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Passives Without Argument Incorporation

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1 Overview

There are three defining properties of the passive construction: (a) the suppression of the external argument, (b) the absorption of the accusative Case, and (c) the appearance of a *by*-phrase, which is interpreted as bearing the same thematic role as the suppressed external argument. All three can be seen in (1).

- (1) a. The dog chased the man
b. The man was chased (by the dog)

In (1a), the subject of the active sentence, *the dog*, is no longer the subject of the passive sentence in (1b), while the object of the active sentence in (1a), *the man*, does not remain the object in the passive (1b). Also, the *by*-phrase in (1b), *by the dog*, thematically corresponds to subject of the active in (1a), *the dog*.

The standard theories of Jaeggli (1986) and Baker, Johnson, and Roberts (1989) give a unitary account for the external argument suppression and the accusative Case absorption by assigning both the external θ -role and the accusative Case to the same element, the passive morpheme, which they consider to be the *-en* ending. There are, however, a number of problematic aspects about their approach.

- A) The correlation between external argument suppression and accusative Case absorption is not the type of correlation observed in any of the comparable cases. For example, the body part incorporation in *hand-wash the car* or *hand-pick the oranges* does not trigger accusative absorption. Nor do we find that the dative clitics in

Romance languages ‘absorb’ the accusative or any other case except for the dative.

- B) The correlation between external argument suppression and the appearance of a *by*-phrase: The thematic role of the suppressed external argument seems to surface on an oblique phrase. This is an unusual correlation that is not attested in other familiar cases of argument suppression, such as the implicit objects of *eat* and *read*, as in *I ate* (*P the dinner), *I am reading* (*P a book).
- C) The thematic licensing of *by*-phrases: In standard theories, the external thematic role is assigned to the passive morpheme, so it cannot be available for the *by*-phrase even though the *by*-phrase is interpreted as bearing the same thematic role as the active subject. As a result, the thematic interpretation of *by*-phrases has to be handled through an additional mechanism that does not follow from anything else in their theories, i.e., through a thematic role transmission convention in Jaeggli (1986), and the equivalent of clitic doubling in Baker, Johnson, and Roberts (1989).
- D) The parallelism between passives and causatives: The approaches that crucially rely on incorporating the external argument into the verb/inflection cannot capture the essential parallelism between causatives and passives without also positing some argument incorporation in causatives as well (see Zubizarreta 1982). This parallelism is particularly robust in Korean (Park 1986, examples modified from Marantz 1985), where the passive morpheme is identical to the causative morpheme.

- (2) a. na-nin ibalsa-ekey mæri-ril kak-ki-æss-ta
I-NOM barber-DAT hair-ACC cut-CAUSE-PAST-DEC
‘I had the barber cut my hair’
- b. næ mæri-ka ibalsa-ekey kak-ki-æss-ta
my hair-NOM barber-DAT cut-PASS-PAST-DEC
‘My hair was cut by the barber’

Marantz (1985) and especially Li (1990) pursue an alternative approach that is specifically designed to handle this parallelism. As a starting point, they assume that the passive morpheme is a predicative head that takes a VP complement. They treat PASS as a raising verb, which roughly has the VP architecture in (3a). It contrasts with the transitive predicate CAUSE, whose VP structure is as in (3b).

- (3) a.
- b.

Both Marantz and Li argue that the Korean CAUSE is ambiguous between the passive

(raising) form in (3a) and the causative (transitive) form in (3b). Although their approach fares better than the standard theories which treat the passive morpheme as an incorporated external argument, it still leads to some unresolved problems.

- A) The correlation between external argument suppression and accusative Case absorption remains unexplained, since as a raising predicate, PASS is supposed to block accusative Case assignment inside its complement domain, cf. Li (1990). This is clearly not the case with ordinary raising verbs. For example, the lower verb *enjoy* does not lose its accusative Case assigning capacity in *Bill seems to be enjoying his drink*.
- B) The correlation between the suppression of the external argument and the appearance of the *by*-phrase does not follow from anything in their system(s). The analysis of PASS as a raising predicate excludes any natural source for *by*-phrases, except the possibility that the specifier of the lower VP is forced (by some lexical property of the higher predicate PASS) to surface as a *by*-phrase rather than a DP with structural Case.

By its nature, a predicate-based approach is better equipped to account for the thematic licensing of a *by*-phrase and the parallelism between causatives and passives than the one that assumes that the passive morpheme is an incorporated argument. That is because it does not force the external thematic role to be assigned to any constituent, which is then available for the *by*-phrase. It can also provide a VP architecture very similar to causatives. On the other hand, in a framework that treats PASS as a raising verb, it is not possible to explain why external argument suppression should correlate with (a) accusative Case absorption and (b) the appearance of a *by*-phrase. That is because (a) a raising predicate interacts only with the highest argument of its complement domain, which is the specifier of the lower VP in this case, and cannot interfere with the (Case) relation between the lower verb and its complement, and (b) there is no straightforward and obvious way of turning the raising DP into an oblique expression, i.e., a *by*-phrase, as it raises to the specifier of the higher VP.

This paper presents an alternative approach to the passive construction that avoids all these problems by treating the relation between the specifier of PASS and the specifier of the root verb as one of control instead of raising.

2 The proposal

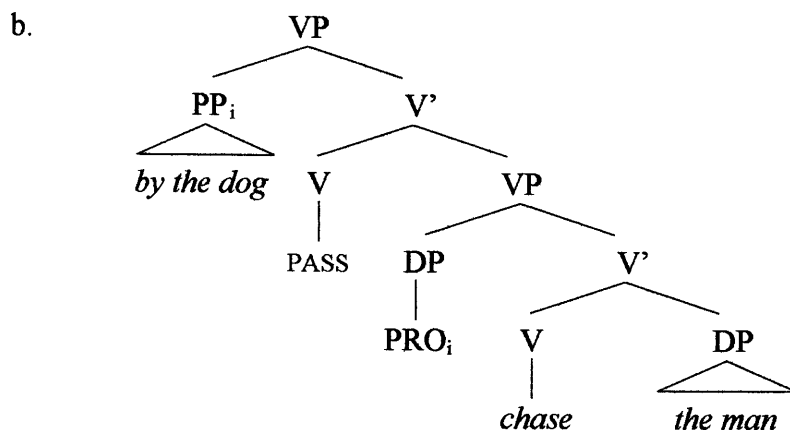
In the theory of passives proposed here, the passive morpheme is a predicate, PASS, that takes a *by*-phrase specifier and a VP complement. Crucially, PASS is a control predicate, whose *by*-phrase specifier controls the PRO generated as the specifier of the lower VP, which is headed by the root verb. This section outlines the structure and the derivation of the passive construction under this particular view.

2.1 The structure

The key component of the proposed VP architecture for the passive construction is

the control relation between the *by*-phrase specifier of PASS and the PRO specifier of the VP headed by the root verb, e.g., *chase* in (1b) above.

(4) a. [_{VP} [_{PP} *by the dog*]_i PASS [_{VP} PRO_i *chase* [_{DP} *the man*]]]



The structure in (4) presupposes an index percolation mechanism that transfers the index of *the dog* to the PP that dominates it, so that the *by*-phrase can control the PRO. Apart from this, there are three main features to the structure in (4):

- i. The passive morpheme is a predicate, PASS, that takes a VP complement.
- ii. PASS is a control predicate, whose specifier controls the specifier of its complement VP.
- iii. The specifier of PASS is a *by*-phrase.

PASS is a semantically vacuous predicate that does not contribute to the event structure. If anything, it seems only to be altering the aspectual interpretation of the clause.¹ It also appears that PASS is a phonologically null predicate in English.²

This VP architecture in (4) accounts for the problems that were stated in (B), (C), (D), and the first half of (A) with no additional stipulations:

The problem in A: The external argument of the root verb is not suppressed in (4). It is there in the structure, though in the form of the empty pronominal PRO. Thus, the correlation mentioned in (A) between the suppression of the external argument and the absorption of the accusative Case does not exist as such.

The problem in B: Not only is the external argument of the root verb not suppressed in (4), but also the *by*-phrase is generated independently as the specifier

¹ Compare *Bill counts the sheep*, which has a habitual reading, with *The sheep are counted by Bill*, which most naturally has the perfective reading.

² The participial morpheme *-en* cannot be PASS since it also a part of the perfective tense morphology.

of PASS. The fact that the external argument of the root verb appears to be missing in passives is simply a consequence of the control relation between the two positions.

The problem in C: The *by*-phrase in the passive construction is generated as the specifier of PASS, and is thematically licensed directly by PASS.

The problem in D: The VP architecture of the passive construction parallels the VP architecture of the causative construction in terms of the fundamental head-complement relation between the higher predicate PASS or CAUSE and the VP that contains the root verb. Therefore, whatever benefit that Marantz (1985) and Li (1990) reap from their raising structures also carries over to the structure given in (4). In the Korean case, for instance, the causative predicate can be treated as an optional control predicate on a par with the English *get*, cf. *I got to leave early* versus *I got him to leave early*. In this system, the alternation in the Korean cases would be between the control and non-control versions of CAUSE, which is a much more common phenomenon compared to verbs that alternate between the transitive and raising versions, which is what Marantz and Li must assume.

2.2 The derivation

The Extended Projection Principle (EPP) of Chomsky (1982) and (1995), which requires every clause to have a subject, forces one of the arguments in (4) to move to the subject position, the [Spec, NomP].³ There are three possible candidates in (4): the *by*-phrase, PRO, and the internal argument DP.

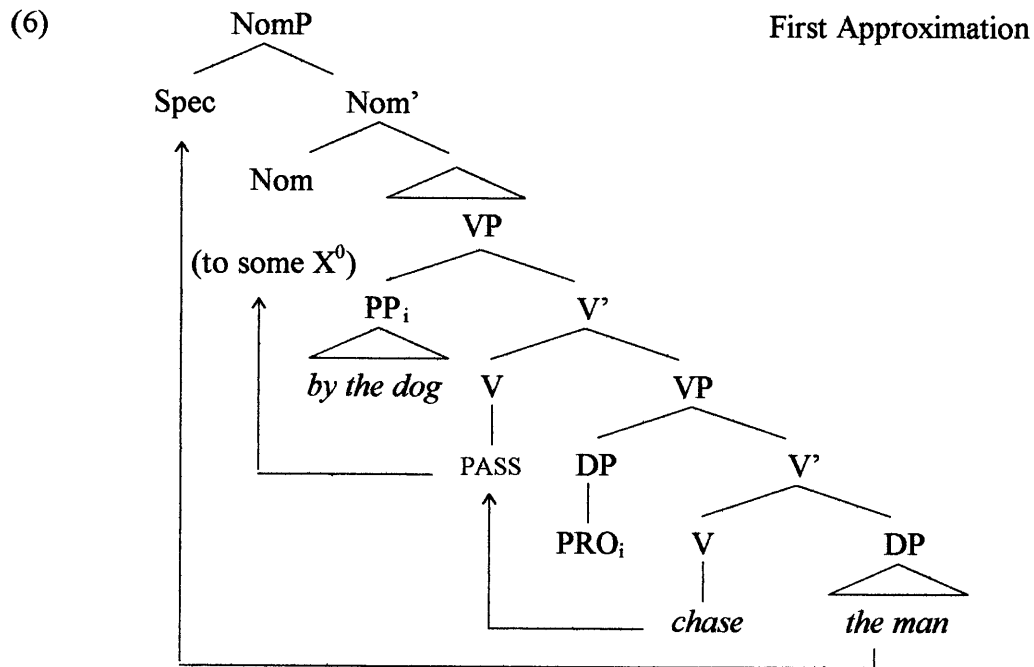
It is not entirely clear why the *by*-phrase is not a viable option in (4). This is likely to be related to the reason that oblique agents, *by*- and possibly *with*-phrases, are not normally allowed in the subject position across the world's languages. Whatever may be the reason behind this general restriction, it can readily be extended to account for the inability of *by*-phrases to appear as subjects in the passive construction. It appears, however, that some languages do allow this option, such as Hindi (Mahajan 1995) and possibly Lithuanian (Kural 1996).

The reason that PRO cannot move to the subject position is more straightforward. Raising the PRO above its controller would create an ill-formed chain in which the controller DP (or the PP) is bound by an argument (PRO) in an A-position, which is contextually the position that licenses DP-traces but not a thematically independent argument like the controller DP/PP.

³ The terms NomP and AccP are used in this paper to indicate the projections where the nominative and accusative Cases are licensed, cf. AgrSP and AgroP, respectively. NomP and AccP are neutral terms in terms of their status with respect to agreement morphology.

(5) *PRO_i ... [by DP]_i ... t_i

This leaves the complement of the root verb, *the man* in (4) as the only available argument that can move to the subject position to satisfy the EPP. This is shown as a first approximation in the diagram (6) below, where the verb is assumed to undergo overt movement out of the VP layers into some inflectional head.⁴



3 Intransitive verbs

Since the movement of the internal argument to the subject position is motivated by the EPP, it is in principle possible to passivize any verb that provides an argument that can occupy the subject position at the surface and/or at LF. This would include the unergative verbs in English that have nonthematic complements, such as bare measure phrases, cognate objects, and resultatives in (7) and (8), respectively.

⁴ There is evidence that the verb undergoes short movement in English. The word order in the causatives of unaccusative verbs like *Bill made the rabbit disappear* suggests that the internal argument (the 'subject' of the unaccusative *disappear*) moves over the verb, which would have to be outside the VP. Uniformity in the derivations can be maintained if it is assumed that the object must also have moved out of the VP in the ordinary transitive sentences, e.g., *Bill chased the rabbit*. The VO order in these cases suggests that the verb must have moved outside the VP as well, to a position that is above the surface position of the direct object. As a result, one can maintain that the verb regularly undergoes short movement to an inflectional projection above the VP complex, but below tense.

- (7) a. Bill ran five miles
 b. Sue sang a song
 c. His friends laughed John out of the room
- (8) a. Five miles were run (by Bill)
 b. A song was sung (by Sue)
 c. John was laughed out of the room (by his friends)

In these instances, the unergative VP is subordinated under the passive VP, where the *by*-phrase controls the sole thematic argument of the unergative verb, and the nonthematic complement (or in the case of resultatives, the specifier of the nonthematic complement) moves to the subject position to satisfy the EPP.

Because of the EPP requirements, having a nonthematic complement is crucial for the ability of unergative verbs to passivize. However, passivization is not limited to such cases. Specifically, in languages like Dutch, unergative verbs can passivize without the presence of any non-thematic complement that would satisfy the EPP.

- (9) Er wordt hier door de jonge lui veel gedanst
 there is here by the young people much danced
 ‘There is danced here a lot by young people’


Sentences like (9) pose a serious problem for the Principle of Full Interpretation (PFI) of Chomsky (1986). The expletive *er* does not have any semantic content, which makes it invisible at LF. As a result, the EPP can be satisfied at LF only if some other argument can move to the subject position, but there is no such candidate in (9).

The solution to this problem can be found in Hale and Keyser’s (1993) basic VP architecture for unergative verbs, where unergative verbs are derived by incorporating cognate objects into a light verb at some lexico-syntactic level, as in (10a). This paper adopts their basic insight, but with some modifications. It assumes that an unergative verb binds a null pronoun inside its complement in the syntax as in (10b), instead of pre-syntactically incorporating the head of its complement.⁵

- (10) a. i. [VP V [NP dance]]
 ii. [VP dance_i [NP t_i]]
- b. i. [VP DP dance_i [DP pro_i]]
 ii. [VP DP dance_i [DP [DP pro_i] a dance]]
 iii. [VP DP dance_i [DP [DP pro_i] a waltz]]

⁵ Kural (1996) argues for the necessity of this move on the basis of ‘related object’, which are non-thematic objects of the verb that are semantically related to the cognate objects, but phonologically different, as in *dance a waltz, sing a lullaby*.

One can argue that what satisfies the EPP at LF with unergative verbs in Dutch is this ‘cognate pro’ that is generated inside the NP complement of unergative verbs.⁶ The relevant procedure is sketched out below.

- (11) Er wordt ... [VP [DP *pro*_i] gedanst_i]


The same must in principle be available in English as in Dutch. The unavailability of such passives in English is due to a second fact that is presumably unrelated, which is the inability of *there*-insertion to be licensed with transitive and unergative verbs.⁷

- (12) a. *There was run (by Bill)
 b. *There was sung (by Sue)
 c. *There was laughed (by his friends)

By contrast, unaccusative verbs do not provide any comparable constituent that can move to the subject position to satisfy the EPP. Therefore, even if a language actually allowed expletive subjects with unaccusative verbs (or intransitives in general), the passivization of these verbs would inevitably lead to an EPP violation.

- (13) *In dit weeshuis wordt er door de kinderen erg snel gegroeid
 in this orphanage is there by the children very fast grown
 ‘In this orphanage there is grown very fast by the children’

Thus, unaccusative passives are ruled out in this system by the EPP.⁸

4 The control relation

The control relation between the specifier of PASS and the specifier of the root verb, illustrated in (4), can be justified in terms of the asymmetries that exist between the subjects of active verbs and the *by*-phrases licensed by the passive construction. Crucially, these asymmetries come in the form of selectional requirements: the range of arguments allowed as active subjects is not the same as the range of arguments allowed as passive *by*-phrases. It can be seen in (14) that semi-idiomatic arguments that are acceptable as active subjects are not acceptable the same way when they appear as *by*-phrases.

⁶ This can be done by either by moving it to the subject position to replace the expletive, as in Chomsky (1986), or by having its features raised to Infl, as in Chomsky (1995).

⁷ This behavior could be explained if one assumed that English licenses expletives at the [Spec, VP] level while Dutch and other languages can license them at the [Spec, NomP].

⁸ For the passives of unaccusative verbs in German, Turkish, etc., the reader is referred to Kural (1996).

- (14) a. Good enough doesn't cut it
 b. *It isn't cut by good enough

Idiosyncratic subjects that are specifically licensed by the root verb are also limited in their distribution.

- (15) a. Five dollars buys you a good meal in this restaurant
 b. *A good meal is bought by five dollars in this restaurant

It can also be seen in (16) that the arbitrary reading of *they* is not available when it appears as a *by*-phrase in the passive construction.

- (16) a. They eat dinner late in this country (they = arbitrary)
 b. Dinner is eaten late by them in this country (they ≠ arbitrary)

Nevertheless, the control relation in (4) presents a significant problem, which is the interpretation that a passive *by*-phrase is understood to have associated with the same thematic role as the suppressed external argument of the root verb. This was mentioned in the beginning as one of the basic properties of the passive construction, and it is demonstrated in the following examples. Both the active subject *everyone* in (17a) and the passive *by*-phrase in (17b), *by everyone* appear to be associated with the Experiencer role licensed by the verb *love*.

- (17) a. Everybody loves this book *everyone* = Experiencer
 b. This book is loved by everyone *by everyone* = Experiencer

The thematic interpretation of the *by*-phrase as being identical to the corresponding active subject poses an interesting dilemma: On the one hand, these two arguments do not seem to be selected by the same predicate, as suggested by examples like those in (14) through (16), but on the other hand, they seem to be bearing the same thematic role type.

These two facts would be reconciled by assuming that the thematic role provided by PASS for the *by*-phrase is the type of role that does not interact with the event structure. Rozwadowska's (1988) Neutral has that quality. It is posited as the unaffected Patient role borne by the arguments that fail to become the possessors inside nominals, e.g., **algebra's knowledge*, and has been partly redefined in Kural (1996) as the role that covers all nonagentive unaffected arguments. An example for the Neutral role can be seen in the case of the causer below, with the periphrastic form *make* in (18a) and the covert causative in (18b).

- (18) a. The view of the ocean made me buy this house
 b. The news about the stock market made me sell my shares

The subjects are nonagentive and unaffected in both (18a) and (18b), where the view and the news cause the house-buying and share-selling events simply by existing in the same

complex event. They do not necessarily interact with their respective events in the same manner as, for instance, an Agent argument would. In this respect, the role that they are associated with is very similar to the role that the object *the sheep* is in *Bill counted the sheep*, which qualifies the causer as a Neutral argument.⁹

Given the semantics of Neutral arguments in terms of their inability to interact with the event they participate in, it can be argued that the *by*-phrase, which is licensed by PASS, also bears the Neutral role. As such, the *by*-phrase does not contribute to the thematic structure, while, the lower verb maintains its ability to provide the same thematic role for its specifier in the passive construction as it does in the active sentences. In terms of (17b), the verb *love* still assigns the Experiencer role to its specifier PRO, as in (19).

- (19) [VP [PP *by everyone*]_i PASS [VP PRO_i *loved Bill*]]
-

Because Neutral arguments are inert and do not add anything to the interpretation of the event structure other than their existence, and because PASS is a semantically vacuous predicate, both the *by*-phrase and the VP layer introduced by PASS remain thematically transparent in the passive construction. As a result, the the PRO in the specifier of the root verb that is controlled by the *by*-phrase, i.e., the Experiencer in (17b) and (19), introduces the thematic role into the control chain, which then comes to dominate the interpretation.

In sum, the fact that a *by*-phrase is understood as bearing the same role as the suppressed external argument of the root verb is actually an interpretive illusion. It is due to the control relation between the *by*-phrase and the external argument of the root verb, combined with the thematic inertness of the *by*-phrase (a Neutral argument) and the semantic vacuity of the predicate PASS (plausibly only an aspectual predicate).

5 The accusative Case

The only issue that has not been addressed so far is the second part of the problem mentioned in (A), the correlation between the external argument suppression and the accusative Case absorption. As stated above, since the external argument is present in the structure as a PRO in (4), and not suppressed, the correlation does not exist as such. Therefore, what must be explained here is not exactly the correlation in (A), but simply the fact that the accusative Case is absorbed in the passive construction.

Because the passive morpheme is no longer an argument in this system, it cannot be a factor in the absorption of the accusative Case. It does appear, however, that the

⁹ Kural (1996) derives the agentive reading of the causers through an elementary predicate, ACT, cf. Jackendoff (1987).

accusative Case is actually ‘absorbed’ by the derived subject, rather than the ‘missing’ external argument.

- iv. Accusative Case assignment is blocked by the derived subject.

Evidence for the statement in (iv) comes from the behavior of verbs like *load* and *spray* in the passive construction.

A well-known property of verbs like *load* and *spray* is that they not only have the option of taking either the location or the theme as their direct object, but the argument that becomes their direct object also acquires the ability to measure out the loading or spraying event, as has been discussed by Tenny (1990). The examples are given below.

- (20) a. The farmer loaded the hay onto the truck (the hay is exhausted)
 b. The farmer loaded the truck with hay (the space in the truck is exhausted)

In (20a), the loading is coextensive with the hay, such that the act of loading exhausts the available hay. By contrast, the loading in (20b) is coextensive with the truck, and the act of loading is complete when the room in the truck is exhausted. The fact that it is the accusative argument that measures out the loading event suggests that, at least as far as these verbs are concerned, the exhaustive reading arises as a consequence of the association of an argument with the accusative Case position.¹⁰

What is a more significant fact in the context of the current discussion is that an internal argument preserves its ‘measuring out’ property when it becomes the derived subject in the passive construction.

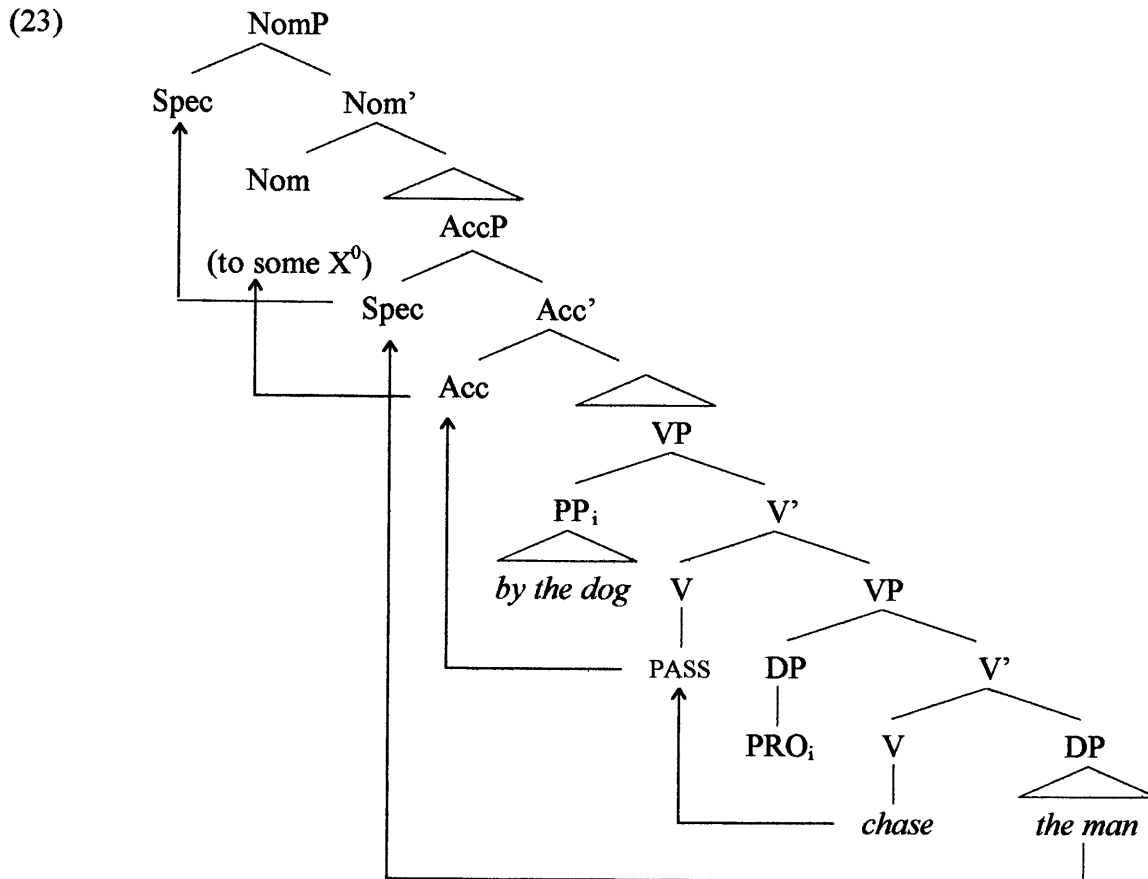
- (21) a. The hay was loaded onto the truck by the farmer (the hay is exhausted)
 b. The truck was loaded with hay by the farmer (the truck is exhausted)

The loading event is measured out by the hay in (21a), cf. (20a), and by the truck in (21b), cf. (20b). This, however, is clearly not a property of the subject per se, since an underived subject cannot measure out the loading event the same way,

¹⁰ Dowty (1991) suggests that in examples like *The crowd exited the auditorium*, the event is measured out by the subject. It is not entirely clear that the subject in these cases is performing the same function as the direct object in the examples in (20). In the *exit* example what *the crowd* determines is the concatenation of the individual exiting events, whereas there is no such iterated event reading in the standard cases of measuring out, as in (20), or in *Bill ate an apple*. The only true counterexample to this generalization seems to be the *swarm*-type verbs discussed in Fillmore (1965): *The bees are swarming in the garden* and *The garden is swarming with bees*. It is possible though, that these verbs underlyingly have an unaccusative-type derivation.

- (22) a. The villagers loaded the hay onto the truck,
 b. The villagers loaded the truck with hay.

One can assume that the derived subject acquires the ability to measure out an event by being the direct object at some point in the derivation. In structural terms, this implies that the internal argument moves to the subject position through the accusative case licensing position, the [Spec, AccP], as shown in (24).



This requirement is likely to be the result of a locality constraint on movement, which forces the internal argument to move to the first available Case licensing position in order to escape the VP, which is the [Spec, AccP] in (23). Further movement to the nominative licensing position [Spec, NomP] would be sanctioned under the assumption that Case-licensing is an optional procedure. If the accusative Case on the internal argument is licensed, then the subsequent movement to [Spec, NomP] would place an accusative expression into the nominative licensing position, which presumably triggers a Case clash. If the accusative Case is not licensed in that intermediate step, the internal argument can move on to the [Spec, NomP], and be licensed for the nominative Case instead.

In the cases of *load* and *spray* type verbs, the internal argument that has already been shifted to accusative position is the one that can continue to the subject position, as shown in (23). A welcome consequence of this particular type of movement is that it

stops other arguments from moving to that position. The effects of this can be observed in the dative shift construction in English, where it has been suggested that only the argument that lands in the [Spec, AccP] to be licensed for the accusative Case can move further to the subject position.¹¹

- (24) a. John gave a book to Mary
 b. i. A book was given to Mary
 ii. *Mary was given a book to
- (25) a. John gave Mary a book
 b. i. Mary was given a book
 ii. *A book was given Mary

Finally, note that there may be a possible morphological remnant of the intermediate step of the movement given in (23) in languages like Ukrainian (Sobin 1985), where the derived subject may optionally appear as an accusative argument, in which case the subject-verb agreement is also blocked.

- (26) a. Cerkva bula zbuovana v 1640 roc'i
 church-NOM/FEM was-FEM built-PASS-FEM in year
 'The church was built in 1640'
- b. Cerkvu bulo zbuovano v 1640 roc'i
 church-ACC/FEM was-NEUT built-PASS-NEUT in year
 'The church was built in 1640'

It can be argued that the marked property of these languages is that they allow the derived subject to keep their accusative morphology even when they move out of the [Spec, AccP]. It remains to be seen whether this means that the Case of the subject is still licensed in the nominative position, [Spec, NomP], or that the derived subject is truly an accusative expression in these cases, and that they happen to be able to leave their Case licensing position and move further up to possibly satisfy the EPP as accusative subjects.

¹¹ It appears that (25bii) is perfectly acceptable in some dialects. I believe this is due to the licensing conditions on the 'null dative' rather than the ability of the derived subject to move to [Spec, NomP] by skipping [Spec, AccP]. (a) In some of these dialects (and I do not know how widespread this phenomenon is), *They gave it me (about a few minutes ago)* is acceptable. (b) Even in these dialects, passivization is blocked by beneficiary shift: **The cake was baked Mary* from *I baked Mary a cake*. Clearly, more needs to be done with respect to dialectal variation observed in *%A book was given Mary*, but note that the availability of these forms poses a serious problem for the incorporation-based accounts of passives as well.

6 Conclusion

The theory of passives proposed in this paper provides a straightforward account for the cluster of properties that define the passive construction without any additional assumptions. Admittedly, there are some serious questions that remain, such as the exact conditions under which null *by*-phrases are licensed (perhaps as an arbitrary pro that must incorporate into the verb/inflection). It does appear, however, that the framework developed here presents a promising avenue for future research.

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