY and does not have Case assigning property. On the other hand, verbal passive does not undergo any categorical change. Therefore, it does not need any operators as PERF and SUCH. This accounts for some lexical restrictions for adjectival passive formation. For example, the restriction that *believe* type verbs cannot undergo adjectival passive formation can be reduced from the fact that *believe*-type verbs cannot take PERF operator.

- (28) John has believed Mary to be a genius. (*with perfective reading)

Furthermore, verbal passive cannot assign any structural Case since the suffix *-en* heads the derived V, but it has the capacity of assigning inherent Case. Accordingly, the verbs with double object can undergo verbal passive formation but they cannot undergo adjectival passive formation because of the Case filter.

Although verbal passive formation is not involved with categorical change, *-en* being the same morpheme as past participle, verbal passives cannot be inflected any more.

Consequently, the VP headed by verbal passives cannot be a sister of I, but constitute a small clause with a subject which is moved from the object position.

Even though there remain some problems which need deeper investigation, I suppose the view taken here is on the right track. I hope more investigation will be taken in future research on passive construction.

Notes

¹Bresnan (1982) claims that "direct argument" must be Theme, but as Levin and Rappaport (1986) remarks, it is not restricted to Theme. Therefore, I used the term "direct argument" here adopting Levin and Rappaport's term.

²As for the implicit agent, it might be argued, as Grimshaw (1990) does, that there is actually no implicit agent in agentless passives. The controller of PRO in a purpose clause is not an implicit agent but the event which IP describes or arbitrary PRO (examples taken from Grimshaw).

- (i) a. ?The doors were opened to enter the room.
- b. The doors are open to keep cool.
- c. The doors were opened to keep us cool.

In the cases of (ia) and (ib), the controller should be arbitrary PRO while in (ic) it can be either PRO or event. Even if *by* phrase is present, the controller of PRO can be event as (ii) shows.

- (ii) The doors were opened by John to keep us cool.

However, Jaeggli points out (iii) as a counterexample for the event control.

- (iii) a. *The house was struck by lightning [PRO to start a fire].
- b. The lightning started a fire.

As Jaeggli and Roberts suggest, control of PRO in rationale clauses is involved with agentivity.

³Bresnan's "Passivization in English" (1982: (3)).

⁴Bresnan's "Participle-Adjective Conversion" (1982: (36)).

⁵This "BE function" must be emphasized. As Jackendoff points out, *loaded book* only has perfective reading. He reduces this difference to the conceptual difference between two *loads*.

The one in *load the truck with books* has BE function while the other one in *load the books onto the truck* has GO function instead. As is stated here, we must say that only BE can be stripped of INCH and be stative.

⁶If we state that suffix is the head and that the assignment of structural Case is based on government, V cannot assign structural Case when it is suffixed *-en*. The Case assignment that *-en* blocks is only the structural Case as the data in German shows.

- (i) Es wird dem Schüler von dem Lehrer geholfen.
- it is the schoolboy-Dat. by the teacher help-en
- "The school boy was helped by the teacher"

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