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The case of fragment answers

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Abstract. This paper investigates the case of bare-(pro)nominal fragment answers, and specifically the issues that arise in analyzing the case of fragment DPs from subject questions. I adopt a middle ground approach between competing theories of nonsententials—namely the Ellipsis Approach (Merchant 2004) and the approach of Direct Interpretation (Barton & Progovac 2005)—and propose fragment DPs to be derived from a null *v*P. For their case forms, I compare two different theories of case—assignment by functional heads and Dependent Case Theory—and hypothesize that fragment DPs construed as the internal argument are realized in dependent case for nominative-accusative languages. Fragment DPs construed as the external argument would be found in their default case form, which is language-specific. Fragment answer data from English, Korean, and Serbian is used to provide cross-linguistic support for this null *v*P analysis and discussion of case.

Keywords. syntax; fragment answers; dependent case; English; Korean; Serbian

1. Introduction. The underlying structure of fragment answers and other nonsententials has long been a point of inquiry within generative syntax—the case forms of which have received considerable attention. The question of whether they involve fully generated and subsequently elided structures, or only structure for which is heard, continues to pose issues in studies of language acquisition, disorders, and other related phenomena (cf. Progovac 2013 for a comprehensive discussion). In this paper, I look at a particular subset of fragments—those that are in the (pro)nominal form—and attempt to analyze the syntactic processes involved in the licensing of their case forms.[1] Specifically, this analysis will look at how two different theories of fragment answers account for case-mismatches in English, and then weave in data from Korean and Serbian to provide cross-linguistic validity to this analysis. Examples of fragment answers are found in the (A) responses to (1)-(2).

(1) English
Q: Who did Mary see?
A: Him/*he
S: Mary saw him/*he.

(2) English
Q: Who saw John?
A: Him/*he
S: He/*him saw John.

The question in (1) is an object question. In both the fragment answer (A) and the sentential answer (S), the direct object occurs as the accusative *him*. With respect to (1) then, there is no dif-

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[1] The examples in this paper will follow the format below:
Q = antecedent question
A = fragment answer
S = sentential answer

ference in the case forms of the constituent being questioned in either response, which is not surprising. However, a problem occurs when looking at (2), which is a subject question. The pronominals in (2A) and (2S) differ, such that the one in (2A) is accusative and the other in (2S) is nominative. Thus, there is a case-mismatch between the (A) and (S) forms of (2)—a subject question—but not for the object question (1). As will be seen, this case-mismatch is prevalent in English questions—specifically in subject questions—and the goal of this paper is to provide an account of fragment DPs that correctly predicts the case forms of responses like (2A).

The structure of this paper is as follows. I will consider two theories of case assignment—namely Functional Head Theory and Dependent Case Theory—in Section 2. I also look at two separate theories of how nonsententials like fragment answers are derived—including the Ellipsis Approach and approach of Direct Interpretation—which are discussed in Sections 3 and 4, respectively. Finally, a novel analysis of the derivation and case forms of fragment answers is proposed in Section 5.

2. Theories of case. The two theories of case discussed in this paper are the Functional Head Theory (FHT) and Dependent Case Theory (DCT). As a brief overview, FHT is the conventional theory of case adopted in most analysis. Under FHT, case is assigned via specific heads. Specifically, finite T^0 assigns nominative to the DP at Spec,TP, and transitive v^0 assigns accusative to the DP positioned as the sister to V^0. The second theory I will go over is known as Dependent Case Theory (DCT), where case is not assigned by a dedicated head, but rather follows an algorithm based on the relationship among DPs.

First proposed in Marantz (1991), DCT involves an algorithm of case assignment that relies on the presence of two DPs found within a c-command relationship. The algorithm is known as the "case realization disjunctive hierarchy", in which a DP is assigned case, and it is then removed from the case calculus. DCT begins with the assignment of lexical and inherent case, and the assignment of dependent case follows. In this theory of case assignment, accusative and ergative case are grouped together as dependent case, as they occur in configurations where two DPs are present. The direction of case assignment depends on the language's type of case-alignment. In nominative-accusative languages, dependent case (= accusative) is assigned downward to the lower DP, while in ergative-absolutive languages, dependent case (= ergative) is assigned upward to the higher DP. The full algorithm for DCT is outlined in (3):

(3) Case realization disjunctive hierarchy (from Marantz 1991)
   a. Lexically governed case
   b. Dependent case (ACC/ERG).
   c. Unmarked case (environment-sensitive)
   d. Default case

Once the first of two DPs is assigned dependent case, the remainder DP receives either unmarked or default case, depending on the environment in which it is found. As noted by Marantz (1991), unmarked case is typically relativized to a specific domain. For example, it is nominative that occurs as the unmarked case within finite TPs in English. As such, unmarked case is noted to occur in the sentential domain, and where unmarked case is unavailable (i.e., in configurations without a finite TP), default case is realized.

The default case, as described by Schütze (2001), is the case "used to spell out nominal expressions (e.g., DPs) that are not associated with any case feature assigned or otherwise deter-

mined by syntactic mechanisms" (206). While unmarked case is universally nominative or absolutive, default case is language-specific. With respect to English, Schütze (2001) identifies a variety of environments, including DPs that are left dislocated and elided, where pronouns are noted to occur in the accusative form. This leads to the identification of accusative as the default case form in English. It is important to note that at least in English, the default case is different than the unmarked case. This is as opposed to other languages, like Korean and Serbian, where default case is nominative and therefore identical to unmarked case. In the discussion that follows, both theories of case will be explored in relationship to the aforementioned theories of how nonsententials are derived, starting off with the Ellipsis Approach.

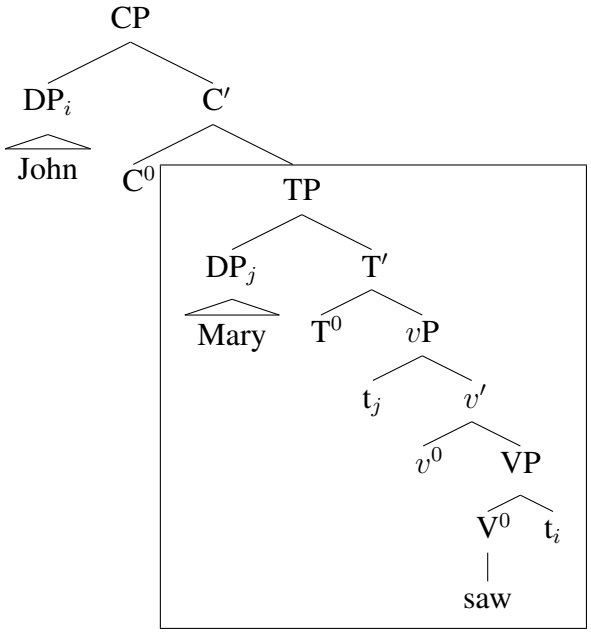
3. Too much structure: The Ellipsis Approach. The first approach to fragment answers that will be discussed is the Ellipsis Approach (EA), pioneered by Merchant (2004). Under EA, fragment answers are derived from full sentential structures which are then elided. Merchant's analysis relies on the connectivity effects observed between the fragment answer itself and the antecedent question—including the obeying of island constraints by fragment answer XPs. Consequently, fragment answers are noted to be XPs that are first base-generated in their full sentential form, and then move to the specifier of a functional projection, such as CP, within the left-periphery. The structure including anything below/after the TP is then elided and subsequently unpronounced.

Though EA discusses verbal and even prepositional fragment answers, this analysis will only focus on fragment answer DPs, and more specifically, those that can be in the form of pronominals or r-expressions. The reasoning for such a line of analysis is to provide an account for the case mismatch observed in (2). Before delving into the pronominals and type of case found within fragment answers, I will begin by looking at an example of how bare r-expression fragments, such as that in (4), are accounted for by EA.

(4) English
Q: Who did Mary see?
A: John
S: Mary saw John.

According to EA, (4A) is derived from (4S) by subsequently Ā-moving DP[*John*] from the sister of V^0 (= *saw*) to Spec,CP. The TP and any structure below is then elided, leaving the only material to be pronounced as DP[*John*]. The result of such a process, shown in (5), is the fragment answer (4A), with the elided material represented in a frame within the tree.

(5)



EA, though on the surface seems to account for the unpronounced material in fragment answers, meets complications when the r-expressions are replaced with their corresponding pronominals, such as those seen in (2). I will now turn to both theories of case-assignment (FHT and DCT) and show that the mismatches in case found within bare-pronominal fragment answers are not accounted for by EA.

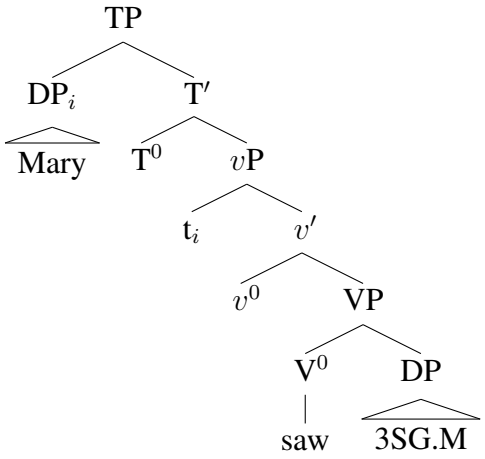
3.1. PROBLEM—THE CASE OF SUBJECT FRAGMENT ANSWERS. For (1)-(2), the base-position of each fragment DP would be different under EA. The examples are reproduced below in (6)-(7), with their corresponding pronouns in featural annotation in order to test the predictions made by both FHT and DCT. In (6), the answer DP in the sentential counterpart is found in the direct object (i.e., internal argument) position. In (7), the answer DP is situated in the subject position, which belongs to the external argument. I will now look at the derivations of (6)-(7) before the answer DP Ā-moves to the left-periphery, and look at what both theories of case would predict under EA.

(6) English
Q: Who did Mary see?
A: Him/*he
S: Mary saw 3SG.M.

(7) English
Q: Who saw John?
A: Him/*he
S: 3SG.M saw John.

In (6), the DP[3SG.M] is base-generated as the sister to V^0, and before moving to Spec,CP, it will be assigned case. The corresponding structure before Ā-movement is shown in (8).

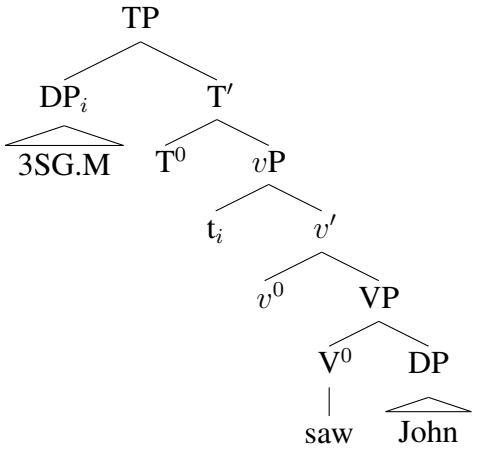
(8)



Under FHT, the fragment DP that is being assigned case is in the verbal complement position. Accordingly, one can predict that v^0 assigns accusative to DP[3SG.M], resulting in the pronominal form *him*. As seen in the fragment answer (6A), this prediction is met, such that only the accusative form *him* is grammatical. As for DCT, the fragment DP is the lower of two DPs in a c-command relationship. Since English is a nominative-accusative language, dependent case (= accusative) is assigned downward. Accordingly, DCT would predict the fragment in (6) to occur in accusative—a prediction that is also correct. As a result, both the FHT and DCT correctly predict the case of the pronominal answers for the object question (6).

For (7), the DP[3SG.M] is base-generated at Spec,*v*P and moves to Spec,TP, as shown in (9). Under FHT, the prediction is that T^0 assigns nominative to DP[3SG.M], meaning the fragment DP in the subject position is predicted to occur in the form *he*. The same prediction is made under DCT; dependent case is assigned downwards to the lower DP[*John*]. Since there is a projected TP, this is a sentential, so unmarked case (= nominative) is assigned to the higher DP[3SG.M]. As a result, under both FHT and DCT, nominative is predicted to be the case that is assigned to the fragment DP from the subject question in (7). Looking at the fragment DP[*him*] in (7A), it is evident that this prediction is wrong, as the grammatical form is the accusative.

(9)



As seen from the analysis of (6) and (7), EA is able to account for (6), an object question, but not for (7), which is the subject question where the case-mismatch was initially observed. EA can then be said to not be able to account for the case of subject questions like (7), which could be due to the relationship between the nominative case and the TP.

A common denominator between both false predictions by EA is the TP, which serves as the locus of nominative case under both FHT and DCT. As mentioned previously, it is T^0 that assigns nominative case for FHT; for DCT, it is the TP that serves as the domain by which unmarked case (= nominative) is available, at least in English. Given the relationship between the TP and nominative case, the step of projecting a TP in the derivation of fragment answers results in the incorrect prediction by EA. The generation and elision of sentential structure beyond the fragment answer could then be considered an extra step that results in too much structure, and consequently, results in the predicted assignment of nominative case to a fragment DP that does not grammatically occur as nominative. Fragment answers like (1A) and (2A) should therefore be derived from less structure than that found in EA, or else the case of these answers would be wrongly predicted. However, generating too little structure, as seen in the upcoming section on the approach of Direct Interpretation, additionally proves to be problematic as well.

4. Too little structure: Direct Interpretation. The approach of Direct Interpretation (DI) accounts for not only fragment answers but other nonsententials as well. Explored in Barton & Progovac (2005) and Progovac (2013), the main premise of DI is that nonsententials are derived without a TP, and that they are not affected by syntactic processes—such as the assignment of nominative case—relevant to the TP. Without a TP, nonsententials are hypothesized to generate maximally as their corresponding major category; that is, nonsententials that appear as nouns would generate as DPs and nothing more. Such a proposal accounts for the observation that nonsententials, including bare-noun fragment answers, typically occur in their default case forms. After all, fragment answers are one of the environments, according to Schütze (2001) in which default case occurs. It is the prediction then that fragment answers, under EA, would surface in their default case forms.

Under DI, the individual fragment responses in the (A) responses in (1)-(2) and (6)-(7) would maximally generate as DPs because they are DPs. With respect to case, a theory under DI would predict the DP fragment to occur in their default case, which is accusative in English. This is consistent with what has been observed thus far, as the (A) responses in English fragments have all been in accusative. More importantly, the case of a fragment DP from a subject question (cf. (2) and (7)) is correctly predicted, which was not achieved under EA.

Fragment DPs in languages where default case is not accusative can also be accounted for by DI. Take for example (10)-(11), which are in Korean and Serbian, respectively. In both of these languages, the default case is nominative (Barton & Progovac 2005). Under DI, then, the prediction is that the corresponding fragment DPs will occur in their default nominative forms.

(10) Korean (adapted from Morgan (1989))
Q: Nu-ka ku chaek-ul sa-ass-ni
who-NOM DET book-ACC buy-PST-Q
'Who bought the book?'
A: Yongsu(-ka) / *Yongsu-rul
Yongsu(-NOM) / Yongsu-ACC
'Yongsu.'

(11) Serbian (adapted from from Barton & Progovac (2005))
Q: Ko bi pojeo jos jedno parče torte?
who AUX more eat one piece cake

'Who would eat another piece of cake?'
A: Ja/Mi/On/Ona / *Mene/*Nas/*Njega/*Nju
I/We/He/She / Me/Us/Him/Her

As seen from Korean (10A) and Serbian (11A), the grammatical responses are nominative. Once again, the prediction made under DI is met, such that fragment DPs will occur in their default forms. This prediction not only applies for default-accusative languages like English, but also default-nominative languages like Korean and Serbian as well.

Accounting for not only fragment answers but nonsententials in general, DI presupposes the absence of a TP within the syntax of fragment answers, thus explaining the occurrence of default case in bare-noun fragment answers. By doing so, DI correctly predicts the case of fragment DPs from subject questions like (2), unlike EA. However, DI faces problems of its own—one of them including the fact that case forms other than the default can occur in fragment answers. This will be discussed in the following subsection.

4.1. PROBLEM—CASE-CONNECTIVITY EFFECTS. One of the challenges facing DI is that in many instances, fragment answers tend to display case-matching connectivity effects. That is, the case that appears in the antecedent question additionally appears in the fragment answer, and this case does not necessarily always match the default case in a given language. For instance, even every English fragment DP seen thus far occurs in the default accusative, that in (12) does not.

(12) English
Q: Whose friend did you see?
A: His/*him/*he
S: I saw his/*him/*he friend.

In (12), the grammatical fragment DP in the (A) response matches the case of the *wh-* in the question (Q), such that both are in the genitive case. This poses a problem for a theory like DI, as one would expect the fragment DP in (12A) to occur in the default accusative. In the same manner, a case other than the default nominative can show up in fragment DPs in Korean and Serbian, as shown in (13)-(14).

(13) Korean (adapted from Morgan (1989))
Q: Nuku-rul po-ass-ni
who-ACC see-PST-Q
'Who did you see?'
A: (*Yongsu(-ka)) / Yongsu-rul
Yongsu(-NOM) / Yongsu-ACC
'Yongsu'

(14) Serbian (adapted from Progovac (2013))
Q: Ko-ga je Ana posetila
who-ACC AUX Ana visited
A: Ver-u / *Vera
Vera-ACC / Vera.NOM
S: Ana je posetila (Ver-u / *Vera)
Ana AUX visited Vera-ACC / Vera.NOM
'Ana visited Vera.'

In (13), having the r-expression followed by the accusative suffix *-rul* in the fragment answer (A) is grammatical, as opposed to having it followed by the nominative suffix *-ka*. This is contrary to what one would expect in DI, owing to the observation that the fragment answer in this example is not in the default nominative. The same is observed in the Serbian example (14), as the accusative suffix in the (A) response (= *Ver-u*) is the grammatical choice of the two.

While the fragment answers in (1)-(2) and (10)-(11) occur in their language-specific default forms, (12)-(14) do not. The case forms of the latter data points are not accounted by DI, thus showing one problem with the theory with respect to case-connectivity effects. This problem may serve as a consequence of generating too little structure for case-assignment, and as will be seen in the next subsection, additional structure would necessarily have to project to account for other connectivity phenomena, such as binding.

4.2. PROBLEM—ANAPHOR FRAGMENT ANSWERS. To recap what has been seen of DI thus far, fragment answers that are nouns would generate as DPs without any additional structure. However, this leaves one with a problem when taking into account Binding Theory, as the grammaticality of certain DPs (including anaphors, pronominals, and r-expressions) are dependent on the presence of another c-commanding, co-referential DP. More specifically, I will primarily focus on Binding Principle A, which requires an anaphor to be bound within its binding domain. If bare-noun fragment answers were to only be generated as DPs, one would not expect anaphors to appear as fragments. After all, the lack of any other structure would leave no room for an antecedent to bind its anaphor. However, the opposite is found to be true: anaphor fragment answers are possible. Examples of anaphor fragment answers in English, Korean, and Serbian are found in the (A) responses of (15), (16), and (17), respectively.

(15) English
- Q: Who$_i$ did she see?
- A: Herself$_i$
- S: She saw herself$_i$.

(16) Korean
- Q: Nuku-rul po-ass-ni?
  who-ACC saw-PST-Q
  'Who did you see?'
- A: Cakicasin$_i$-ul
  self-ACC
  'Myself'
- S: Nae$_i$-ka cakicasin$_i$-ul po-ass-eo
  1SG-NOM self-ACC see-PST-D
  'I saw myself.'

(17) Serbian
- Q: Ko-ga je ona udarila
  who-NOM AUX 3SG.F hit
  'Who did she hit?'
- A: Se$_i$-be
  self-ACC
  'Herself'

S: Ona$_i$ je udarila se$_i$-be
3SG.F AUX hit self-ACC
'She hit herself.'

With the observation that anaphor fragment answers are possible in languages like English, Korean, and Serbian, additional structure would have to be proposed in order to account for the data in (15)-(17). In other words, there would have to be an (unpronounced) antecedent to bind each anaphor. Conversely, not proposing additional structure for fragments would mean positing anaphors to occur without antecedents, and the result of that would be an over-generation of anaphors. Therefore, fragment DPs require more structure than that proposed under DI, which is simply a DP. As seen in Section 3, there should also be less structure than that proposed under EA, which includes a TP. Accordingly, the remainder of this analysis will focus on the benefits of projecting a single maximal category that contains more structure than a DP but less than that of a TP: a *v*P.

5. The middle ground: A *v*P approach. Positing fragment answers as being derived from structure less than a TP and more than a DP, I will provide a new analysis for which fragment answers derive from a *v*P—notably, one that has a null V^0. Moreover, this *v*P analysis, when adopting a case theory like DCT, will prove to be successful in accounting for the case facts observed so far. First, there warrants a justification for this approach, which is outlined in the subsequent paragraphs.

One of the main advantages of EA, as opposed to DI, is that fragment answer DPs are base-generated according to their corresponding position in their sentential answer. As seen in Section 3.1, under EA, the fragment DP in the object question (1) is base-generated as the sister to V^0, as an internal argument, before moving to the left-periphery (cf. (8)). The DP in the subject question (2) is base-generated at Spec,*v*P as an external argument (cf. (9)). In other words, these fragment DPs are base-generated according to their thematic roles, at least under EA. If we were to strip away the TP, as seen in DI, the problems of case-mismatches do not come up. However, by not proposing structure beyond a DP, a theory like DI runs into the danger of assuming that fragment DPs are generated the same, regardless of their thematic roles. This is inconsistent with The Uniformity of Theta Assignment Hypothesis (UTAH), shown in (18).

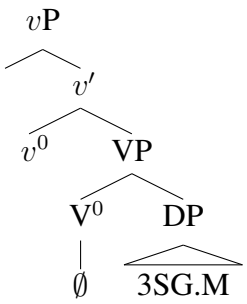
(18) The Uniformity of Theta Assignment Hypothesis (via Baker 1997)):
Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

Taking into account UTAH then, a theory of fragment answers should derive them from the minimal structure required for theta-role assignment: a V^0. This accounts for the observation that the fragment answer (1A) is construed as an internal argument. Moreover, assuming the *v*P-Internal Subject Hypothesis, there should also be a *v*P, for which the specifier will serve as the base-generated position of the external argument, like that of (2A). In fact, I propose that fragment answers involve maximally generating a *v*P, owing to the observation that having additional structure, such as a TP, leads to the case mismatches observed in Section 3.1. Minimally and maximally generating a *v*P therefore buys the current analysis the advantage of deriving fragment answers from their thematic roles and abiding by UTAH—all without proposing too much or too little structure.

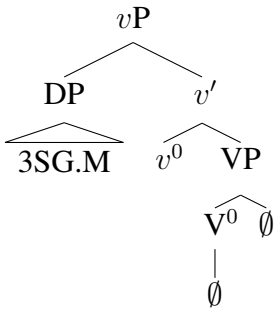
I will now show the derivation of (1)-(2) under this analysis. As seen earlier, (1) is an object

question, so the fragment DP would be generated as sister to the null V^0, shown in (19). For (2), a subject question, the fragment DP would be generated at Spec,*v*P, shown in (20).

(19)

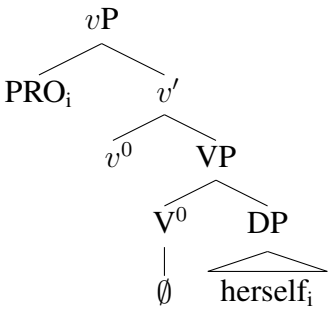


(20)



Generating more structure for fragment DPs than a theory under DI, the problem of anaphor fragment answers can now be solved. Under this novel *v*P theory, in anaphor fragment answers like (15A), the anaphor would also generate in the internal argument position. After all, anaphors require an antecedent, which would have to be situated in the position corresponding to the external argument. As a result, anaphors in anaphor fragment answers, like the one in (15A), would generate as sister to the null V^0. Likewise, in order to prevent a violation of Binding Principle A, there would have to be an antecedent for the fragment answer at the external argument position—one that is not heard and thus phonologically null. As a result, there would have to be an element like a PRO at Spec,*v*P, and it would have to be co-referential with the external argument itself (i.e., that of the antecedent question). An example illustrating the derivation of an anaphor fragment answer like (15A) under the current analysis is shown in (21).

(21)

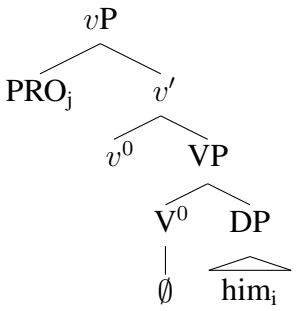


In (21), the anaphor found in (15A) is base-generated as sister to V^0, with its antecedent PRO at Spec,*v*P. Having a generated PRO prevents a Binding Principle A violation and therefore can account for the anaphor fragment answers observed in (15)-(17).

A PRO could additionally be posited to occur in the derived structure for fragment DPs that are construed as internal arguments. This is as a result of the position for the external argument,

in which the PRO generates, being available. For object questions like (1) then, a PRO co-referring to the external argument would generate at Spec,*v*P. Unlike anaphor fragment answers, the PRO and fragment DP in non-anaphoric fragment answers would not be co-indexed. Otherwise, this would give rise to a Binding Principle B Violation. Consequently, the structure of the object DP answer in (19), can be revised by generating a PRO, as seen in (22).

(22)



Evidence for a PRO existing in fragment DPs construed as internal arguments can be seen in continuity effects with respect to Binding Theory. These continuity effects are taken to be evidence for EA. Examples of continuity effects for Binding Principles B and C are shown in (23)-(24)—which both have object questions.

(23) English (adapted from Merchant (2004))
Q: Who did John$_i$ try to shave?
A: *Him$_i$
S: *John$_i$ tried to shave him$_i$.

(24) English
Q: Who did John$_i$ spill tea on?
A: *John$_i$
S: *John$_i$ spilled tea on John$_i$.

For (23)-(24), the null *v*P approach would have the fragments in the (A) responses generate as sister to V^0, as they are construed as internal arguments. However, there would have to be a mechanism that accounts for the ungrammaticality of (23)-(24). In (23), the DP[*him*] in the fragment is ungrammatical as a result of it being co-indexed *John*. Even though there is no pronounced element corresponding to *John* in (23A), the effect of the r-expression on the fragment's grammaticality is still observed. Under the null *v*P approach, there would have to be a silent element (a PRO) that is co-indexed with *John*—and also c-commands *him*—so as to account for Binding Principle B. The same applies for (24), where the fragment r-expression is ungrammatical as a result of Binding Principle C effects. To account for the fragment's ungrammaticality, there would have to be a PRO, co-indexed with *John* and c-commanding the internal argument, at Spec,*v*P. Note that the PROs in the derivations of fragment answers construed as internal arguments would co-index with their external arguments. As a result, to prevent an over-generation of pronominals (such as in (23)) and r-expressions (in (24)), a PRO should generate at Spec,*v*P for fragments construed as internal arguments.

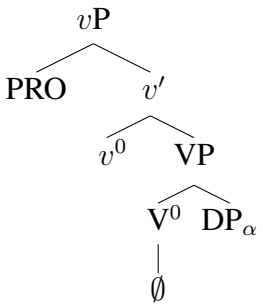
Before proceeding to how case would be calculated under this analysis, it is important to specify the role that PRO plays in case assignment. Under FHT, it is assumed that PRO either does not receive case, or it has a case form that is null (Martin 2001). In terms of DCT, PRO

serves as a case competitor like other DPs. As a result, a DP in the c-command domain of PRO would receive dependent case, at least under a nominative and accusative system (Baker & Vinokurova 2010). With these properties of PRO in mind, this discussion will now turn to how both theories of case would account for the case of fragment answers.

5.1. CASE CALCULUS—FHT. To review the case facts seen thus far, the accusative form is seen to occur in fragment DPs construed as internal and external arguments, as seen in (1) and (2) respectively. To abide by UTAH, these fragment DPs are base-generated in certain positions in a *v*P depending on their theta relationships: sister to V^0 for internal arguments, and Spec,*v*P for external arguments. A question then arises of how an analysis that minimally and maximally generates a *v*P for fragment answers would account for their case forms. To approach an answer to this question, the case that FHT ascribes to a general fragment DP, labeled DP α, will be explored.

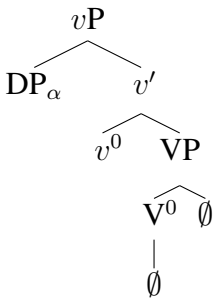
As mentioned earlier, in an analysis involving FHT, the prediction is that v^0 will assign accusative to the sister of V^0. As a result, it is expected that a DP α construed as an internal argument, like that shown in (25), would receive the accusative case. Looking at (1A), this prediction is met; the grammatical answer, *him*, is accusative. In other words, FHC correctly predicts the case of fragment DPs construed as internal arguments under this analysis. This is similar to EA, where a correct prediction was made for a fragment DP construed as the internal argument, as seen in Section 3.1. Nevertheless, like EA, this analysis also runs into a problem when trying to account for DPs, that are construed as external arguments.

(25)



For example, a DP α construed as an external argument would generate at Spec,*v*P, as shown in (26). There then is the question of how FHT would account for this configuration. It was under EA that T^0 assigns nominative to the DP at Spec,*v*P. However, by stripping away the TP and only having a *v*P, the result is that there is no functional head to assign case to the DP in the external argument position. From this configuration, DP α would not receive case, thus violating the case filter.

(26)



There are a few options that this analysis is left with. There is the option of reverting back to EA and proposing the generation of a TP; this nonetheless does not address the problems observed

in Section 3. The other option is to do away with the *v*P analysis, but that would (i) not abide by UTAH and (ii) not account for the data pertaining to anaphor fragment answers in Section 4. The final option is that the present analysis can adopt a theory of case like DCT and resort to the notion of default case—reminiscent of the approach under DI. As seen in the next subsection, this is the route that will be taken, which will buy the *v*P analysis a few advantages.

5.2. CASE CALCULUS—DCT. First, I will explore how DCT would account for a fragment DP α occurring as an internal argument. Under this analysis, DP α would generate as sister to V^0. A PRO for the external argument would generate at Spec,*v*P. This configuration is already shown in (25). As mentioned earlier, PRO is a case-competitor, so it would also factor into the case-assigning algorithm—outlined in (3). Both the PRO and DP α are in a c-command relationship, so this configuration would involve the assignment of dependent case.

For now solely dealing with nominative-accusative languages, it is predicted that dependent case (= accusative) would be assigned downward to the lower DP α. Like the analysis involving FHT, this prediction is met when looking at (1), as the answer DP occurs in accusative. Not only that, the case of the fragment answers in Section 3, including (13) and (14) for Korean and Serbian respectively, are correctly predicted. The fragment DP construed as an internal argument is in accusative as a result of it being in the c-command domain of the PRO. If a theory of fragment answers were to alternatively adopt a DI-like analysis and attribute the case of the DP α to the default case in languages like Korean and Serbian, the prediction would be that fragment DPs would only appear in nominative and not accusative—contrary to what is seen in (13) and (14). As such, it can be said that the case of fragment DPs construed as internal arguments would be in the dependent case.

Finally, the task left is to account for the data in which the fragment DP occurs in the external argument position, such as (2). As mentioned earlier in this section, this element, DP α would generate at the specifier of the *v*P with an empty VP complement, already shown in (26). With respect to DCT, there is not a second DP with which DP α is in a c-command relationship. Moreover, as mentioned in Section 2, default case is realized in configurations where there are no syntactic mechanisms for case assignment, including instances of nonsententials. As a result, the default case is expected to show up in DP α when there is no other element present in its fragment answer derivation. This prediction is met in (2), as the fragment answer form, *him*, is in accusative—the default form in English. Not only that, this prediction is met in fragment DPs in Korean and Serbian as seen in (13) and (14) respectively. In both examples, the fragment answer is in the default case which is shared by both languages: nominative. As a result, a correct prediction for a DP α found in the external argument position is finally made across these languages. Due to it being the only nominal present in the fragment answer *v*P, the subject DP is assigned default case via DCT. Therefore, the *v*P analysis accounts for the observation that fragment DPs, construed as external arguments, are found in their default forms.

The analysis in this section has accounted for fragment DPs from object questions. These fragment DPs were correctly predicted to occur in accusative (= dependent case) in English, Korean, and Serbian. The analysis in this section has also accounted for fragment DPs from subject questions. In English, they were correctly predicted to occur in accusative (= default case) in English, and nominative (= default case) in Korean and Serbian.

6. Conclusion. In summary, the case of fragment answers depends on the structural relationships in which they are found. In instances of fragment DPs occurring as the internal argument, it

is expected that they will be realized in the dependent case, at least in languages with a nominative-accusative alignment. For fragment DPs construed as the external argument, they would be found in the form corresponding to the default case, which is ultimately language-specific. This is made possible by adopting DCT as a theory of case assignment, under an analysis where fragment DPs are generated maximally and minimally as *v*Ps.

The *v*P approach serves as a middle ground between both EA and DI. Generating fragment DPs in a *v*P buys the advantage of not generating too much structure like EA. After all, in Section 3, the TP was seen to result in incorrect predictions for case under both FHT and DCT. A *v*P analysis also buys the advantage of not generating too little structure like DI, where case-mismatches and potential binding violations were observed in Section 4. Finally, the *v*P approach was able to provide a cross-linguistically valid account for the issue mentioned at the beginning of this paper, which is the case-mismatch observed in subject questions like (2).

Of course, there are two broad questions that call for further research on this *v*P analysis. First, there is the question of how such an analysis would work with fragments that are not DPs, but rather other syntactic categories. It is the assumption that under UTAH, fragments for other syntactic categories would generate according to their thematic relationships. The second question is how this analysis would hold up for languages that have an ergative-absolutive alignment of case; after all, in languages with this alignment, dependent case (= ergative) is assigned in the opposite direction. By answering these questions, the field can approach a preliminary understanding of the long-standing puzzle regarding the structure of nonsententials, and specifically, the case of fragment answers.

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