Abstract

The pseudo-passive is peculiar in that (i) the DP that appears to be the complement of a preposition undergoes passivization, and (ii) it is semantically characterized by the fact that it describes a resultant state or a characteristic of the Theme. The first peculiarity can be explained if the DP is not the complement of P but the complement of the V-P complex. However, the problem with this approach is that V and P cannot form a constituent in the corresponding active. In this paper, however, I propose that we can maintain the V-P complex approach if it is an adjectival passive. The adjectival passive describes a characteristic of the Theme, and it does not necessarily correspond to its active counterpart with regard to the internal argument structure. This suggests that the peculiarities of the pseudo-passive follow if it is an adjectival passive. This paper claims that it is indeed the case. In short, I claim that the passive morpheme in the pseudo-passive is the adjectival passive — en, which is empirically supported by the fact that they display the properties of adjectival passives.

1 Introduction

It is well-known that once an argument is assigned Case, it cannot undergo further A-movement. However, pseudo-passives are quite peculiar in that the DP that appears to be the complement of a preposition moves to a Case position.

(1) a. The hat was sat upon.
   b. These carpets have never been walked on.

A plausible approach to this peculiarity is to argue that in (1a) sit upon is a constituent, and the hat is the complement of sit upon, not upon (Radford 1988, Drummond & Kush 2011).

(2) the hat was [[sat upon] the hat]

If this approach is correct, it is predicted that sit upon must be a constituent in the active as well as in the passive. However, there are insurmountable pieces of evidence that it cannot be a constituent in the active (Postal 1986, Koster 1987, and Baltin and Postal 1996). For instance, the objects can be conjoined, as illustrated in (3a-b), but in the active counterpart of (1a) the hat cannot be conjoined, as shown in (4a-b).

(3) a. John bought a chair.
   b. John bought not a chair but a hat.
(4) a. John sat upon the chair
   b. *John sat upon not the chair but the hat.

This suggests that the hat is not the complement of sat upon in (4a).
(5)  a. *John [[sat upon] not a chair but a hat].
    b. John sat [vp upon a hat].

If we assume that (1a) is analyzed as (2), we can explain why the hat can undergo passivization, but sat upon cannot be a constituent in (4a). This puts us in a dilemma, since it is usually known that there is parallelism between the verbal passive and its active counterpart. This paper explores the possibility of resolving this dilemma by proposing that the pseudo-passive is an adjectival passive.

2 Problems with the Reanalysis Approach

There are many idiomatic expressions that contain a preposition and permit passivization. The idiom take advantage of is a case in point. If we assume that the idiom is simply a word, we can explain why passivization is permitted although the object appears to be the complement of the preposition of. This section examines whether we can extend this approach to the pseudo-passive, and then points out some potential problems.

2.1 Two Possible Ways of Generating Idioms

Sentence (6) has two corresponding passive constructions, as shown in (7a-b).

(6)  John took advantage of Mary’s honesty.
(7)  a. Mary’s honesty was taken advantage of.
    b. Advantage was taken of Mary’s honesty.

This puzzle can be resolved if we assume that there are two ways of deriving the idiom take advantage of. Let us first assume that take advantage of is a word, not a phrase.

(8)  \([v [vp take advantage of]]\)^2

If so, it is quite straightforward why Mary’s honesty can be preposed in (7a). If take advantage of is a constituent, the preposition of cannot assign Case to Mary’s honesty, and furthermore, nor can the passive morpheme –en assign Case to it. That is, in (9a) Mary’s honesty occurs in a Caseless position, and it needs to move to a position where it can be assigned Case. As shown in (9b-c), the SPEC-T position is available, and so it moves to the SPEC-T.

(9)  a. [en [vp [v take advantage of] Mary’s honesty]]: Merger with be and T
    b. [T [be [en [vp [v take advantage of] Mary’s honesty]]]]: Raising to the SPEC-T
    c. [Mary’s honesty T [be [en [vp [v take advantage of] Mary’s honesty]]]]

Let us now assume that take advantage of is a constituent, and the preposition of is not part of the idiom. In this case advantage is in a non-Case position when the VP is merged with the passive morpheme –en. On the other hand, Mary’s honesty is in a Case position since it is the complement of the preposition of. Hence advantage moves to the SPEC-T position.

(10) a. [vp en [vp [v take advantage of] Mary’s honesty]]: Merger with be and T
     b. [T [be [vp en [vp [v take advantage of] Mary’s honesty]]]]: Raising to the SPEC-T
     c. [Advantage T [be [vp en [vp [v take advantage of] Mary’s honesty]]]]

We have seen that the idiom take advantage of permits either the direct object or the prepositional object to passivize, depending on whether or not the preposition of is part of the idiom. There are two other types of idioms. For instance, cast doubt on allows only the object DP to passivize, and lose sight of allows only the prepositional object to passivize.

(11)  a. Doubt was cast on his motives.
     b. *His motives were cast doubt on.

(12) a. *Sight was lost of our goal.
     b. Our goal was lost sight of.

This suggests that cast doubt on is a phrasal idiom, whereas lose sight of is a lexical idiom. In other words, cast doubt is a constituent, but cast doubt on is not, and lose sight of is a constituent, but lose sight is not.

(13) a. [vp cast doubt] on his motives
     a’. *[v cast doubt on] his motives
     b. [v lose sight of] our goal
     b’. *[vp lose sight] of our goal
To recapitulate, the prepositional passive is permitted when the preposition is a part of a word-level idiom.

2.2 Extension to the Pseudo-Passive

With the above discussion in mind, let us attempt to account for the passives in (14a-b) while assuming that sleep in and walk on are constituents.

(14) a. This bed was slept in by Napoleon.
    b. These carpets have never been walked on.

The most serious problem with this approach is that sleep in and walk on do not form constituents in actives (Postal 1986, Koster 1987, and Baltin and Postal 1996). We have seen from (1-5) that sit upon is not a constituent in the active, but it is a constituent in the passive. There are many other examples in support of the claim that in the pseudo-passive V and P form a constituent, but in the corresponding active they do not. For instance, an adverb can intervene between V and P in the active, whereas it cannot in the pseudo-passive.

(15) a. The lawyer will go thoroughly over the contract.
    b. *The contract will be gone thoroughly over by the lawyer.
    b’. The contract will be thoroughly gone over by the lawyer.

(16) a. They spoke angrily to John.
    b. *John was spoken angrily to.
    c. John was spoken to.

There are many other data that show the same point. Gapping requires a verb to be elided, as shown in (17a-b).

(17) a. Frank talked to Sandra and Arthur _______ Louise.
    b. Sandra was talked to by Frank and Louise (*to) Arthur.

Interestingly, talk to cannot be a gap in the active, but it must be a gap in the pseudo-passive.

(18) a. Frank talked to Sandra and Arthur _______ * (to) Louise.
    b. Sandra was talked to by Frank and Louise (*to) Arthur.

While discussing passivization of idioms, we have assumed that if an idiom is phrasal in the active, it is also phrasal in the passive, and if it is lexical in the active, it is also lexical in the passive. In the case of pseudo-passives, however, there is no parallelism between the active and the pseudo-passive with regard to constituency. This is quite puzzling under the proposal that V and P form a constituent in the pseudo-passive. The next section is devoted to resolving this puzzle.

3 Pseudo-Passive as Adjectival Passive

It is well-known that there are two types of passives: the verbal passive and the adjectival passive. I propose that the peculiarities of the pseudo-passive can be explained if the pseudo-passive is an adjectival passive.

3.1 Contrast in Argument Structure between Verbal Passive and Adjectival Passive

There are two types of passive en: the verbal passive en and the adjectival passive en.

(19) a. Mary was given the book.
    b. The rules are ungiven.

What is peculiar about the adjectival passive ungiven is that the verb give can have two theta-roles—Theme and Goal, but the adjective ungiven can assign just one theta-role.

(20) *Mary was ungiven the rules.

This follows if we assume that the adjectival passive morpheme en assigns a Character role, which means ‘has the property x’, where x is the property expressed by the adjective. Theta-roles percolate when they cannot be assigned.6 For instance, the theta-role of happy can percolate when happy is merged with un.

(21) a. [happy(Theme)]: merger with un
    b. [un [happy(Theme)]]: Theta-Rule

Percolation
However, they cannot percolate across another theta-role due to the intervention effect. For instance, in (22c) the Theme role is not assigned to Character in the sense of Higginbotham (1985). This is how a new predicate is formed in the syntax.

(22) a. \([\text{v give}_{\text{Theme}}]\) : Theta-Role Percolation
b. \([\text{v give}_{\text{Theme}}]\) (Theme) : Merger with \(\text{en}_{\text{Character}}\)
c. \([\Lambda \text{[v give}_{\text{Theme}}] \text{en}_{\text{Character}}]\) : Theta-Identification
d. \([\Lambda \text{[v give}_{\text{Theme}}] \text{en}_{\text{Character}}]\) (Character = Theme) : Merger with un & Theta-Role Percolation
e. \([\text{un} \Lambda \text{[v give}_{\text{Theme}}] \text{en}_{\text{Character}}]\) (Theme) (Character = Theme)

Notice that just one theta-role can be identified as Character. Therefore, the newly-formed adjective \textit{given} can assign just one theta role. The main point is that the adjectival \textit{-en} can be involved in forming a new predicate via theta-identification, and in this case only one theta-role can be realized.

Before turning into the verbal passive, let us consider the nature of theta-role assignment and theta-role percolation. I propose that theta-role assignment must obey the Earliness Condition in (23).

(23) Earliness Condition: A theta-role must not be assigned late.

Let us assume that the Theme role of X percolates and is assigned to Z in (24).

(24) a. \([\ldots X_{\text{Theme}}]\) : Theta-Percolation
b. \([\ldots X_{\text{Theme}}]\) (Theme) : Merger with Z and Theta-Role Assignment
c. \([\ldots X_{\text{Theme}}] Z_{\text{Theme}}\]

Then, this is a violation of the Earliness Principle. It appears that given (23), there is no room for theta-role percolation. However, it is not the case. It is noteworthy that what is wrong with the derivation in (24) is not the theta-percolation in (24a-b) but with the late theta-role assignment (24b-c). If X were merged with Z, the Theme role could be assigned earlier. Hence the theta-role assignment in (24c) is in violation of the Earliness Condition. This means that once a theta-role percolates, it must not be assigned: it must be theta-identified with another theta-role; if the percolated theta-role is not assigned to an argument but identified with another theta-role, the Earliness Condition is not violated.

With the Earliness Condition in mind, let us consider the verbal passive. The verbal passive participle \textit{given} can assign two theta-roles.

(25) Mary was given these books.

The verbal passive morpheme \textit{-en} assigns a theta-role, but it is a theta-role for an adjunct. So it cannot be involved in theta-identification. As illustrated in (26a), let us assume that the verb \textit{give} is merged with the verbal passive morpheme, not with DPs. Then, the theta-roles must be percolated.

(26) a. \([\text{en} \text{v give}_{\text{Goal, Theme}}]\) : Theta-Role Percolation,
b. \([\text{en} \text{v give}_{\text{Goal, Theme}}]\) (Goal, Theme)

In accordance with the Earliness Principle in (23), the percolated theta-roles in (26b) must undergo theta-identification. However, there is no theta-role that can identify the percolated theta-roles. As a result, there is no way for the theta-roles of \textit{give} to be discharged: that is, (26b) cannot produce a well-formed sentence. If, on the other hand, the verbal passive morpheme is merged with a VP with its theta-roles discharged, a well-formed phrase can be generated.

(27) \([\text{en VP Mary give}_{\text{Goal, Theme}} \text{these books}]\)

In (27) the two arguments of \textit{give} can be syntactically realized. Now it is not surprising that the verbal passive is analogous to the active in terms of internal argument structure.

The gist of the claim is that there is parallelism in internal argument structure between the active and the verbal passive, while there is no parallelism between the active and the adjectival passive. In what follows I argue that the asymmetry between the pseudo-passive and its
active counterpart arises from the fact that the pseudo-passive is an adjectival passive.

3.2 Derivation of the Pseudo-Passive

The pseudo-passive obeys some semantic constraints that the verbal passive does not. It is subject to the affectedness condition: it describes a ‘resultant’ state of the subject.

(28) a. The hat was sat upon.
   b. *The tree was sat under.
   c. John sat upon the hat.

(29) a. This bed has been slept in.
   b. *This bed has been slept beside.
   c. John slept in the bed.

(30) a. The street [covered with snow] has not been walked on.
   b. *The street has not been walked in.
   c. We have not walked on the street.

As will be discussed in 3.3, the affected Theme is closely related with characterization. Let us first consider the contrast between (28a) and (28b). If Theme was affected by an event, it can be characterized by the event. In (28a), for instance, the sitting event can affect the shape of the hat, and consequently it can be a characteristic of the hat. On the other hand, in (28b) the sitting event cannot affect the tree, and so cannot be a property of the tree. The same point is shown by (29a-b). If someone sleeps in a bed, the event assigns a new property to the bed in the sense that it is now a used one. By contrast, when someone sleeps beside a bed, the bed is not affected and so it is not assigned a new property. This point is corroborated by (30a-b). Walking event usually does not affect a street in general, and so cannot assign a new property to the street. However, the street covered with snow will be affected if someone walks on it, and hence it is assigned a new property as a result of walking. On these grounds we can generalize that the pseudo-passive denotes a characteristic of the Theme. These considerations lead us to the conclusion that the morpheme en in the pseudo-passive assigns a Character role: that is, it is an adjectival passive morpheme.

With this in mind, let us attempt to derive (28a). If sit is merged with upon, the Theme role of upon cannot be assigned in situ, and so it undergoes percolation. If sit upon is merged with the Character role-assigning en, theta-identification takes place: the Theme role is identified as the Character role. As a result, the complex predicate \[\{en_{char}\} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\] is generated.

(31) a. \[v \text{ sit upon}_{(theme)}\]: Theta-Role Percolation
   b. \[v \text{ sit upon}_{(theme)}\]{(char): Merger with \(en_{char}\)
   c. \[en_{char} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\]: Theta-Role Identification
   d. \[en_{char} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\]{(char = theme): Merger with this hat and Theta-Role Assignment
   e. [[en_{char} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\]{(char = theme)}: Merger with be and T
   f. \[T \{be \{en_{char} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\}_{(char = theme)}\}\]: Raising
   g. \[\{this hat\}_{(char = theme)}T \{be \{en_{char} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\}{(char = theme)} this hat\}_{(char = theme)}\]]

In this analysis this hat cannot be assigned Case from upon, since it is an argument of \[\{en_{char}\} \{v \text{ sit upon}_{(theme)}\}_{(char = theme)}\] not an argument of upon. Therefore, it can undergo passivization.

The immediate question begged for in this analysis is why the verb sit must be merged with PP, not with F in the active. Let us suppose that it can be merged with the preposition upon. If so, the Theme role of upon percolates, and it must be identified as Agent when sit upon is merged with the Agent-assigning v.

(32) a. \[v \text{ sit upon}_{(theme)}\]: Theta-Role Percolation
   b. \[v \text{ sit upon}_{(theme)}\]{(char): Merger with v
   c. \[v_{(Agent)} \{v \text{ sit upon}_{(theme)}\}_{(char)}\]

However, the Theme and the Agent cannot refer to the same object: one cannot sit upon oneself. Therefore, sit must be merged with a PP like upon the hat. Generally speaking, the non-reflexive light verb does not permit theta-identification, since it requires its own theta-role to be different from the percolated theta-role. Almost every transitive light verb is a non-reflexive light verb. In short, the Character role can be theta-identified with the Theme role, whereas the Agent role cannot, which resolves the long-standing puzzle: why can V-P be a constituent in the pseudo-
passive, although it cannot be a constituent in its active counterpart?

Another issue we need to address is what happens when the verbal passive morpheme -en is merged with sit upon.

(33) a. [v sit upon\(_{\text{theme}}\)]: Theta-Rule Percolation
b. [v sit upon\(_{\text{theme}}\)]: Merger with the verbal passive en
c. [en [v sit upon\(_{\text{theme}}\)]]

It is quite straightforward why (33c) is ill-formed. Let us recall that the verbal passive -en assigns a defective theta-role—an adjunct theta role, which cannot permit theta-identification. Accordingly, there is no way for the theta-role of upon to be realized. The percolated Theme role in (33c) must not be assigned to an argument in accordance with the Earliness Condition. However, it cannot be theta-identified with another theta-role. Therefore, (33c) is ill-formed. To conclude, only the adjectival passive morpheme en can be merged with sit upon.

3.3 Affected Theme vs. Non-Affected Theme

According to the Earliness Principle, V can be merged with P, forming a pseudo-passive only if the percolated Theme can be identified with another theta-role. It can undergo theta-identification when the passive -en is adjectival and assigned a Character role. This implies that the pseudo-passive is permitted even by a verbal passive as long as the percolated thematic role can be theta-identified. This prediction is borne out. Thus far, I have claimed that the subject of the pseudo-passive is assigned a Character role by the adjectival passive morpheme -en. We have seen from (28-30) that the Character role is easily available when the Theme is affected, but it is not available when the Theme is not affected. However, (34b) and (35b) show that the pseudo-passive is permitted if the passive describes the characteristic of the raised Theme although it is not affected.

(34) a. *Jeju City was walked around by his father.
   b. Jeju City can be walked around in a day.
(35) a. *The hotel was stayed in by my sister.
   b. The hotel can be stayed in by

Generally speaking, it is hard to get the reading that the sentence is about the characteristic of the subject when the Theme is not affected. In (34a) and (35a) Jeju City and the hotel cannot be affected, and hence it is not surprising that they are not grammatical. However, (34b) and (35b) are well-formed although the Theme is not affected. It seems that the Character role can be assigned by a modal such as can. Sentence (36b) is about the characteristic of the book, although (36a) is not.

(36) a. This book was read by John.
   b. This book can be read in a day.

This clearly shows that modals such as can can assign a Character role. In fact, Diesing (1992) proposes that even T can assign a property role when it takes an individual-level VP as its complement. The main claim made here is that a percolated theta-role must undergo theta-identification, and if can assigns a Character role, a well-formed sentence can be generated when a theta-role percolates. If so, even the verbal passive can be a source for the pseudo-passive with the help of a modal. I propose that in (34b) and (35b) the passive morpheme is not adjectival but verbal.

(37) a. [v walk around\(_{\text{theme}}\)]: Theta-Rule Percolation
b. [v walk around\(_{\text{theme}}\)]: Merger with verbal passive-en
c. [en [v walk around\(_{\text{theme}}\)]]: Theta-Rule Identification
d. [en[v walk around\(_{\text{theme}}\)]\(\text{[theme]}\)]: Theta-Rule Assignment
d. [be [[en[v walk around\(_{\text{theme}}\)]]\(\text{[theme]}\) in a day]]\(\text{[theme]}\): Merger with can
e. [can\(_{\text{char}}\) [be [[en[v walk around\(_{\text{theme}}\)]]\(\text{[theme]}\) in a day]]\(\text{[theme]}\)\(\text{[char]}\): Theta-Identification
f. [can\(_{\text{char}}\) [be [[en[v walk around\(_{\text{theme}}\)]]\(\text{[theme]}\) in a day]]\(\text{[theme]}\)\(\text{[char]}\): Merger with Jeju City & Theta-Rule Assignment
g. [Jeju City\(\text{[char]}\) can [be [[en[v walk around\(_{\text{theme}}\)]]\(\text{[theme]}\) in a day]]\(\text{[theme]}\)\(\text{[char]}\)]
In fact, walk around is not compatible with the adjectival passive morpheme, since its Theme is not affected. So it is merged with the verbal passive and so the Theme role is percolated until it is theta-identified with the Character role of can.

This analysis is based on the Earliness Principle in (23), according to which a theta-role can be percolated only if it can be identified by another theta-role. In (28a), (29a), and (30a), the affected Theme undergoes Theta-Identification since the adjectival passive morpheme –en assigns a Character role, and in (34b) and (35b) the unaffected Theme undergoes Theta-Identification with the Character role of can. This claim amounts to saying that even the verbal passive can be a source for the pseudo-passive if the Character role can be assigned to the subject.

3.4 Account for the Puzzles

Now we are in a position to account for the two major puzzles revolving around the pseudo-passive: (i) why is it subject to the Characterization Condition, and (ii) why is it possible to move out of a Case position? According to the proposal advocated here, the two issues are related. The Case-related issue can be resolved if the verb sit can be merged with the preposition upon, and merger of sit with upon is permitted only when the resulting structure is merged with the adjectival passive morpheme en or the modal can, which assigns the Character role, thereby giving rise to the Characterization Condition.

Thus far, I have claimed that most pseudo-passives are adjectival passives. This is empirically supported by the fact that they display the properties of adjectival passives: (i) they can be used as a prenominal modifier, (ii) they can function as the complement of the raising verbs like look, (iii) they are compatible with the negative affix un-, and (iv) they can be modified by an adverb like very.

(38) a. John is the most talked about player in the game.
    b. The bed looks slept in.
    c. Just ten years ago this would have been unheard of.
    d. Their living room is very lived in.

(Wasow 1977, (90))

(39) a. After the tornado, the fields had a marched through look.
    b. Each unpaid for item will be returned.
    c. You can ignore any recently gone over accounts.
    d. His was not a well-looked on profession.
    e. They shared an unspoken (of) passion for chocolates.
    f. Filled with candy wrappers and crumpled bills, her bag always had a rummaged around in appearance.

(Bresnan 1995, (16))

(40) a. a slept-in bed
    b. a much relied-upon technique

(Bruening 2011: 2)

These all support the claim that most pseudo-passives are adjectival,14 which is confirmed by the fact that the pseudo-passive does not permit the progressive aspect.

(41) a. *This bed is being slept in.
    b. *The hat is being sat upon.

Considering that the progressive aspect is compatible only with the verbal passive, we are led to the conclusion that the pseudo-passive is an adjectival passive.

However, it is worthwhile to reiterate that even the verbal passive can produce the pseudo-passive with the help of modals such as can, when the Theme is not affected. Precisely speaking, the pseudo-passive is an adjectival passive when its Theme is affected, and it is a verbal passive when its Theme is not affected.

4 Conclusion

Let us summarize this paper. The passive sentences in (42a-b) are peculiar, since their subject appears to originate from the complement position of a preposition.

(42) a. Mary’s innocence was taken advantage of.
    b. Mary beds were slept in.

This puzzle can be resolved if the preposition is a part of a bigger predicate.
a. Mary’s innocence was \[e_{vp} \text{en} [v \text{take advantage of} \text{Mary’s innocence}]\]
b. Mary beds were \[e_{vp} \text{en} [v \text{sleep in} \text{many beds}]\].

The analysis in (43a) is plausible, since \textit{take advantage of} can be taken to be a constituent in the corresponding active, but the one (43b) is not, since \textit{sleep in} cannot be a constituent in the active sentence.

(44) a. John [took advantage of] Mary’s innocence.
b. *John [slept in] this bed.

However, I have claimed that the analysis in (43b) is still tenable, because the passive morpheme \textit{en} in (43b) is an adjectival \textit{en}. The asymmetry between (43b) and (44b) does not undermine the claim that \textit{slept in} is a constituent in the pseudo-passive, since there is no parallelism between the adjectival passive and its corresponding active in terms of the internal argument structure.

References

Anderson, Mona. 2005. Affectedness. In the Blackwell companion to syntax vol 1, ed. by Martin Everaert and Hen van Riemsdijk. Malden, MA.: Blackwell.
Anderson, Mona. 1979. Noun Phrase Structure. Ph.D dissertation. University of Connecticut.
Anderson, Mona. 1977. NP Pre-posing in Noun Phrases. Proceedings of the North Eastern Linguistic Society 8: 12-21. Amherst: Graduate Linguistics Student Association.
Baltin, Mark and Paul M. Postal. 1996. More on reanalysis hypotheses. Linguistic Inquiry 27: 127-145.
Bresnan, Joan. 1995. Lexicality and Argument Structure. Paper presented at the Paris Syntax and Semantics Conference, 1995.
Bruening, Benjamin. 2014. Word Formation is Syntactic: Adjectival Passives in English. Natural Language and Linguistic Theory 32: 363-422.
Bruening, Benjamin. 2011. Pseudopassives, Expletive Passives, and Locative Inversion. Ms. University of Delaware.
Chomsky, Noam. 1995. The Minimalist Program. Cambridge, Mass.: MIT Press.
Chomsky, Noam. 1981. Lectures on government and binding. Dordrecht: Foris.
Diesing, Molly. 1992. Indefinites. Cambridge, Mass.: MIT Press.
Drummond, Alex & Dave Kush. 2011. Reanalysis as Raising to Object. Ms. University of Maryland.
Emonds, Joseph E. 2006. Adjectival Passives. In Martin Everaert and Hen van Riemsdijk, eds., The Blackwell companion to syntax, Oxford: Blackwell, vol. 1: 16-60.
Freidin, Robert. 1975. The analysis of passives. Language 51: 384-405.
Higginbotham, James 1985. On semantics. Linguistic Inquiry 16: 547–593.
Koster, Jan. 1987. Domain and dynasties: the radical autonomy of syntax. Dordrecht: Foris.
Postal, Paul M. 1986. Studies of passive clauses. Albany: State University of New York Press.
Radford, Andrew. 1988. Transformational grammar: a first course. Cambridge: Cambridge University Press.
Wasow, Thomas. 1977. Transformations and the Lexicon. In P. Culicover, A. Akmajian, and T. Wasow, eds., Formal Syntax, New York: Academic Press, pp. 327–360.
Williams, Edwin. 1994. Thematic structure in syntax. Cambridge, Mass.: MIT Press.
Williams, Edwin. 1980. Argument structure and morphology. The Linguistic Review 1: 81-114.

1 The corresponding pseudo-passive sentence is well-formed.

(i) Not the chair but the hat was sat upon.

2 Chomsky (1995) proposes that the transitive verbs like \textit{hit} consist of the light verb \textit{v} and its corresponding intransitive \textit{hit}. In this analysis the active counterpart of (8) looks like (i).

(i) \[e_{vp} [v \text{[v take] advantage of}] \text{Mary’s honesty} \]

3 Radford (1988) assumes that \textit{V} and \textit{P} undergo reanalysis in the course of the derivation. In this paper, by contrast, I argue that \textit{V} is merged with \textit{P} from the start.

4 Drummond & Kush (2011) try to support the reanalysis approach by making use of raising-to-object.
On the other hand, Freidin (1975) and Emonds (2006) claim that all the passive participles are adjectives.

See Williams (1994) for thematic role percolation.

Williams (1994) proposes that theta-percolation is blocked by a predicate that assigns an external theta-role.

It is usually known that only Theme percolates (Williams 1980). However, the Goal can percolate as well.

(i) a. Untaught children
    b. If the children are untaught, their ignorance and vices will in future life cost us much dearer in their consequences than it would have done in their correction by a good education. (Thomas Jefferson)

Bruening (2014) observes that verbs of the deny-class are exceptional in that the internal argument structure is preserved in the adjectival passive: both Theme and Goal are licensed, as illustrated in (i).

(i) Victim remains denied her American nationality.

Let us recall that proposition-taking adjectives are usually raising predicates.

(ii) a. It is likely that John will come to the party.
    b. John is likely to come to the party.

Verbs of the deny-class take a proposition as their internal argument. What is denied in (iii) is the proposition that the victim bears a relation with her American nationality.

(iii) They denied the victim her American nationality.

I propose that when the adjectival morpheme en is merged with a proposition-taking verb, it patterns like the proposition-taking adjectives: it is a raising morpheme in that it does not assign the Character role. The raising morpheme can maintain the argument structure of its complement. Therefore, (i) is grammatical.

The possibility that the adjectival -en is merged with VP seems to be ruled out in (22). The un- is required to be merged with an X0-level constituent, which means that given must be X0. This claim amounts to saying that the adjectival –en can co-occur with VP if there is no negative morpheme –un. To put differently, it is predicted that both Theme and Goal can be realized if given is not attached by un. This prediction is borne out.

(i) She seemed given too much power.
    (Bruening 2014: 33)

So I propose that when the adjectival -en is merged with VP, both Theme and Goal can be realized.

There are few reflexive light verbs like shave and wash.

(i) John {shaved, washed}

This is reminiscent of the Affectedness Condition on preposing in passive nominals (Anderson 2005, 1979, 1977).

Notice that a by-phrase can be licensed in the pseudo-passive, as shown in (35b). This seems to support the claim that the pseudo-passive can be verbal. However, see Bruening (2014) for a claim that even the adjectival passive permits a by-phrase.

Many linguists, including Bruening (2011), assume that the pseudo-passive is a verbal passive and sentences (32-34) are adjectival passives derived from verbal passives. However, I argue that they are well-formed, since pseudo-passives are adjectival.