Lexical Passivization (1): A Criticism on the Syntactic Analysis of Passivization

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Abstract

This paper criticizes the traditional syntactic analysis held in generative grammar for decades, in which θ -role and Case are absorbed on the basis of Case and structure. We first look at the technical implementation of the idea in the former framework of the generative grammar, GB, and argue that this analysis does not hold any more in the latest framework, the Minimalist Program. Furthermore, we introduce some examples that may not be identified resorting to Case and structure, to show that the relevance of syntax to passivization is, in fact, more restricted than have been thought, and note that they rather suggest that the semantic aspect of verbs is more relevant to passivization.

Key Words: Passivization, Case, Structure, The Minimalist Program

1. Introduction

In the earliest transformational grammar, a passive sentence was analyzed as derived from the corresponding active sentence via the rule specified only for the passive transformation. After the elaboration of the theories of generative grammar, Chomsky (1981) makes an influential claim that passive clauses are not derived from the corresponding active ones by application of one single rule, but they are derived as a consequence of the interaction of two independent properties. Chomsky's claim is intriguing in that he shows us that the surface peculiarity of passive is not due to the application of a peculiar passivization rule, but they arise from a general rule of grammar keeping to two properties specific to passive constructions; the passive construction, therefore, is just a superficial taxonomic distinction, and passive clauses are derived exactly like active ones except the affection of the two properties. This way of analysis has been the basis of studies on the passive in generative grammar for decades, and the passive is still so analyzed even in the latest framework of the Chomskyan grammar, the Minimalist Program.

2. Previous Approaches to Passive in Generative Grammar and Their Problems

2.1 Chomsky (1981)

As we mentioned in the introduction, Chomsky (1981:124) makes a claim that English passive clauses are derived as a result of the interaction of the general rules and two independent properties, which are as follows:

- (1) (I) [NP, S] does not receive a θ -role
 - (II) [NP, VP] does not receive Case within VP, for some choice of NP in VP

The property (I) is called θ -role absorption and the property (II) Case absorption, and these two properties play key roles in deriving passive sentences in the context of GB. Look at the examples below.

- (2) a. John was killed.
 - b. [NP e] was killed John.

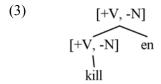
(2b), from which the S-Structure (2a) is derived, is the underlying D-Structure. According to the property (II) above, the passive predicate *killed* does not assign Case to its complement, *John*, in (2b). Hence, *John* does not have Case and is forced to move to some position where it can be assigned Case; otherwise, it will cause the violation of the Case Filter, which requires for every NP to be assigned Case by S-Structure. In addition, the property (I) says that the subject position in (2b) is not assigned θ -role; therefore, it can be a licit landing site of movement, because even if *John* moves to this position, *John* will not result in being assigned θ -roles doubly, avoiding the violation of the θ -criterion, which requires that each argument bears one and only one θ -role. Given that it is necessary for *John* to move and the subject position is available for the movement, it moves there, so that (2a) is derived.

As seen above, the properties proposed in Chomsky (1981) correctly predict the formation of English passive constructions, but one question arises: why on earth each property of passive, (I) and (II), exists in English passive constructions? In next section, we review answers to this question proposed by Jaeggli (1986) and Baker, Johnson and Roberts (1989).

2.2 Jaeggli (1986) and Baker, Johnson and Roberts (1989)

Jaeggli (1986) assumes that "[s]ubcategorization features include elements strictly within the government domain of the subcategorizing element" (588), that they specify arguments' positions, and that a θ -role is associated with a subcategorization feature; since the external argument is not within the governing domain of a predicate, its position is not specified and, as a result, external θ -roles are not associated or linked to a particular argument position. He then concludes that external θ -roles are in principle free to be assigned to any object.

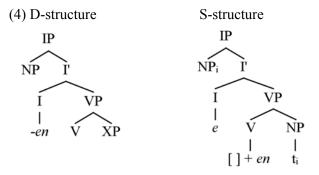
Jaeggli proposes a structure to passive participles (killed, here) such as the one below:



In the structure (3), as just mentioned, there should exist an unlinked (external) θ -role, and the passive morpheme -*en* appears in the governing domain of V as the sister of it. Jaeggli assumes that, in this situation, -*en* may be assigned the θ -role despite its status as a bound morpheme. In this way, he explains one of the two crucial properties of passive, θ -role absorption. The other property is left unexplained: Case-absorption. About this matter, he simply assumes that -*en* is also capable of receiving (Accusative) Case, just like an ordinary DP, even though it is a bound morpheme. In sum, Jaeggli explains the two properties proposed by Chomsky by giving the morpheme -*en* special status as a licit bearer of θ -role and Case.

Jaeggli's explanation indeed works out well; however, it is conceptually insufficient in that it is still a mystery why a bound morpheme may receive both θ -role and Case. Baker, Johnson and Roberts (1989) provide conceptual support to Jaeggli's claim; they propose that the passive morpheme is actually an argument. Once it is an argument, the two properties of passive follow from the property as an argument; specifically, in a later version of the GB theory in which their theory is stated, any argument must satisfy the Visibility Condition, which roughly states that all arguments must receive θ -role and Case; hence, put it in other words, given the status as an argument, *-en* may, or rather, must be assigned θ -role and Case.

To implement their claim, they propose the following D- and S-structure to passive (the left one is the D-structure and the right one the S-structure):



In the D-structure in (4), -en is base-generated under I, where they assume that it receives a compositional θ -role, which is equivalent to an external θ -role, from the sister VP. Only assignable θ -role of the VP being assigned, the subject position is empty, in fact. This explains θ -role absorption. The story goes further; by the S-structure, -en moves downward and adjoins onto the V for independent reasons, so that it forms the complex with the V and occurs within the governing domain of it. According to Baker, Johnson and Roberts (1989), it is obligatory, under government, that V's only assignable Case, Accusative Case, should be assigned to the morpheme—Case absorption is explained.

Summing up this section, we saw that Chomsky (1981) makes a fundamental suggestion concerning passive, Jaeggli (1986) provides rough conceptual implementation, and finally, Baker, Johnson and Roberts (1986) elaborate it with a simple technique. Their explanations are complete; however, so is it in the GB theory. Time has gone by, the framework of generative grammar has changed and the new framework has arrived: the Minimalist Program. In the program, some essential concepts which formally played central roles in GB are done away with, due to the lack of conceptual necessity. Given the change, their explanations are not intact.

2.3 Minimalist Explanation Taking over the Explanations in GB

Let us look at Jaeggli's explanation first. There are largely three problems which prevent it from working well in the Minimalism. First, in the Minimalism, the concept of government is no more used. Chomsky (1995:176) states that "[t]he concept of government would be dispensable, with principles of language restricted to something closer to conceptual necessity:", by which he means that the notion of government may be expressible with some more necessary and fundamental principles of language; in the Minimalism, as its name shows, postulating such an extra concept is undesirable and it should be dispensed with. Jaeggli's explanation is, as we saw, crucially dependent on government to explain Case and θ -role absorption. Hence, without the concept of government, the conceptual ground of Jaeggli's explanation is greatly impaired.

Second, in the Minimalism, the checking theory is adopted. In that theory, it is assumed that a lexical item enters a derivation, with its features including Case already specified, and in the derivation, some of its features must be checked by movement for convergence. There are two ways to check features: one way is to overtly move to the specifier position of a relevant head, and the other is to adjoin to it covertly. In the proposed structure (3), the putative bearer of Case feature *-en* is, obviously, not in the configuration possible for feature-checking; it is not a specifier, or Jaeggli does not assume that it adjoins to anything. Therefore, in the structure that he assumes, Case absorption does not take place in the Minimalism.

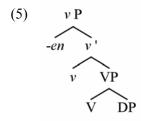
Third, in the structure (3), he assumes that -en receives an external θ -role within the projection of V. Chomsky (1995:313), however, states that "[a] θ -role is assigned in a certain structural configuration," External θ -roles are, as its name shows, the one that should be assigned outside verbal projection; if θ -roles are, as Chomsky says, assigned in accordance with structure, external θ -roles should not be assigned to -en, it being outside the verbal projection in the structure (3). To sum up, in the Minimalist framework, Jaeggli's proposal has lost its conceptual ground, and his explanation of Case and θ -role absorption does not hold.

Next, let us look at the proposal of Baker, Johnson and Roberts (1986). Clearly, dependence on government is a problem, but more must be said about the proposal. Although the crucial point of their claim is that the morpheme *-en* has status as an argument, we will set aside this point for a while; in this section, we will see that their explanation may not be technically implemented, seen in the eye of the Minimalism.

Remember that, for the explanation of Case absorption, they resort to the downward movement of -en from under I onto V as shown by the S-Structure in (4). In terms of the Minimalism, since -en and the morpheme are realized phonetically as the complex as a result of the downward movement, this movement must have taken place in the overt syntax, before Spell-Out; otherwise, -en and the V should not form the complex. Chomsky (1995, Ch.3) proposes that a derivation should proceed satisfying the Extension Condition, which roughly states that a syntactic operation such as Merge and Move must operate targeting a root syntactic object. In addition, he also states that "[the Extension Condition] does not hold after Spell-Out ..." (327); this means that the condition holds before Spell-Out, that is, in the overt syntax. These things taken into account, any syntactic operation in the overt syntax must target a root object. The proposed downward movement in the overt syntax, however, targets the V, which is included within the larger category IP, clearly not a root, when the movement takes place; hence, the movement violates the Extension Condition.

Baker, Johnson and Roberts also assume that in the D-Structure in (4), the compositional θ -role from VP, which is equivalent to the external θ -role, is assigned to *-en* under I. In addition to the assumption that θ -roles are assigned based on the structural configuration, Chomsky further notes that " θ -relatedness is a 'base property'..." (315) and assumes that external θ -roles are assigned in Spec- ν P. In the structure, it is clear that *-en* firstly merges with VP as I; therefore, for the morpheme, I is the base position. According to Baker, Johnson and Roberts, *-en* should be assigned an external θ -role there. However, since it is not in Spec- ν P, it is not assigned an external θ -role. Hence, their explanation of θ -role absorption does not hold in the Minimalism.

In the Minimalism, would it then be possible to maintain the idea that the morpheme -en is an argument and receives an external θ -role, if we assume that -en first merges with ν P, instead of VP, and becomes the specifier of ν P in consonance with Chomsky's assumption of θ -role assignment? Let us assume that passive has a structure like (5) below:



We have already noted that *-en* and the verb are fused in the overt syntax; to form a complex, the already formed complex of v and V needs to raise upward to *-en*, the downward movement being barred. However, Chomsky (1995) proposes the (chain) uniformity condition which stipulates that "[a] chain is uniform with regard to phrase structure status," and he explains that "the phrase structure status of an element is its (relational) property of being maximal, minimal, or neither." (253). In the structure (5), at the launching site of the movement of the complex to *-en*, the status of the complex is minimal—it is a head there, but at the landing site, it is nonminimal—the specifier is not a position for a head. The chain uniformity condition is therefore violated, and such a movement

is illicit in the Minimalism. Furthermore, for the implementation of Case absorption in the Minimalism, the uninterpretable Accusative Case feature of v should attract -en (-en overtly moves to v or its formal feature only covertly does so), be checked with -en's Case feature and delete. However, -en counts as a neighborhood in the structure and is disregarded for the consideration of attraction; hence, Case absorption also fails. In sum, in the Minimalism, if we admit the morpheme -en as an argument exceptionally, θ -role absorption is unexplainable; in turn, even if we assume a structure where -en may receive the external θ -role, Case and passive participle formation are still unexplainable.

In this section, we saw that the traditional ways of analyzing passive in GB do not hold in themselves in the Minimalist framework, and especially their essential claim that *-en* receives Case and θ-role also does not. Moreover, Goodall (1993) independently denies the claim that *-en* is an argument from the cross-linguistic point of view (we do not review his analysis here for the reason of space). All things considered, we have to conclude that assuming argument-like status to *-en* is conceptually and empirically incorrect.

3. The Problems of the Approaches in Terms of Case and Structure

3.1 Introduction

The approaches to passive that we have so far seen are also stated in terms of structural configuration, in the sense that the failure of Case assignment/checking, which is based on structural configuration, gives rise to the movement of DP that is the sister of V: more specifically, in GB, since a DP cannot receive Case from the passivized V, it raises up to Spec-IP for Case. In the history of Chomskyan grammar, it has long been believed that this is the case. In this section, we challenge this belief and show that Case and structure are basically irrelevant to passive.

3.2 Pseudopassives

In English, there is a construction called pseudopassive, in which the object of a preposition, not of a verb, undergoes the movement of passivization, as illustrated in (6):

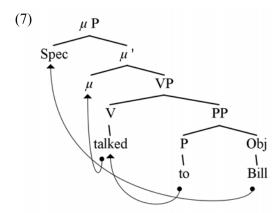
- (6) a. John talked to Bill. (Fujita and Matsumoto 2005:171)
 - b. Bill was talked to (by John). (ibid.)
 - c. The Committee talked about Pauline's thesis. (Baltin and Postal 1996:127))
 - d. Pauline's thesis was talked about by the committee. (*ibid.*)

(6b,d) are the passive sentences corresponding to the active ones (6a,c), respectively. In pseudopassive, if passivization targeted the Case assigning/checking property of a verb, it would not be necessary that the complement DPs of the prepositions such as *Bill* and *Pauline's thesis* in (6) raise to Spec-IP. In turn, if we persist in the movement by the Case reason, we have to assume that the prepositions that are not morphologically affected are deprived of their Case assigning/checking property by passivization. Pseudopassive is, as is shown, problematic for the claim that verb's

deprivation of the Case assigning/checking property by the morphological process of passivization gives rise to the movement.

An approach that may overcome this problem is the structural "reanalysis". By reanalysis, an independent verb and preposition are reanalyzed as a single syntactic unit, and the preposition is allowed to incorporate into the verb. In (6a,c), *talk* and *to* and *talk* and *about* respectively form single verbs under reanalysis, and the passive morphology uniformly deprives the verbs so formed of the Case assigning/checking property; as a result, (6b,d) are derived. Reanalysis provides us with the uniform target of Case absorption and the uniform motive of the movement.

Fujita and Matsumoto (2005) propose a technical implementation of reanalysis in the Minimalist framework, assuming the following structure:



In the system that Fujita and Matsumoto assume, μ , a functional category that is responsible for activating or inactivating the Case information of Case-assigning/checking elements, appears in the structure. In the structure (7), the preposition *to* first raises to the V *talk*, forming a complex verb, and then the complex raises further to μ , finally forming a complex consisting of the μ , the V, and the P. Besides, the DP *Bill* raises to Spec- μ P. Since μ in passive is the type that inactivates Case information, *Bill* must raise further to some higher position for the activation of its Case.

Given the structure (7), it follows that the complex of μ , V, and P is formed in the overt syntax, because the object DP appears phonetically in Spec-TP and it must be there through the Case checking at the specifier of the projection of the complex, where its Case information is inactivated. Therefore, if correct, the complex should react as a single unit to any overt and covert syntactic operation.

The prediction is incorrect, indeed. Baltin and Postal (1996) show that the putative complex behaves as discrete lexical items to some syntactic operations, contrary to our prediction. Citing Postal (1986), they provide examples showing that the preposition that is putatively reanalyzed—structurally incorporated into a verb—may be shared by multiple verbs, and the verb of a putative complex may be shared by two prepositions. Look at the examples in (8):

- (8) a. Communism was talked, argued, and fought about.
 - b. Fascism was fought for by Goebbels and (then) against by De Gaulle.

In (8a), we expect that this sentence would result in ungrammaticality; because the preposition *about*, as has been assumed, is syntactically incorporated into a verb, it should not be shared by other verbs. However, the opposite is true; rather, this preposition shows the property of an ordinary preposition, in that it can be shared by the multiple verbs. In (8b), the verb *fought* is shared by the two prepositions *for* and *against*, one of which are not adjacent to the verb; this is also the behavior of an ordinary preposition, but not the complex one.

Though we have only presented one argument against the structural reanalysis approach such as Fujita and Matsumoto (2005), Baltin and Postal (1996) provide a total of eight arguments: heavy NP shift, stranded P, subdeletion, reflexive, verbal phrase ellipsis, passivization/object-raising correlation, pronoun-binding and floating quantifiers, all of which indicate that the behavior of a putative reanalyzed preposition is the same as an ordinary preposition. In the structure such as proposed by Fujita and Matsumoto, the complex including V and P is formed in the overt syntax, and therefore, it should behave as a single unit to both overt and covert operations. Given these results, however, their analysis is empirically wrong.

Let us turn to the Case-driven movement in passive. Since a preposition in pseudopassive is indifferent from an ordinary preposition, the preposition, which is not morphologically affected, should be a licit Case-assigner; if so, there should be no need for the object to move for Case. Therefore, we do not have an account that unifies passive participle formation and the passive movement, but rather have an argument against the Case driven movement in passive.

3.3 Double Object Constructions

Chomsky (1995, Ch.4) assumes that Vb, the complex of a main verb and a light verb, checks the Accusative Case feature of an object in the specifier position. Look at (9) below, which is an example of double object constructions.

(9) John sent Mary a letter.

Suppose that in (9), the Goal argument *Mary* bears Dative Case, and the Theme argument *a letter* bears Accusative Case, though their Cases are not reflected morphologically. Setting aside how Dative Case is checked in the Minimalism, if Case absorption always targets Accusative Case in passivization, we expect that, in the Case assignment story, the passive alternative of the sentence (9) would be like (10a) below, where the Theme DP cannot receive Accusative Case in Spec-vP and then raises to Spec-TP for Case.

- (10) a. *[TP a letter, [T was [$_{vP}$ t_i [$_{v}$ sent, [$_{VP}$ Mary t_i t_i]]]]]
 - b. Mary was sent a letter.

(10a) is unacceptable to most English speakers; instead, (10b), where the Goal DP *Mary*, not the Theme DP, moves to the subject position, is acceptable.²

Let us tentatively assume that English no longer has the distinction between Dative and Accusative, as is shown by their identical morphology, and either of the two arguments in a double object construction has the identical Objective Case; besides, Case absorption in passive targets Objective Case, not Accusative Case; furthermore, the Theme argument in a double object construction possesses Inherent Objective Case, which does not need to be checked. All of these assumed, the passive of a double object construction would be derived correctly: the Goal argument moves to Spec-TP for Nominative Case assignment, Spec-vP being unavailable for Objective Case assignment/checking this time, and the Theme argument stays in situ, its Inherent Case not needing to be checked. Crucially, as long as we keep to Case to explain the passive movement, we cannot predict the passivization of a distransitive verb correctly, unless we assume that there is no distinction between Dative and Accusative.

Lightfoot (1979), however, shows that also in Modern English, where the distinction between Dative and Accusative Case was still morphologically reflected, the Dative argument moves in passive, as illustrated in (11) and (12), where the italicized DPs occur in the dative. Interestingly, in the passive alternatives in (12) corresponding to the active ones in (11), the Dative DPs are allowed to appear in the Subject positions in the Dative form.

- (11) a. Mon him, ofteah þare claba.
 - 'Someone took-away from-him his clothes.'
 - b. Mon strake him (hine) of his leg.
 - c. They banished him the realm.
- (12) a. Him wæs oftogen þare claþa.
 - b. Him was stricken off his leg.
 - c. *Him* was banished the realm.

The examples in (12) show that the Dative Objects move to the subject position in passive. Note that if we pursue the Case-based account of the passive movement, we must conclude that in passivization, Case-absorption targets Accusative Case if the verb is a monotransitive, but Dative Case if it is a ditransitive; a puzzle.

We will have a key to the puzzle, if we cease keeping to Case in describing passivization. In fact, recourse to Case makes things complicated. If we look at passive from another point of view, specifically, if we take semantics of arguments into account, we will have a simpler account; the key is that Goal arguments are always displaced in passive both in contemporary English and in Modern English. Thus, we have another argument that further calls into question the assumption that Case is relevant to passivization.

3.4 Experiencer-Object Psych Verbs

In English, there is a category of verbs called psych verbs. Psych verbs, as their name indicates, express psychological state or change. Psych verbs are plausibly classified into two subcategories: Experiencer-subject (ES) ones as in (13a) and Experiencer-object (EO) ones as in (13b):

- (13) a. They fear/hate/admire thunder.
 - b. Thunder frightens/disturbs them.

(Grimshaw 1990:8)

Both types of psych verbs assign the basically identical θ -roles, which are Experiencer and Theme, but the directionality of assignment of these θ -roles differs between the two subcategories: in the ES class, Experiencer is assigned to the subject and Theme to the object; in the EO class, vice versa.

Among EO verbs such as (13b), there further exist two subcategories: the one that assigns volitional Agent role to the subject and the one that assigns nonvolitional Causer role to the subject as illustrated in (14):

(14) a. {John/The rumor} annoyed Mary.

(Fujita 1996:151)

b. {John/The situation} frightened Mary.

In (14a,b), if the left ones of the two choices, *John*, are chosen as the subjects, they are interpreted as volitional Agent under natural reading, whereas if the right ones, *The rumor* and *The situation* respectively, are chosen as the subjects, they are naturally interpreted as nonvolitional Causer.

Between these two subclasses under EO verbs, we find an interesting difference in the behavior to passivization. Look at the examples in (15) and (16):

- (15) a. Mary worries/concerns/perturbs/preoccupies Fred.
 - b. Fred is worried/concerned/perturbed/preoccupied by Mary.
- (16) a. The situation worries/concerns/perturbs/preoccupies Fred. (Grimshaw 1990:114) b. Fred is worried/concerned/perturbed/preoccupied by the situation. (*ibid.*)

In (15a), the EO verbs assign volitional Agent to the subject *Mary* under natural reading, and (15b) is the passive alternatives to (15a). Grimshaw (1990) notes that the EO verb assigning volitional Agent to subject has the event, put differently non-state, interpretation, and the event interpretation may be held after passivization. Grimshaw proposes a diagnostic that examines whether the event interpretation is established. It is to see whether or not a sentence accepts the progressive aspect: if the progressive alternative is acceptable, the sentence has the event interpretation; in contrast, if not, the sentence only has the state interpretation. The passive alternatives (15b) pass the diagnostic, as illustrated in (17):

(17) Fred is being worried/concerned/perturbed/preoccupied by Mary.

The EO verbs in (16a), on the other hand, assign nonvolitional Causer to the subject *The situation* under natural reading, and these sentences may have the event interpretation, as exemplified in (18):

- (18) a. The situation was worrying/concerning/perturbing/preoccupying Fred.
 - b. The birthday party is surprising/[...] Mary (right now). (Dowty 1991:587)

However, if we apply the diagnostic to the passive alternatives (16b), the result is unacceptable, as in (19):

(19) a. *Fred is being worried/concerned/perturbed/preoccupied by the situation.

As the unacceptability of (19) shows, the passive of the nonvolitional Causer EO verb no longer has the event interpretation differently from the corresponding active; in other words, the interpretation of those verbs is restricted only to the state interpretation by passivization. Grimshaw further argues that this is because their status is changed from verb to adjective by passivization. This argument is exemplified by the examples in (20), where the passive participles show the parallel distribution to adjectives: they appear in the complement position of *seem*, which only takes adjectives as the complement, and at the same time, they also allow *un*-prefixation, which is generally allowed for adjectives.

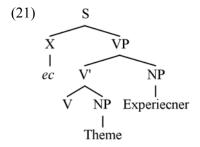
(20) Fred is/seems unworried/unconcerned/unperturbed/unpreoccupied by the situation.

(*ibid.*, 114)

Grimshaw thus concludes that volitional Agent EO verbs may be passivized verbally (i.e., their categorical status as verb remains intact) with their event reading retained, whereas nonvolitional Causer EO verbs are only allowed to be passivized adjectivally (their categorial status is forced to be changed from verb to adjective by passivization) with the event reading lost.

The crucial point here is that whether a verb can be passivized verbally or not is dependent on whether the verb entails volition on the subject. If we keep to Case to account for passivization, then how can we derive the fact? Both the verb with a volitional subject and the one without it assign identical Cases: Nominative to the subject and Accusative to the object. To the extent that there is no difference in the Cases between them, we cannot resort to Case to explain the different behaviors to passivization. We have one more argument against the Case-based analysis of passivization.

We then have a further question: if Case is irrelevant to the difference, is it likely that structure is relevant? A possible approach that might explain the difference in terms of structure is proposed in the context of GB by Belletti and Rizzi (1988). They assume a D-structure representation such as (21) (irrelevant details omitted by the authors) to Italian EO verbs:



In the structure (21), the Theme argument is base-generated as the complement of the main verb, the Experiencer argument is base-generated as the sister to V', and the subject position is empty. In this structure, no argument is generated in the subject position, where Agent is generally assigned; therefore, we may assume that nonvolitional Causer EO verbs have this structure, since neither of their arguments bears Agent. Assuming so, we have a natural explanation why Agent EO verbs and

Causer EO verbs behave differently to passivization. We have seen that the external θ -role, which is assigned externally to VP, is absorbed in passivization; since no argument is generated externally to VP (all arguments are generated inside VP) in the putative structure of Causer EO verbs such as (21), there should also be no external θ -role fed to passivization; hence, Causer EO verbs fail to be passivized normally (i.e., verbally), and only the more marked Adjectival passivization is allowed to them.

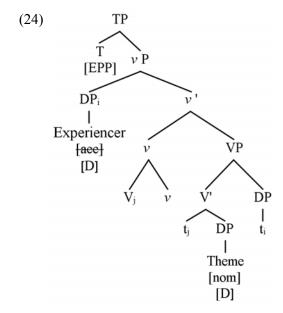
Next question is whether we may assume the structure such as (21) in the context of the Minimalism. Let us see how the derivation proceeds when the VP structure like (21) is embedded under vP in consonance with the assumption in the Minimalism, without any element merging with vP, as shown in (22):

(22)
$$\left[v_P v \left[v_P \right] V DP_{\text{THEME}} DP_{\text{EXP}} \right]$$

Given that the Experiencer argument appears in the Accusative form, it must raise to Spec-vP and check its Accusative Case feature against the Vb (the complex of v and V) under the Spec-head relation, as illustrated in (23):

(23)
$$\left[v_{P} DP_{i \text{ EXP } \text{[ace]}} \left[v_{i} \left[v_{V} V_{j} v_{\text{[ace]}} \right] \left[v_{P} \left[v_{i} t_{j} DP_{\text{THEME}} \right] t_{i} \right] \right] \right]$$

The derivation further proceeds until T merges with the structure to form TP, as in (24):



The question here is whether it is possible to raise the Theme DP to Spec-TP crossing the Experiencer DP with the D-feature that can enter the checking relation with the strong EPP feature of T at this point of the derivation. The strong EPP feature is checked overtly, or the derivation will crash.

Chomsky (1995:356) claims that the operation Attraction can only attract the closer element and he defines *closeness* as follows:

(25) Closeness

If β c-commands α and τ is the target of raising, then β is *closer to* K than α unless β is in the same minimal domain as (a) τ or (b) α .

In the structure (24), let us say that β = the Experiencer DP, α = the Theme DP, K = TP, and τ = Spec-TP, putting aside the definition of minimal domain.³ The Experiencer DP and the Theme DP is not in the same minimal domain, because the Experiencer DP is in the minimal domain of ν and the Theme DP is in that of V; thus, in this case, β is not in the same minimal domain as α . In the same way, β is not in the same minimal domain as τ , either. Therefore, both of the conditions (25a,b) are satisfied. Further, β c-commands α in the structure (24). Hence, β is closer to K than α , namely, the Experiencer DP is closer to TP than the Theme DP. If we follow the definition of closeness, we predict that the operation Attraction for checking the strong EPP of T attracts the Experiencer DP 'overtly', contrary to the fact. As a conclusion, assuming the VP structure such as proposed by Belletti and Rizzi (1988) in the context of the Minimalism leads to an incorrect derivation. Put differently, in the Minimalism, Accusative objects must be merged under VP and Nominative subjects must be merged with ν P for a convergent derivation; otherwise, the unchecked Nominative Case feature of the Theme DP would cause the derivation to crash.

To summarize, we saw that the different behaviors of Agent EO verbs and Causer EO verbs to passivization are unexplainable in terms of Case for the identical Case assignment. Furthermore, the different behaviors are also unidentifiable in terms of structure, because the Minimalism only allows a uniform derivation and an identical structure for either type of the verbs. This argument on the different behaviors stemming from the slight difference in semantics on the verbs' subjects further undermines the validity of the approach to passive based on Case and structure.

3.5 Other Cases of Failure of Passivization

Some verbs are unpassivizable unexpectedly from the syntactic viewpoint. In this section, we will look at some of these. There is a class of verbs that impose symmetric relation between their arguments, which are sometimes called 'symmetric' verbs or predicates: for example, *resemble*, *marry* and *meet*. These verbs show an interesting property: even if the grammatical functions of their two arguments are inversed, the truth condition of the sentence does not change. As an illustration, look at (26):

- (26) a. John resembles Bill.
 - b. Bill resembles John.
 - c. John met Mary.
 - d. Mary met John.
 - e. John married Mary.
 - f. Mary married John.

(c-d; Kuno and Takami 2005:38)

In (26a,b), if *John resembles Bill* is true, then *Bill resembles John* is also true, and if *John resembles Bill* is false, *Bill resembles John* is also false. This is also true for (26c-f). These verbs invariably

may not be passivized, as shown in (27):

- (27) a. *Bill is resembled by John.
 - b. *Mary was met by John at Harvard Square today. (ibid., 39)
 - c. *Mary was married by John in 1960. (ibid.)

Note that these verbs assign Nominative to the subject and Accusative to the object as ordinary transitive verbs do, as can be seen in (28), where pronouns are used instead of proper nouns, to show the DPs' Cases.

(28) He/she resembles/met/married him/her.

If the properties of passivization are just the ones such as pursued by Chomsky (1981), Jaeggli (1986), and Baker, Johnson and Roberts (1989), that is, (I) [NP, S] does not receive a θ -role and (II) [NP, VP] does not receive Case within VP, symmetric verbs surely meet the structural requirements in that the Nominative argument is correctly assigned the external θ -role in Spec- ν P, and Accusative Case is correctly assigned to the other argument, in the structure that is derivable in the Minimalism.

Can we syntactically derive the unacceptability without resorting to ad hoc stipulations? The answer to the question is quite unclear; though, it might be objected that symmetric verbs as in (26) do not have Agent arguments, and this fact prevents them from being passivized syntactically somehow. However, these objections are invalid, because we have examples such as (29):

(29) a. John read *Hamlet* last night. (Kuno and Takami 2005:32)

b. John entered the lecture hall on time. (*ibid.*, 41)

c. Professor Smith quit the University of Hawaii in 1960. (ibid., 43)

In all of the sentences in (29), the subjects, *John* in (29a), *John* in (29b), and *Professor Smith* (29c), respectively, are naturally understood to perform the actions described by the verbs "volitionally". Similarly to ordinary transitive verbs, these verbs also have the structural properties enough to be passivized, plus their subjects being agentive. If the presence of Agentivity actually has an impact on passivization, the sentences in (29) should all be passivized grammatically, satisfying all the other conditions on passivization. This is not the case, however, as in (30), which shows that the presence of Agentivity is not crucially relevant to the unacceptability. In terms of structure, it is quite unexpected that these verbs are resistant to passivization.

- (30) a. ??/*Hamlet was read by John last night. (ibid., 32)
 - b. *The lecture hall was entered by John on time. (*ibid.*, 41)
 - c. *The University of Hawaii was quit by Professor Smith in (1960). (ibid., 43)

Here, we have another argument against the proposal that Case and structure are exclusively relevant to passivization, and this case seems to us to strongly suggest that only referring to Case and structure is insufficient to explain passivization, rather, that the semantic aspect of verbs is more radically connected to the consideration of passivization than the syntactic aspect.

4. Conclusion

In this paper, we criticized the traditional syntactic analysis on passivization both conceptually and empirically and saw some impact of the semantics of verbs on passivization. In section 2, we saw the influential claim made by Chomsky (1981) that an external θ-role and Case are absorbed in passivization and the claims made by Jaeggli (1986) and Baker, Johnson and Roberts (1989) that technically implement Chomsky's suggestion. These claims might have held in GB, but they are not in the Minimalism; we argued that their central claim that the passive morpheme *-en* receives an external θ-role and Case no longer holds in the Minimalism. In section 3, we saw four arguments against the relevance of Case and structure to passivization, which are pseudopassive, double object constructions, EO psych verbs, and some unpassivizable cases. Some of these examples not only deny the relevance of Case and structure, but rather suggest the strong relevance of the semantic aspect of verbs. In this paper, we just presented negative arguments against the traditional way of looking at passive in generative grammar and suggested the relevance of semantics, and we did not present an alternative idea for the reason of space. In the forthcoming paper, we are going to present a new idea accounting for passivization on the basis mainly of the semantic aspect of verbs.

Notes

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- 1. The complex of v and V should raise up to -en, because v alone does not raise, the form of a passive participle being clearly V + -en, and V alone does not raise, crossing v on the way to -en, which violates the head movement constraint.
- 2. There is dialectal variation with regard to the acceptability of the type (10a). Roberts (2006:151), for instance, states, "Most American speakers reject examples of this type. They may be more natural in Northern varieties of British English than in Southern ones."
- 3. Hornstein, Nunes, and Grohmann (2005:367) define the minimal domain of α as "[t]he set of categories immediately contained or immediately dominated by projections of the head α , excluding projections of α ."

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