

ACD and Movement Reconsidered: A and A' Copies*

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1. Introduction

Generative grammar has long distinguished between A and A'-movement, yet has always had an eye toward collapsing the two into one syntactic operation: movement. While such a day may be a long way off, this paper is a nod in that general direction. This paper investigates the properties of the copies left behind by A and A'-movement, in the end concluding that there are no obvious *syntactic* differences between the two types of copies, but some interesting evidence that the two types of copies are treated differently by the interpretive component of the grammar. To reach that conclusion, this paper first argues for disassociating movement from the resolution of infinite regress in ACD (section 2), thus turning ACD into a diagnostic for semantic parallelism. Building on the initial investigations of A and A'-copies by Lasnik 1998, this new semantic parallelism diagnostic is applied to instances of A and A'-movement (section 3), and two interesting extensions: the Copy Problem as raised by Fox 2002, and the analysis of binding and control as instances of overt A-movement (Hornstein 1999, 2000).

2. Reconsidering Movement

2.1 The Problem of Infinite Regress

In any given ACD construction, the XP containing the gap is also contained within the VP that must serve as the antecedent for the gap, hence the antecedent contains the ellipsis site (Antecedent Contained Deletion):

(1) John [_{VP} kissed everyone that Mary did [_{VP} e]]

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In (1), the only VP that can serve as the antecedent for the empty VP is the matrix VP. However, if we replace the empty VP with the matrix VP, there would still be an empty VP (Sag 1976):

(2) John [_{VP} kissed everyone that Mary did [_{VP} kissed everyone that Mary did [_{VP} e]]]

Replacing the gap once again with the VP will yield yet another gap. This constant loop is called an infinite regress, and is often referred to as the infinite regress problem.

The standard analysis of ACD holds that the infinite regress can be resolved by moving the XP that dominates the gap and is dominated by the matrix VP to a position outside of the VP:

(3) [_{DP} Everyone that Mary did [_{VP} e]] [John [_{VP} kissed t_{DP}]]

In (3), once the DP has been moved out from under the matrix VP, the matrix VP can serve as an antecedent for the empty VP:

(4) [_{DP} Everyone that Mary did [_{VP} kissed t]] [John [_{VP} kissed t]]

2.2 Sluicing-ACD

Yoshida (2003, and this volume) observes that ACD is possible in sluicing (Ross 1969) constructions:

(5) [_{IP} John was kissing someone [_{PP} without knowing who [_{IP} e]]].

Adopting the position that sluicing is an instance of IP ellipsis (Ross 1969, Merchant 2001) forces one to assume that the entire IP is serving as the antecedent for the gap in (5). Furthermore, it seems that the PP adjunct is a VP adjunct, as it is possible to front the PP adjunct along with the VP:

(6) John was kissing someone without knowing who, and [kissing someone without knowing who], Bill was too.

As a VP adjunct, the PP is squarely within the IP. With the PP containing the ellipsis contained within the IP that serves as the antecedent, we have an ACD configuration. The interesting fact about (5) is that there is no obvious motivation for movement of the PP that could resolve the infinite regress. As an adjunct, the PP does not require Case, so there is no motivation for Case movement. Because the PP is not headed by a quantifier, there is also no motivation for QR. Therefore we might expect an infinite regress in cases such as (5).

Although unappealing, infinite regress could be resolved by stipulating that the PP undergoes movement, despite the lack of obvious motivation. Yet even with this stipulation there is a problem: there will be more variables than binders. The QR of *someone* in the matrix will leave behind one variable, presumably parallel to the one

bound by *who* in the sluice, and the stipulated movement of the PP will leave another, which will not be bound in the sluice:

- (7) [IP [DP someone] [IP John [PP without knowing who [VP was kissing t_{DP} t_{PP}] [VP was kissing t_{DP} t_{PP}]]]]

In the logical form in (7), there are four traces and three potential binders. So it seems that not only is there no apparent movement in sluicing-ACD, but there can't be any movement at all. Yet (5) is acceptable, so the question is what resolves the infinite regress.

2.3 Infinite Regress and Semantic Parallelism

The sluicing ACD example in (5) suggests that there must be a mechanism other than movement that resolves infinite regress. This in itself is not surprising, as Hornstein 1995 notes that there are other adjunct PP constructions in which movement is not apparent:

- (8) John [VP₁ [VP₂ worded the letter] [PP as carefully as Bill did [VP₃ e]]]

Hornstein observes that (8) can be resolved without movement as long as the adjunct PP is structurally outside of the antecedent VP, in this case, VP₂. Kennedy 1997 notes this observation, and then moves on to other cases of adjunct PPs. I take the lack of objection as tacit confirmation that movement is not necessary to resolve this instance ACD.

Unfortunately, Hornstein's structural analysis of ACD in (8) is not going to resolve sluicing-ACD. The antecedent for the gap is the entire IP. There is no structural position outside of the IP for the adjunct PP, therefore we would still expect an infinite regress. Fortunately, Merchant's analysis of sluicing has the same effect as Hornstein's structural analysis. Anticipating the discussion slightly, Merchant's semantic parallelism requirement allows the IP to serve as the antecedent of the gap in a swiping construction to the exclusion of an adjunct PP. Therefore, Merchant's semantic parallelism should also allow the IP to serve as antecedent to the exclusion of the PP in sluicing-ACD.

Building on his 2001 analysis of sluicing, Merchant 2002 addresses the subset of sluices in which a preposition follows the *wh*-word; Merchant calls this construction *swiping*:

- (9) Lois was talking, but God only knows who to.

Rosen (1976) initially observed that these constructions are ill-formed if the preposition appears in the antecedent to the gap:

- (10) a. *We were with somebody. I forget who with.
b. We were with somebody. I forget who.

This prohibition, however, is not absolute. There are acceptable examples with the preposition in the antecedent:

- (11) She fixed it with something, but God only knows what with.

This state of affairs for swiping is thus incredibly parallel to the state of affairs in sluicing-ACD: the antecedent of the gap in each construction must exclude the adjunct PP.

For Merchant (2001), sluicing is the PF deletion of the IP under identity with the antecedent clause. Crucially, the identity for Merchant is not formal identity, but rather a semantic identity along the lines of Schwarzschild 1999. This allows Merchant to analyze the antecedent of a sluice as the VP, because by assuming something along the lines of the VP Internal Subject Hypothesis, the VP is a full proposition:

- (12) She [_{VP1} [_{VP2} *t*_{she} fixed it] with something], but God only knows what with.

By selecting VP2 as the antecedent for the sluice, the preposition is no longer within the antecedent, and swiping is again possible. It is a small step to apply this parallelism requirement to sluicing ACD, in which VP2 serves as a semantic antecedent for the elided IP:

- (13) [_{IP} John [_{VP1} [_{VP2} *t*_{John} was kissing someone] [_{PP} without knowing who [_{IP} e]]]].

Thus it seems that although infinite regress is a problem for formal languages, natural languages come equipped with a solution, namely semantic parallelism, and consequently movement is no longer required for ACD constructions to avoid the problem of infinite regress.

2.4 When Movement is Necessary

Proposing that movement is not necessary to avoid an infinite regress does not necessarily imply that movement is never necessary to correctly resolve ACD. In particular, it seems that movement would still be required in relative clause ACD cases. In a standard relative clause ACD construction, there is no VP that can serve as the antecedent for the elided VP to the exclusion of the direct object relative clause:

- (14) John [_{VP} kissed everyone that Mary did [_{VP} e]]

So it seems that semantic parallelism will not suffice to create a parallel VP from which an antecedent may be found without inducing an infinite regress. In this case, movement is still required to avoid infinite regress.

However, as we have seen previously, in PP adjunct-ACD movement is not necessary to avoid infinite regress, either due to the Hornstein (1995) structural analysis or the semantic parallelism analysis advocated here:

ACD and Movement Reconsidered

- (15) John [_{VP1} [_{VP2} worded the letter] [_{PP} as carefully as Bill did [_{VP3} e]]]

The question then is whether there are any empirical consequences to this residual movement requirement.

Beginning with Baltin (1987), standard analyses of ACD have assumed that the constraints on the movement that is required to avoid infinite regress may have effects on the possible interpretation of the elided VP; such effects are generally called boundedness effects. For instance, in the ACD construction in (16a), the paraphrase in which the highest VP serves as the antecedent for the ellipsis is not possible (16b). Only an interpretation in which the lower VP is the antecedent is possible (16c):

- (16) a. Larson thought that Kollberg questioned the suspects Beck did.
b. #Larson thought that Kollberg questioned the suspects Beck thought that Kollberg questioned.
c. Larson thought that Kollberg questioned the suspects Beck questioned.

The impossibility of the higher VP serving as antecedent is generally attributed to the impossibility of the relative clause object moving above the higher VP. Since it cannot move out of the domain of the higher VP, any interpretation in which the higher VP serves as antecedent would result in an infinite regress. And if boundedness effects are indeed caused by the presence (and constraints) of movement, then the no-movement analysis presented above would predict no boundedness effects in adjunct-ACD cases. This indeed appears to be the case:

- (17) a. Larson thought that Kollberg questioned the suspects as fervently as Beck did.
b. Larson thought that Kollberg questioned the suspects as fervently as Beck thought that Kollberg questioned the subjects.
c. Larson thought that Kollberg questioned the suspects as fervently as Beck questioned the suspects.

The adjunct-ACD in (17a) can have both the paraphrase in (17b) in which the higher VP serves as the antecedent, and the paraphrase in (17c) in which the lower VP serves as the antecedent.

It should be noted, however, that there are adjunct-ACD cases in which boundedness effects do arise:

- (18) a. Larson thought that Kollberg questioned the suspects from the desk that Beck did.
b. #Larson thought that Kollberg questioned the suspects from the desk that Beck thought that Kollberg questioned the suspects from
c. Larson thought that Kollberg questioned the suspects from the desk that Beck questioned the suspects from.

This in itself is not very surprising given the interpretation of the ellipsis. In the good paraphrase in (18c), the ellipsis is actually interpreted as including the adjunct PP. Given that the adjunct PP is included in the antecedent of the ellipsis, it can't be the case that infinite regress was resolved through semantic parallelism, because the outer VP shell (VP2) of the lower VP was used as the antecedent:

- (19) [_{IP} Larson [_{VP1} thought that Kollberg [_{VP2} [_{VP3} questioned the suspects] [_{PP} from the desk that Beck did.]]]]

Therefore it follows that some sort of movement was necessary to avoid the infinite regress. More importantly, however, is the impossibility of VP3 serving as the antecedent in this case:

- (20) #Larson thought that Kollberg questioned the suspects from the desk that Beck questioned the suspects

This impossibility arises because VP3 does not contain a variable, and thus cannot be parallel to the elided VP without resulting in an illegitimate logical form. It seems, then, that the need of a variable in the antecedent (for interpretation) is enough to force a movement solution to the infinite regress problem, since movement is a variable creating operation.

2.5 ACD as Diagnostic for Semantic Parallelism

To recap, sluicing-ACD presents compelling evidence that movement cannot be the general-purpose solution to the infinite regress problem. Adopting Merchant's analysis of sluicing, a semantic parallelism requirement for ACD, is sufficient to resolve the infinite regress in most cases. In certain restricted cases, movement is still required for the ACD to be well-formed, such as when movement is required to create the antecedent variable.

An interesting consequence of the disassociation between movement and infinite regress is that it significantly constrains the possible sources of ungrammaticality in unacceptable ACD constructions. In particular, as long as the elided XP is outside of the antecedent VP, either through Merge or Move, the failure cannot be one of infinite regress, and must be one of parallelism, all things being equal. In the sections that follow, this situation will be exploited, as ACD will be used as a diagnostic for parallelism, or lack thereof, between A and A' copies.

3 Parallelism and the A/A' Distinction

3.1 Reconstruction

Lasnik 1998, building on work in Chomsky 1993/1995, raises the following (not uncontroversial) puzzle: QR displays reconstruction effects, whereas Raising does not. For instance, in (8) below, the covert QR of *every friend of John's* is not enough to

alleviate the Principle C violation, as if it is reconstructed back to its base position for the Principle C computation:

- (21) ??Someone introduced him_i to every friend of John's_i.

In the following examples, however, we see that Raising generally disallows reconstruction effects, such as failing to obviate a Principle B violation:

- (22) a. *John_i expected him_i to seem to me [IP t to be intelligent]
b. John_i expected Mary_j to seem [IP t_j to like him_i]

And in (23), there is no narrow scope reading available for the Raised quantifier:

- (23) Everyone seems not t_{everyone} to be there yet.
= #It seems that everyone isn't there yet.

This puzzle leads Lasnik to consider a radical solution: if copies are responsible for reconstruction, and Raising doesn't show reconstruction effects, then Raising does not leave behind a copy. Following standard assumptions, Lasnik assumes that the QR in (21) is A'-movement, and the Raising in (22) is A-movement, and thus reformulates his speculation: perhaps A'-movement leaves behind copies, while A-movement does not. While the ultimate status of these examples remains to be seen, of particular interest for the present purposes is the fact that Lasnik has framed the problem in terms of a difference between A and A'-copies.

3.2 Tough Movement

With one potential difference between A and A'-copies already highlighted by Lasnik 1998, and armed with the new ACD diagnostic, the next logical step is to apply the ACD diagnostic for parallelism to both A and A'-copies. In fact, ACD has already been applied to A'-copies numerous times: the standard analysis of ACD, and also the analysis of relative clause ACD presented in this paper, involve the QR of the relative clause. QR is generally accepted as a form of covert A'-movement, presumably leaving behind an A'-copy that is semantically parallel to the relative clause variable in the elided VP:

- (24) [DP Everyone that Mary did [VP kissed VBL₁]] [John [VP kissed COPY₁]]

Even covert wh-movement, another typical instance of A'-movement, seems to allow resolution of relative clause ACD, suggesting again that the A'-copy of wh-movement is parallel to the variable within the relative clause:

- (25) a. Which girl dated which boy that Mary did?
b. [CP [DP Which boy that Mary did [VP date VBL₁]] which girl [IP dated COPY₁]]

Unfortunately, directly testing the parallelism between relative clause variables and Lasnik's examples is impossible, as English does not have overt "object raising" in English. However, Lasnik's observation that A-copies tend to disallow reconstruction might offer a possible test case.

Tough Movement (TM) is the name commonly given to the transformation relating (26a) to (26b):

- (26) a. It is tough to please Oliver's mother.
b. Oliver's mother is tough to please.

While the precise analysis underlying this transformation has been a point of productive research for several decades, the general consensus is that the construction probably involves both A and A'-movement, as it displays both A and A' properties (see especially Chomsky 1981). For the present purposes, the interesting fact is that it has been claimed that TM does not allow scope reconstruction: the non-tough moved version in (27a) is ambiguous between the narrow-scope and wide-scope reading of *few girls*, whereas in (27b), only the wide-scope reading is available, suggesting a lack of reconstruction for Tough Movement (Postal 1974, Lasnik and Fiengo 1974):

- (27) a. It would be difficult for Jim to talk to few girls.
b. Few girls would be difficult for Jim to talk to.

3.3 The Interpretation of A and A' Copies

This lack of scope reconstruction suggests that TM is identical to Raising along the relevant dimension for the copy investigation initiated by Lasnik 1998. As such, it seems ripe for an ACD test:

- (28) a. It is tough to please everyone that you did.
b. *Everyone that you did is tough to please.

Example (28a) is a standard ACD construction using the *tough* predicate in the matrix clause, and is judged acceptable by my informants. However, the tough-moved version in (28b) is not judged acceptable.¹ Under the standard analysis, in which movement is required in ACD constructions to avoid infinite regress, it would be surprising to see an instance of overt movement destroying an otherwise acceptable ACD. However, under the account of ACD sketched out here, the unacceptability of (28b) would be due to a failure of parallelism between the copy of the tough-moved relative clause, and the variable within the relative clause:

- (29) *[_{IP} [_{DP} Everyone that you did [_{VP} please VBL₁]] is tough to [_{VP} please COPY₂]

¹ The non-ACD interpretation in which *did* is actually the past tense of the main verb *do* is completely acceptable (standard grammaticality judgment interview, N=11, non-linguist informants, 0 accepted the Tough Movement ACD construction).

So it appears that the QR copy in (24) and the WH copy in (25) are different from the TM copy in (28) at least two dimensions:

- | | |
|------------------|--|
| (30) QR/WH Copy: | Can be reconstructed
Satisfies semantic parallelism with RC variables |
| TM Copy: | Cannot be reconstructed
Does not satisfy semantic parallelism with RC variables |

These facts fall out if it is assumed that the A'-copies left behind by QR and WH-movement are different from the A-copies left behind by TM. Interestingly, both pieces of evidence for this difference are *interpretive*: scope reconstruction facts and semantic parallelism facts. This is the interesting fact about A and A'-copies: for both methods of investigation proposed in the literature, Lasnik's reconstruction effects and the ACD parallelism effects discussed here, there is no evidence for a syntactic distinction. While far from conclusive, this lack of evidence for a syntactic difference is supportive of the efforts within generative grammar to derive the differences between A and A'-movement from their obvious thematic, or interpretive, differences.

4. Predictions: The Copy Problem, and Overt A Copies

In the previous section, ACD was used to investigate the potential differences between A and A'-copies. Ultimately, it was concluded that there are definite differences, but those differences held at an interpretive level, not a syntactic level. In this section, two potential predictions of that proposal are addressed: the Copy Problem raised by Fox 2002, and the recent suggestion that the proforms in binding and control are actually instances of overt A-copies (e.g. Hornstein 1999, 2000).

4.1 The Copy Problem

Fox 2002 raises an interesting problem for the standard analysis of ACD: specifically, he points out that the standard analysis of ACD is not compatible with the Copy Theory of Movement. Chomsky 1993/1995 notes that certain cases of movement, specifically wh-movement in (31a) and QR in (31b), are unable to rectify a Condition C violation:

- (31) a. ??Guess [which friend of John's_i] he_i visited.
b. ??Someone_i introduced him to every friend of John's_i.

To account for the facts in (31), Chomsky proposes redefining movement, such that a complete copy of the moved item remains in its base position, not just a trace. This copy would theoretically retain all of the semantic properties of the original, including binding properties, thus explaining the fact that wh-movement and QR cannot rectify a Condition C violation.

As Fox 2002 observes, applying this Copy Theory of Movement to the standard analysis of ACD creates an interesting tension between the problem of infinite regress, and the common assumption that syntactic (formal) parallelism holds between the VP in

the matrix clause and the VP in the relative clause. If one assumes that the antecedent and the ellipsis site must be syntactically parallel, then the infinite regress problem re-emerges under the copy theory:

- (32) [_{DP} Everyone that Mary did [_{VP} **kissed everyone that Mary did [e]**]] [_{John} [_{VP} **kissed everyone that Mary did [e]**]]

Alternately, if one assumes that infinite regress must be avoided, parallelism will not hold:

- (33) [_{IP} [_{DP} Everyone that Mary did [_{VP} kissed **everyone**]] [_{IP} [_{John} [_{VP} kissed **everyone that Mary did**]]]]

Thus there is a fundamental tension between the infinite regress problem and the parallelism requirement under the copy theory of movement.

Fox proposes a solution to this problem, which I call the Rightward QR approach, because it assumes that QR is a type of rightward movement, much like a form of extraposition. The rightward QR approach also assumes the Lebeaux (1988) late insertion of adjuncts – that adjuncts may be inserted at any point in the derivation. With these two assumptions in hand, a Rightward QR derivation for direct object ACD would look something like this:

- (34) a. John likes every boy
b. [John likes every boy] [every boy]
c. [John likes every boy] [every boy [that Mary does <likes every boy>]]

(34a) represents a certain point reached in the derivation. In step (34b), *every boy* undergoes rightward QR, leaving behind a copy in the matrix VP. In (34c), the relative clause, which Fox assumes to be an adjunct, is inserted into the derivation to the right of the head of the QR chain of *every boy*. Assuming that the tail of this chain is pronounced, this derives the standard case of ACD without introducing a failure of syntactic parallelism, because at the point that *every boy* is moved, there is no relative clause.

Interestingly, the Rightward QR approach appears to offer a solution to the Tough Movement problem as well: because the relative clause is inserted as an adjunct to a rightward moved DP, it must be the case that the relative clause will be the final element in the sentence. In this way, there is an operational constraint against the gap preceding the antecedent in an ACD construction. Since the Tough Movement examples from section 2 involve the gap preceding the antecedent, they would presumably be excluded:

- (35) *Everyone that you did is tough to please.

However, the string in (35) suggests that the relative clause was inserted prior to the Tough Movement. Given the possibility of late insertion of the relative clause, there is a

potential derivation involving Tough Movement in which the operational constraint is respected (in which the gap follows the antecedent):

- (36) a. is tough to please everyone
b. [[Everyone is tough to please everyone]
c. [Everyone is tough to please everyone] everyone]
d. [Everyone is tough to please everyone] everyone that you did]
e. *Everyone is tough to please that you did

In step (36b) *everyone* has undergone Tough Movement, followed by rightward QR in step (36c). In step (36d) the relative clause is inserted, resulting in the unacceptable string in (36e). So it seems that the rightward QR approach, while potentially resolving the Copy Problem, cannot be extended to the Tough Movement Problem.

In fact, the analysis presented within this paper has already presented an alternate solution to the Copy Problem: the copy left behind by QR must be semantically parallel to the variable within the relative clause.

- (37) [DP Everyone that Mary did [VP kissed VBL₁]] [John [VP kissed COPY₁]]

The problem that Fox (2002) raised, that the COPY would either cause infinite regress or fail formal parallelism, no longer arises. Infinite regress may be satisfied through movement of the relative clause as commonly assumed, and parallelism may be satisfied at a *semantic* level if the syntactic copy is *interpreted* as a variable (similar to the LF under the Trace Theory of Movement). With parallelism pushed back to the semantic level, there is no longer any paradox.

4.2 Overt A-Copies

Turning now to the question of binding and control, the analysis presented in this paper would predict that if these proforms were actually overt A-copies, they too should show the same interpretive asymmetries with A'-copies in ACD. At first glance, it seems that Anaphors and Pronouns disallow ACD, while PRO allows it:

- (38) a. *Everyone that Bill does likes himself
b. *Everyone that you do thinks that I like him
c. I persuaded everyone that should to leave his wife

However, as Norbert Hornstein points out (p.c.), an interesting pattern emerges with so-called bridge-verbs:

- (39) a. *Everyone that Bill does likes himself
a'. Everyone that needs to likes himself
b. *Everyone that you do thinks that I like him
b'. *Everyone that you want to thinks that I like him

- c. I persuaded everyone that should to leave his wife
- c'. I persuaded everyone that wanted to to leave his wife

This falls out directly from the analysis presented in this paper. The relevant structures are the following:

- (40)
- a. *[Everyone that Bill does [likes VBL_{RC}]] likes himself
 - a'. [Everyone that VBL_{RC} needs PRO to [like VBL_A]] likes himself

 - b. *[Everyone that you do [like VBL_{RC}]] thinks that I like him
 - b'. *[Everyone that you want PRO to [like VBL_{RC}]] thinks that I like him

 - c. I persuaded [everyone that VBL_{RC} should [leave VBL_A wife]] PRO to leave his wife
 - c'. I persuaded [everyone that VBL_{RC} wanted PRO to [leave VBL_A wife]] PRO to leave his wife

In (40a) and (40b) semantic parallelism is computed with an A-variable (*himself* and *him*) and an A'-variable (VBL_{RC}), hence the failure of ACD. In (40c), semantic parallelism is computed between the A-variable *his* and another A-variable (VBL_A); the RC variable is actually in the subject position, hence successful resolution of the ACD.

In (40a'), the structure has changed such that the RC variable is now not the variable being compared with the A-variable (in fact the RC variable is controlling PRO). The A-variable is now being compared to a variable being bound by PRO, or in other words, another A-variable. But (40b') is not so lucky: in (40b') the RC variable has not changed position (PRO is being controlled by *you*), and is still being compared with the A-variable, hence unacceptability due to a failure of parallelism. And (40c') is basically unchanged: semantic parallelism is computed between the A-variable *his* and another A-variable, while the RC variable is safely sitting in subject position, and controlling the new PRO.

So it appears that overt A-variables are just like covert A-variables in that they are non-parallel to A'-variables with respect to the semantic parallelism of ACD. While not totally surprising, it does lend support to the analysis presented in this paper for ACD, and possibly some support to movement theories of construal.

6. Conclusion

This paper has argued for one simple point: that there are no obvious syntactic differences between A and A'-copies, but at least two potential facts pointing to semantic differences. Along the way, this paper has argued for resolution of infinite regress without movement, resolution of the Copy Problem without Rightward QR, and has lent support to movement theories of construal.

References

- Baltin, M. 1987. Do Antecedent-Contained Deletions Exist?. *Linguistic Inquiry* 18: 279–295.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Fox, Danny. 2002. Antecedent Contained Deletion and the Copy Theory of Movement. *Linguistic Inquiry* 33: 63-96.
- Freidin, Robert. 1986. Fundamental issues in the theory of binding. In *Studies in the acquisition of anaphora*, ed. by Barbara Lust, 151–188. Dordrecht: Reidel.
- Hornstein, Norbert. 1995. Logical Form: From GB to Minimalism. Oxford: Blackwell.
- Hornstein, Norbert. 1999. Movement and Control. *Linguistic Inquiry* 30: 69-96.
- Hornstein, Norbert. 2001. *Move! A Minimalist Theory of Construal*. Oxford: Blackwell.
- Kennedy, Christopher. 1997. Antecedent-contained deletion and the syntax of quantification. *Linguistic Inquiry* 28: 662-688.
- Larson, R. and R. May. 1990. Antecedent Containment or Vacuous Movement: Reply to Baltin. *Linguistic Inquiry* 21:103-122.
- Lasnik, H., and R. Fiengo. 1974. Complement object deletion. *Linguistic Inquiry* 5:535–572.
- Lasnik, Howard. 1998. Some reconstruction riddles. In *Proceedings of the 22nd Annual Penn Linguistics Colloquium*, ed. by Alexis Dimitriadis, Hikyoung Lee, Christine Moisset, and Alexander Williams, 83–98. University of Pennsylvania Working Papers in Linguistics 5.1. Philadelphia: University of Pennsylvania, Penn Linguistics Club.
- Lebeaux, David. 1988. Language acquisition and the form of the grammar. Doctoral dissertation, University of Massachusetts, Amherst.
- May, Robert. 1985. *Logical Form: Its Structure and Derivation*. Cambridge, Mass: MIT Press.
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford University Press: Oxford.
- Merchant, Jason. 2002. Swiping in Germanic. In *Studies in comparative Germanic syntax*, ed. J.-W. Zwart and W. Abraham, 289-315. Amsterdam: John Benjamins.
- Postal, Paul M. 1974. *On raising*. Cambridge, Mass.: MIT Press.
- Sag, Ivan. 1976. Deletion and Logical Form. Doctoral Dissertation. MIT, Cambridge, Mass.
- Schwarzschild, Roger. 1999. GIVENness, AVOIDF, and other constraints on the placement of accent. *Natural Language Semantics* 7: 141-77.
- Yoshida, Masaya. (2003). Adjunct Sluicing and ACD. UMD Syntax Lunch.

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