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A NONUNIFORM ANALYSIS OF
OVERT *WH*-MOVEMENT
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1 A Uniform/Nonuniform Analysis of Overt *Wh*-Movement

There has been an extensive discussion in the generative literature regarding how overt *wh*-movement, a typical $\bar{A}$ -movement, proceeds. In the preminimalist era, any type of *wh*-phrase was assumed to undergo successive-cyclic $\bar{A}$ -movement (see, e.g., Chomsky 1977, 1986a). I call such an analysis a *uniform* $\bar{A}$ -movement analysis of overt *wh*-movement in the sense that any type of *wh*-phrase undergoes successive-cyclic $\bar{A}$ -movement. Within the framework of the Minimalist Program, Chomsky (1995) still assumes a uniform $\bar{A}$ -movement analysis of overt *wh*-movement. Later, though (Chomsky 2000, 2001a,b), he proposes what I call a *nonuniform* analysis of overt *wh*-movement. Under a nonuniform analysis, how overt *wh*-movement proceeds depends on what type of *wh*-phrase is involved.

Let us look at Chomsky's nonuniform analysis in detail. Chomsky (2000, 2001a,b) assumes the Phase Impenetrability Condition (1), which ensures that derivations proceed phase by phase, thereby reducing computational burden (adapted from Chomsky 2001b:14).¹

- (1) In [_{ZP} Z . . . [_{HP} α [_{H'} H YP]]], where HP is a phase and ZP is the next phase, the domain of H is not accessible to operations at ZP, where phases are vP and CP.

Chomsky claims that the Phase Impenetrability Condition follows from the fact that Spell-Out is subject to the general condition on operations (2) (adapted from Chomsky 2001b:14).

- (2) A phase Ph₁ is interpreted/evaluated at the next phase Ph₂.

In order to ensure successive-cyclic movement under the Phase Impenetrability Condition, Chomsky assumes (3) (adapted from Chomsky 2001b:12).

- (3) The head of a phase, C and v, may be assigned an EPP-feature.

¹ Unlike the discussion in Chomsky 2001a,b, the discussion to follow does not assume a distinction between strong and weak phases.

When the moved *wh*-phrase enters into a Case-agreement relation with *v*, *wh*-movement proceeds as in (5a). In (5a), the light verb *v*, which is the head of a phase, is assigned an EPP-feature by means of (3). The ϕ - and EPP-features of *v* trigger overt movement of the *wh*-object *what* to the vP-edge position for Case-agreement reasons. This movement is A-movement, given that movement triggered by the ϕ -features on a functional head counts as A-movement (Chomsky 2000: 108). It then undergoes overt $\bar{A}$ -movement to Spec,C. When the moved *wh*-phrase does not enter into any Case-agreement relation with *v*, *wh*-movement proceeds as in (5b–c). In (5b), although the *wh*-phrase *who* is an argument, it does not enter into a Case-agreement relation with *v*. Its Case-agreement relation is established within the PP *to who*. In (5c), the *wh*-adjunct *where* also does not enter into a Case-agreement relation with *v*. In (5b–c), the ϕ -features of *v* have been deleted by Agree between *v* and the object *those flowers*. The light verb *v* is assigned a P-feature by (4) as well as an EPP-feature by (3). These features trigger overt movement of the *wh*-phrases *who* and *where* to the vP-edge position. These movement operations are $\bar{A}$ -movement, given that movement triggered by the periphery feature on a functional head counts as $\bar{A}$ -movement (Chomsky 2000:108). They then undergo further overt $\bar{A}$ -movement to Spec,C. Hence, under Chomsky's non-uniform analysis, how overt *wh*-movement proceeds depends on the Case-agreement property of a moved *wh*-phrase.

In this squib, I will present a new nonuniform analysis of overt *wh*-movement. I will argue that how overt *wh*-movement proceeds does not depend on the Case-agreement property of a moved *wh*-phrase; rather, it depends on its D(iscourse)-linking/specificity property. As I will show, this analysis receives support from a hitherto unnoticed interplay between weak crossover (WCO) effects and D-linking/specificity.

2 An Interplay between Weak Crossover and D-Linking/Specificity

The phenomenon of WCO, which is illustrated in (6), has been under intense investigation for a number of years (see, e.g., Chomsky 1976, Koopman and Sportiche 1982, Reinhart 1983, Safir 1984, Mahajan 1990, Hornstein 1995).

- (6) *?Who_i does his_i mother love *t_i*?

Among various proposals in the literature, here I assume Mahajan's (1990) condition (7) for expository purposes, though it should be noted that the following discussion is valid regardless of which approach to WCO effects is adopted. ((7) is adapted from Mahajan 1990:23.)

- (7) A pronoun can be interpreted as a bound pronoun only if it is c-commanded by a binder and its variable (if there is one).

As exemplified by (8), it is well known that A-movement remedies WCO effects (see, e.g., Koopman and Sportiche 1982, Reinhart 1983, Safir 1984, Déprez 1989, Mahajan 1990, Richards 2001).

- (8) **Who_i** *t_i* seems to **his_i** mother [*t_i* to be smart]?³

Mahajan (1991) points out another type of WCO remedy, which is exemplified by (9) and (10) (Mahajan 1991:92).³

- (9) a. ???/***Who_i** (the hell) does John believe [that **his_i** mother hates *t_i*]?
 b. ???/***Who_i** (the hell) does **his_i** mother believe [that John hates *t_i*]?
 (10) a. ?**Which man_i** does John believe [that **his_i** mother hates *t_i*]?
 b. ???**Which man_i** does **his_i** mother believe [that John hates *t_i*]?
t_i]

Examples (11) and (12) illustrate the same pattern.

- (11) a. *?**Who_i** do you think [that **his_i** teacher scolded *t_i* in yesterday's geology class]?
 b. *?**Who_i** does **his_i** teacher think [that Mary scolded *t_i* in yesterday's geology class]?
 (12) a. **Which student_i** do you think [that **his_i** teacher scolded *t_i* in yesterday's geology class]?
 b. *?**Which student_i** does **his_i** teacher think [that Mary scolded *t_i* in yesterday's geology class]?
t_i]

In (9)–(12), the object of the embedded verb undergoes *wh*-movement. The moved *wh*-objects in (10) and (12), *which man* and *which student*, are D-linked in the sense of Pesetsky (1987) and therefore count as specific, since, as argued by Cinque (1990), among others, D-linked *wh*-phrases are understood as presupposing the existence of a known set of specific elements. On the other hand, the moved *wh*-objects in (9) and (11), *who (the hell)* and *who*, are non-D-linked/nonspecific. In (9) and (11), the WCO effects emerge regardless of whether the bound pronoun *his* appears in the embedded clause, as shown in (9a) and (11a), or in the matrix clause, as shown in (9b) and (11b). In (10) and (12), on the other hand, the WCO effects emerge only when the bound pronoun *his* appears in the matrix clause, as shown in (10b) and (12b). When the bound pronoun *his* appears in the embedded clause, where the *wh*-phrase originates, the WCO effects are canceled, as shown in (10a) and (12a).

This interplay between the WCO effects and D-linking/specificity, however, is not restricted to the case where the object of a verb

³ I thank an anonymous *LJ* reviewer for bringing this paper to my attention.

undergoes *wh*-movement. As shown in (13)–(18), the interplay is also observed when the object of a preposition undergoes *wh*-movement.⁴

- (13) a. *?Who_i do you think [that his_i teacher will present a special prize to *t_i* this semester]?
 b. *?Who_i does his_i classmate think [that the teacher will present a special prize to *t_i* this semester]?
- (14) a. Which student_i do you think [that his_i teacher will present a special prize to *t_i* this semester]?
 b. *?Which student_i does his_i classmate think [that the teacher will present a special prize to *t_i* this semester]?
- (15) a. *?Who_i do you think [that his_i paycheck was given to *t_i* last week]?
 b. *?Who_i does his_i manager think [that the paycheck was given to *t_i* last week]?
- (16) a. Which employee_i do you think [that his_i paycheck was given to *t_i* last week]?
 b. *?Which employee_i does his_i manager think [that the paycheck was given to *t_i* last week]?
- (17) a. *?Who_i do you think [that Mary sent his_i book to *t_i* yesterday]?
 b. *?Who_i does his_i wife think [that Mary sent the book to *t_i* yesterday]?
- (18) a. Which author_i do you think [that Mary sent his_i book to *t_i* yesterday]?

⁴ It should be noted that Mahajan's (1991) analysis cannot account for the interplay between WCO effects and D-linking/specificity in (13)–(18). Mahajan claims that when the object of a verb is a D-linked/specific *wh*-phrase, as in (10) and (12), it undergoes movement to a position within the government domain of Agr_O, where it is assigned Case by Agr_O, on its way to the final landing site. Hence, in (10a) and (12a), the D-linked/specific *wh*-phrase licenses the bound pronoun *his* when it moves to a position governed by the embedded Agr_O, which is assumed to be an A-position; the WCO effects are canceled. When the extracted *wh*-object is non-D-linked/nonspecific, on the other hand, it is assigned Case by a verb in its original position. The non-D-linked/nonspecific *wh*-object does not move into the government domain of Agr_O on its way to the final landing site. Hence, in (9a) and (11a) the non-D-linked/nonspecific *wh*-phrase does not stop at any A-position where it can license the bound pronoun *his*; WCO effects emerge.

Mahajan's analysis, however, would wrongly predict that when the object of a preposition undergoes *wh*-movement, WCO effects always emerge regardless of whether the extracted *wh*-phrase is D-linked/specific or not. Specifically, it would make the wrong prediction that there would be no way of licensing the bound pronoun *his* in (14a), (16a), and (18a). This is because when the object of a preposition undergoes *wh*-movement, it is assigned Case within the PP and hence does not move to a position governed and Case-assigned by Agr_O. It should also be noted that in (16a), the bound pronoun *his* is licensed even though the embedded clause is passive and thus Agr_O (if it exists at all) does not have any Case-assigning property.

- b. *?Which author_i does his_i wife think [that Mary sent the book to *t_i* yesterday]?

Unlike in (9)–(12), in (13)–(18) the extracted *wh*-phrase is not the object of a verb but the object of a preposition. Furthermore, in (15a) and (16a) the bound pronoun *his* appears within the subject of the embedded passive sentence. In (17a) and (18a), the bound pronoun *his* appears within the embedded direct object position.

On the basis of this hitherto unnoticed interplay between WCO effects and D-linking/specificity, I present a new nonuniform analysis of overt *wh*-movement, where there is an asymmetry between D-linked/specific and non-D-linked/nonspecific *wh*-phrases regarding how *wh*-movement proceeds. More specifically, D-linked/specific *wh*-phrases undergo A-movement from their original position to the embedded vP-edge position and then undergo successive-cyclic $\bar{A}$ -movement to their final landing site. It then follows that no WCO effects emerge when the bound pronoun appears in the embedded clause, as shown in the (a) examples of (10), (12), (14), (16), and (18), since movement to the embedded vP-edge position, which crosses over the bound pronoun *his*, is A-movement. On the other hand, when the bound pronoun appears in the matrix clause, WCO effects do emerge, as shown in the (b) examples of (10), (12), (14), (16), and (18). This is because movement from the specifier of the embedded C to the matrix vP-edge position, which crosses over the bound pronoun *his*, is $\bar{A}$ -movement. In contrast to D-linked/specific *wh*-phrases, non-D-linked/nonspecific *wh*-phrases undergo successive-cyclic $\bar{A}$ -movement from their original position to their final landing site. It then follows that WCO effects appear regardless of whether the bound pronoun appears in the embedded or matrix clause, as shown in (9), (11), (13), (15), and (17). This is because the movement operation that crosses over the bound pronoun is $\bar{A}$ -movement. In the next section, I will present a way of deriving this asymmetry between D-linked/specific and non-D-linked/nonspecific *wh*-phrases.

4 The Asymmetry between D-Linked/Specific and Non-D-Linked/Nonspecific *Wh*-Phrases

4.1 The Phase Impenetrability Condition and Successive Cyclicity

Before we turn to an analysis of the asymmetry between D-linked/specific and non-D-linked/nonspecific *wh*-phrases, a few remarks are in order concerning the Phase Impenetrability Condition (1) and successive-cyclic movement. While essentially following Chomsky's (2000, 2001a,b) analysis of successive-cyclic movement, I depart from it in claiming that only C, not v, may be assigned an EPP-feature and a P-feature. Let us look at how successive-cyclic movement proceeds under the new analysis, taking (19) as an example.

- (19) **Where** did John buy those flowers *t*?

During its derivation, we construct the embedded vP phase (20).

- (20) [_{VP} John [_{v[ϕ]} [_{VP} buy those flowers_[ϕ , ~~Case~~] where_[Q, wh-]]]]

In (20), Agree of *v* with the object *those flowers* establishes a Case-agreement relation, deleting the ϕ -features of *v* and the Case feature of *those flowers*. I claim that although *v* is not assigned an EPP-feature or a P-feature, the *wh*-phrase *where* may raise to the vP-edge position, as shown in (21).

- (21) [_{VP} **where**_[Q, wh-] [_v John [_v [_{VP} buy those flowers *t*]]]]]

Note that given the general condition on operations (2), although this movement is not triggered by any formal feature at this vP-phase level, it does not violate an economy condition that bans superfluous steps in a derivation. This is because according to (2), evaluation/interpretation for the vP phase takes place at the next phase, that is, the CP phase. That evaluation includes whether or not movement of *where* to the vP-edge position at the vP-phase level satisfies the economy condition. At the CP-phase level, C is assigned an EPP-feature and a Q-feature, as shown in (22).

- (22) [_{CP} **Where**_[Q, wh-] [_{C[ϕ , EPP]}-did John [_{VP} *t'* [_v *t*_{John} [_v [_{VP} buy those flowers *t*]]]]]]?]

These features trigger movement of *where* to Spec,C, which licenses movement of *where* to the vP-edge position at the vP-phase level. In other words, a non-feature-driven movement operation like movement of *where* to the vP-edge position in (21) is allowed without violating the economy condition as long as that movement operation leads to the satisfaction of an uninterpretable formal feature at the next phase. This ensures successive-cyclic movement without assuming that *v* may be assigned an EPP-feature and a P-feature.⁵

From a theoretical point of view, my analysis of successive-cyclic movement should be preferred over Chomsky's analysis in the following respect: it does not have to assume *v* with an EPP-feature and a P-feature. Chomsky (2000:149) assumes that a P-feature is defective, arguing that such a feature is analogous to the [person] feature of a defective T. There is a case where C is assigned a Q-feature, a full complement of periphery features. By analogy with the T-system, it is reasonable to claim that we also have a defective C with a P-feature. In contrast to C, *v* is never assigned a Q-feature, which is clear from the fact that a *wh*-phrase can never be stranded in the vP-edge position. This casts serious doubt on Chomsky's analysis, which assumes *v* with a P-feature.

⁵ It should be noted that this analysis predicts that a moved element cannot remain in the vP-edge position and thus captures the lack of object shift in English. This is because an object can only undergo non-feature-driven movement to the vP-edge position if it undergoes feature-driven movement at the next phase. Following Chomsky (2001b), I assume that in languages that allow object shift, an object moves to a higher position outside vP, which licenses its movement to the vP-edge position.

I claim that movement of a *wh*-phrase to the vP-edge position is scrambling in the sense (proposed by Fukui (1993) and Saito and Fukui (1998)) that it is not triggered by any formal feature. I also claim that like clause-internal scrambling in Hindi and Japanese (see, e.g., Mahajan 1990, Saito 1992, 2003), scrambling to the vP-edge position in English can be either A- or $\bar{A}$ -movement. In the next section, I will claim that whether scrambling to the vP-edge position counts as A- or $\bar{A}$ -movement depends on the D-linking/specificity property of a moved *wh*-phrase, which accommodates the asymmetry between D-linked/specific and non-D-linked/nonspecific *wh*-phrases regarding how *wh*-movement proceeds. I will show that the analysis proposed here accounts for the interplay between WCO effects and D-linking/specificity mentioned in section 3.

4.2 Deriving the Asymmetry between D-Linked/Specific and Non-D-Linked/Nonspecific Wh-Phrases

It has been claimed by, among others, Mahajan (1990), Diesing (1992), Runner (1994), Torrego (1998), and Chomsky (2001b) that there is a correspondence between a syntactic position and its specific/nonspecific interpretation. Essentially following Chomsky (2001b), I assume (23) (adapted from Chomsky 2001b:33).

- (23) The non- θ vP-edge position is assigned a specific interpretation.

Given that arguments are A-chains, I assume with Chomsky (2001b) that while the θ -role of an argument is determined by the position where it is first merged, surface interpretation, including specificity, is determined by the position of the head of an A-chain.⁶

Let us first consider (11a) (repeated here as (24)).

- (24) *?Who_i do you think [that his_i teacher scolded *t_i* in yesterday's geology class]?

During its derivation, we construct the embedded vP phase (25).

- (25) [_{vP} who_i[Q, *wh*-, ϕ , Case] [_{v'} his teacher [_v_(ϕ) [_{vP} scolded *t*

 scrambling ($\bar{A}$ -movement)
in yesterday's geology class]]]]]

In (25), Agree of *v* with the *wh*-object *who* in its original position establishes a Case-agreement relation. This deletes the ϕ -features of

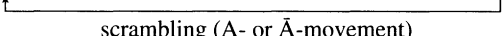
⁶ Note that unlike Diesing's (1992) mapping hypothesis, (23) claims that there is no strict one-to-one correspondence between a syntactic position and its interpretation. According to (23), it is only the non- θ vP-edge position that receives an unambiguous interpretation as specific. The other positions within vP have an ambiguous interpretation as either specific or nonspecific. This allows a specific element in situ to be properly interpreted. See de Hoop 1992 for detailed arguments showing that Diesing's mapping hypothesis is too strong.

v and the Case feature of *who*. Then, the non-D-linked/nonspecific *wh*-phrase *who* scrambles to the vP-edge position. Recall that we are assuming that scrambling to the vP-edge position can be either A- or $\bar{A}$ -movement. In (25), if scrambling of *who* to the vP-edge position counted as A-movement, it would form an A-chain. The surface interpretation of *who*, including specificity, would be determined by the vP-edge position, since it is the position of the head of the A-chain. Since this edge position is not a θ -position, (23) requires *who* to be interpreted as specific.⁷ Since *who* is inherently non-D-linked/nonspecific, this results in an illegitimate interpretation, though the derivation converges. Hence, scrambling of *who* to the vP-edge position in (25) cannot count as A-movement. If scrambling of *who* counts as $\bar{A}$ -movement, on the other hand, *who* forms a trivial one-membered A-chain. The surface interpretation of *who*, including specificity, is determined by its original position. (23) is irrelevant and *who* in its original position can be freely interpreted as specific or nonspecific. *Who* may be assigned a nonspecific interpretation, which is compatible with the inherent property of *who*. This results in a convergent derivation with a legitimate interpretation. Hence, scrambling of *who* to the vP-edge position, which crosses over the pronoun *his*, can only count as $\bar{A}$ -movement. Since $\bar{A}$ -movement induces WCO effects, (24) is deviant.

Let us next consider (12a) (repeated here as (26)).

- (26) **Which student_i** do you think [that **his_i** teacher scolded **t_i** in yesterday's geology class]?

During its derivation, we construct the embedded vP phase (27).

- (27) [_{VP} **which student**_[Q, wh-, ϕ , Case] [_{V'} his teacher [_{V ϕ}] [_{VP} scolded **t**


in yesterday's geology class]]]]

In (27), the D-linked/specific *wh*-phrase *which student* scrambles to the vP-edge position. Unlike in (25), scrambling to the vP-edge position may count as A-movement in (27), forming an A-chain. Because of (23), the D-linked/specific *wh*-phrase *which student* is assigned a specific interpretation, which is compatible with the inherent property of *which student*. This derivation converges with a legitimate interpretation. Since A-movement remedies the WCO effects, (26) is acceptable.

Let us finally consider (12b) (repeated here as (28)).

- (28) *?**Which student_i** does **his_i** teacher think [that Mary scolded **t_i** in yesterday's geology class]?

During its derivation, we construct the matrix vP phase (29).

⁷ Note that this interpretation takes place at the next CP-phase level in accordance with (2).

- (29) $[_{VP} \text{ which student}_{[Q, wh, \phi]} [_{V'} \text{ his teacher } [v \text{ [think } [_{CP} t''$
 $\uparrow$
 scrambling ($\bar{A}$ -movement)
 $[\text{that } [_{VP} t' [_{V'} t_{Mary} [v \text{ [scolded } t]]]]]]]]]$

In (29), *which student* first moves to the embedded vP-edge position and then to the specifier of the embedded C on its way to the matrix vP-edge position. Although scrambling to the vP-edge position can be either A- or $\bar{A}$ -movement, scrambling of *which student* from the specifier of the embedded C to the matrix vP-edge position, which crosses over the pronoun *his*, can only count as $\bar{A}$ -movement. If it counted as A-movement, an improper movement would result. This is because *which student*, which originates in an A-position, would first move into Spec,C, which is necessarily an $\bar{A}$ -position, and then into an A-position. Since $\bar{A}$ -movement induces WCO effects, (28) is deviant. The examples in (13)–(18) can be explained in the same way.⁸

5 Conclusion

In this squib, I presented a new nonuniform analysis of overt *wh*-movement, which claims that how overt *wh*-movement proceeds depends on the D-linking/specificity property of a moved *wh*-phrase. This analysis receives support from the hitherto unnoticed interplay between WCO effects and D-linking/specificity.

Before closing this squib, I will point out further consequences of my analysis, and remaining issues. First, it has been widely assumed that while languages like Japanese, which have relatively free word order, also have scrambling, languages like English do not. Fukui (1993) and Saito and Fukui (1998) argue that scrambling is a non-feature-driven (optional) movement, proposing a parameter that explains why such an optional movement is allowed in languages like Japanese without violating the economy condition that bans superfluous steps in a derivation. If my analysis is on the right track, it presents evidence for Fukui's and Saito's view of scrambling, arguing that

⁸ It is worth noting that when a *wh*-phrase is extracted out of an object DP, WCO effects emerge regardless of whether the extracted *wh*-phrase is D-linked/specific or not, as shown in (i) and (ii).

- (i) a. *?Who_i did Giselle say that his_i mother found [a picture of *t_i*]?
 b. *?Which student_i did Giselle say that his_i mother found [a picture of *t_i*]?
 (ii) a. *?Who_i did Alice sell his_i mother [a picture of *t_i*]?
 b. *?Which student_i did Alice sell his_i mother [a picture of *t_i*]?

This could follow from the present analysis given the assumption that A-movement cannot cross a DP boundary (see, e.g., Chomsky 1986b). Hence, movement to the vP-edge position, which crosses over the pronoun *his*, can only count as $\bar{A}$ -movement; WCO effects emerge. I leave the fuller study of this important subject for future research. I thank an anonymous *LI* reviewer for bringing it to my attention.

English also allows scrambling under very limited circumstances where it does not lead to a violation of the economy condition.

Second, the present analysis crucially assumes with Chomsky (2001a,b) that interpretation/evaluation takes place locally—specifically, at the next phase. Within the theory of computational complexity, it is generally agreed that local considerations induce less computational complexity than global ones (see, e.g., Chomsky 1995, Fukui 1996, Ishii 1997). As Chomsky (2000) argues, however, it is not clear whether computational complexity matters for a cognitive system like language, which does not involve any processing but only stores information. In other words, we need to seek a resolution of this local versus global issue on empirical grounds. The present account offers a local analysis of the interplay between WCO effects and D-linking/specificity, supporting the view of language design that language is phasally local in nature.

Third, the analysis presented here assumes a derivational approach to WCO—that is, that condition (7) applies at every point of a derivation, as suggested by Mahajan (1990). For example, in (27), subsequent movement of *his teacher* to Spec,T is irrelevant to such a derivational approach. This derivational view is further supported by (30).

- (30) a. **Who_i** did Mary think that **his_i** brother amused **t_i** so much at yesterday's party?
 b. **Who_i** did Mary think that **his_i** teacher irritated **t_i** in yesterday's geology class?

In (30), the pronoun *his* can be interpreted as a variable bound by the *wh*-phrase *who*. In other words, WCO effects do not emerge even though the *wh*-object *who* crosses over the pronoun *his* in subject position. It should be noted that since the *wh*-phrase *who* is inherently non-D-linked/nonspecific, the lack of WCO effects in (30) is not due to the interplay between WCO effects and the D-linking/specificity property of a moved *wh*-phrase mentioned in section 3. The derivational approach to WCO can account for the lack of WCO effects in (30) if we assume the analysis of psych-verbs proposed by Belletti and Rizzi (1988). For example, according to this analysis, the theme argument *his brother* in (30a) originates in a position c-commanded by the experiencer argument *who*, as shown in (31).

- (31) . . . [_{VP} [_{V'} amused/irritated **his teacher**] **who**]

Under the derivational approach to WCO, condition (7) is satisfied at this stage of the derivation; there is no WCO effect. (30b) can be accounted for in the same fashion. It remains an unsettled question, however, how we can account for the derivational approach to WCO under (2), which claims that interpretation/evaluation takes place phase by phase. I leave this important issue for further research.

Finally, as Chomsky (1995) points out, the notions of A- and $\bar{A}$ -positions were well defined in the *LGB* framework (Chomsky 1981)

in terms of assumptions that are no longer held in the Minimalist Program, such as multiple-branching constructions and the assumption that the subject of a clause originates in Spec,T. Within the Minimalist Program, since these assumptions are abandoned, the notions of A- and $\bar{A}$ -positions can only be used as descriptive apparatus. Hence, unless the ambiguous A/ $\bar{A}$ -movement status of scrambling to the vP-edge position is derived from deeper principles, one cannot say that the present analysis gives a satisfactory explanation for the interplay between WCO effects and D-linking/specificity. I also leave this important issue for future research.

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AN A-BINDING ASYMMETRY IN
NULL SUBJECT LANGUAGES AND
ITS SIGNIFICANCE FOR
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1 Introduction

This squib presents and examines an A-binding asymmetry that occurs consistently in a number of null subject languages displaying SV/VS surface order alternation. In Greek, Spanish, Portuguese, Italian,

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