QUESTIONING SUPERIORITY[*]

HADAS KOTEK
McGill University

1 Introduction

This paper studies the distribution of *intervention effects* in English questions. Descriptively, intervention effects occur whenever an *intervener* c-commands an in-situ *wh*-word at LF. Example (1) illustrates an intervention effect in a multiple *wh*-question in German: (1a) shows the basic word order in questions without any interveners. If an intervener (here: **no one**) is added into the structure in a position that c-commands the in-situ *wh*, the result is ungrammaticality, (1b). This ungrammaticality can be avoided by scrambling the in-situ *wh* above the intervener, (1c).[1]

(1) **German: Intervention effects avoided through scrambling (Beck, 1996)**

    a. ✓ *Wer* hat Luise *wo*   angetroffen?
       who has Luise where met
       'Who met Luise where'?

    b. ?? *Wer* hat **niemanden** *wo*   angetroffen?
       who has no-one   where met

    c. ✓ *Wer* hat *wo*   **niemanden** ____ angetroffen?

       who has where no-one   met
       'Who met no one where'?

Pesetsky (2000) provides an extensive study of intervention effects in English questions. He observes a correlation between superiority and intervention effects in questions with D-linked *wh*-phrases. Motivating examples are given in (2): (2a–b) show that English generally allows superiority violations. (2c–d) show that when an intervener is introduced into the question, only the superiority-obeying structure is grammatical. The superiority-violating question is ungrammatical.

[1]Throughout, interveners are bolded. Overt movement is indicated with solid arrows and covert movement is indicated with dashed arrows.

(2) **Superiority-violating questions are possible, but sensitive to intervention:**[2]

   a.   Which boy ____ read *which* book?   ✓ superiority-obeying, no intervener

   b.   Which book did *which* boy read ____?   ✓ superiority-violating, no intervener

   c.   Which boy did**n't** ____ read *which* book?   ✓ superiority-obeying, intervener

   d. ?? Which book did**n't** *which* boy read ____?   * superiority-violating, intervener

Beside negation, other operators that give rise to intervention effects include **only**, **very few**, **never**, and **no one**, as shown in examples (3)–(6) below from Pesetsky (2000).[3]

Intervention effects with *only, very few, never, no one* follow the same pattern:

(3) a.   Which girl did **only** Mary introduce ____ to *which* boy?

   b. ?? Which boy did **only** Mary introduce *which* girl to ____?

(4) a.   Which picture did **very few** children want to show ____ to *which* teacher?

   b. ?? Which teacher did **very few** children want to show *which* picture to ____?

(5) a.   Which student did he **never** claim ____ would talk about *which* topic?

   b. ?? Which topic did he **never** claim *which* student would talk about ____?

(6) a.   Which book did **no one** give to *which* student?

   b. ?? Which student did **no one** give *which* book to ____?

To explain the relation between superiority and intervention effects, Pesetsky (2000) argues that superiority-obeying and superiority-violating questions are derived from different structures. Of particular importance is the location of the (surface) in-situ *wh*-phrase: the in-situ *wh*-phrase covertly moves to C at LF in a superiority-obeying question, but remains in its base-generated position in a superiority-violating question. The proposed LFs for (2a–b) are illustrated in (7a–b):

(7) **LF representations of superiority-obeying and superiority-violating questions:**

   a. [CP which boy *which* book   C [TP ____ read ____]]   superiority-obeying
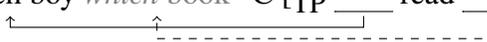
   b. [CP which book   C [TP *which* boy read ____]]   superiority-violating

---

[2]Pesetsky (2000) reports that in cases of intervention in multiple *wh*-questions such as (2), many speakers report that the question is ungrammatical while some others report that the question's single-pair reading is maintained (ia) but its pair-list reading is lost (ib). See Dayal (1996) for more discussion of the semantics of the readings, Pesetsky (2000), Kotek (2014a) for a discussion of the judgments, and Beck (1996) for a similar observation in German.

(i) **Single-pair and pair-list readings of *Which boy didn't read which book?*:**

   a. John didn't read Robinson Crusoe.

   b. John didn't read Robinson Crusoe, Bill didn't read Moby Dick, and Fred didn't read Don Quixote.

[3]The characterization of the set of interveners has been a source of debate in recent literature. Beck (2006) and Beck and Kim (2006) have identified a number of focus-sensitive operators, including *only, also, even*, and negation, as a relatively cross-linguistically stable set of interveners. Other approaches to the nature of intervention and interveners can be found in Beck (1996), Grohmann (2006), Tomioka (2007), Mayr (2014), Li and Law (2014), a.o.

The availability of covert movement in superiority-obeying questions leads to the prediction that only superiority-violating questions—where the (surface) in-situ *wh* is truly LF-in-situ—will exhibit intervention effects. The general intervention schema is given in (8).

(8) **The intervention schema (Pesetsky, 2000, Beck, 2006):**

    a.   * LF: [$_{CP}$ C ... **intervener** ... *wh*]

    b.   ✓ LF: [$_{CP}$ *wh* C ... **intervener** ... _____]

2 Intervention Does Not Correlate With Superiority

In this section I show that intervention does not correlate with superiority in English. Instead **intervention correlates with covert movement possibilities** for the (surface) in-situ *wh*-phrase. I first show that intervention re-emerges in superiority-obeying questions if covert *wh*-movement is restricted, and then that intervention can be avoided in superiority-violating questions if *wh* is given wide scope over the intervener or if the intervener is moved out of the way.

These findings provide new support for Pesetsky's (2000) classic account of the facts in (2)–(6), which crucially links intervention effects with the movement options available to the phonologically in-situ *wh*-phrase in a multiple question.

2.1 Intervention in Superiority-Obeying Questions

Pesetsky proposes that *wh*-in-situ in superiority-obeying question is able to evade intervention through covert movement above the intervener at LF. In this section I show that if movement is blocked, intervention re-emerges. I introduce three ways of blocking movement, using NPIs, focus association, and bound variables. The logic of the argument is as follows: (a) find an element X which must take scope at a known position at LF; (b) construct a *wh*-phrase containing X; (c) covert *wh*-movement is now restricted to the scope position of X; (d) hence, expect to observe intervention effects if an intervener is introduced above the position at which the *wh*-phrase takes scope.[4]

2.1.1 Restricted Movement and Intervention Effects: NPIs

I begin by using Negative Polarity Items (NPIs) to restrict covert *wh*-movement. As is well-known, NPIs must be licensed by a downward entailing environment (Ladusaw, 1980). Example (9) illustrates this with negation as the licensor. Notice that the multiple question itself is not a sufficient licensor in the absence of negation.

(9) **NPIs are licensed in downward entailing environment:**

    a.   Mary *(**didn't**) read <u>any</u> books.

    b.   Which boy {✓ **didn't** give, *gave} *which* girl <u>any</u> flowers?

If an NPI occurs inside a *wh*-phrase, this *wh*-phrase will not be able to move out of the scope of the NPI's licensor. If this licensor is negation, *wh* must remain below negation at LF.

---

[4]In all the cases presented below, the barrier for movement also acts as the intervener. See Kotek (2014b) for a case where the two are distinct: syntactic islands block movement, and interveners are then introduced at different positions. Only interveners occurring *above* the island cause intervention, not interveners occurring *inside* the island.

Recall, moreover, that negation acts not only as an NPI licensor, but also as an intervener in English (see 2c–d). Hence, we predict an intervention effect in such a configuration: the (surface) in-situ *wh*-phrase may be able to undergo covert movement, but the target position of movement is necessarily below the intervener, leading to the illicit intervention configuration in (8a).[5] Examples (10)–(11) instantiate this configuration. Example (10) provides a baseline to show that an NPI must be licensed by c-commanding negation. Examples (11a–b) show that intervention effects are indeed observed in a superiority-obeying question, if an NPI occurs inside the (surface) in-situ *wh*-phrase.

(10) **NPI licensed in question when negation is present:**
Which boy {✓ **didn't** read, *read} [a book about <u>any</u> president]?

(11) **NPI restricts covert movement of *wh*-in-situ, causing an intervention effect:**
   a. ✓ Which boy **didn't** read [*which* book about a/some president]?
   b. ?? Which boy **didn't** read [*which* book about <u>any</u> president]?

2.1.2   Restricted Movement and Intervention Effects: Focus Association

The next argument will come from the behavior of Association with Focus. The interpretation of focus-sensitive operators such as *only* depends on the presence of a F-marked constituent within the scope of the operator. F-marked constituents outside of that scope do not contribute to the evaluation of the operator. This is explained through the *Principle of Lexical Association*:

(12) **The Principle of Lexical Association (PLA) (Tancredi, 1990:p. 30):** An operator like *only* must be associated with a lexical constituent in its c-command domain.

Evidence motivating this structural restriction on Association with Focus is shown in (13)–(14). The *wh*-question in (13a) is ungrammatical with the intended interpretation. The corresponding echo question in (13b), with the F-marked constituent in the scope of the operator, is grammatical. Similarly, the topicalization example in (14a) is ungrammatical, but the corresponding example with in-situ focus is grammatical, (14b) (F-marked constituents are underlined).

(13) **F-marked constituents may not move out of the scope of *only*:**
   a. * <u>Who</u>$_F$ do you **only** like ____?
      Intended: Who *x* is such that you like only *x*?
   b. ✓ You **only** like <u>who</u>$_F$?
(14) a. * <u>Mary</u>$_F$, John **only** likes ____.
      Intended: 'As for Mary, John only likes her$_F$ (and no one else).'
   b. ✓ John **only** likes <u>Mary</u>$_F$.

Given the PLA, if an F-marked constituent occurs inside a *wh*-phrase, this *wh*-phrase will not be able to move out of the scope of the associating operator. If this licensor is *only*, *wh* must remain below *only* at LF. However, recall that *only* acts not only as an NPI licensor, but also as an intervener (see 3a–b). Hence, we predict an intervention effect in such a configuration. Example (15) instantiates this configuration: intervention effects are observed in a superiority-obeying question, if F-marking is introduced inside the (surface) in-situ *wh*-phrase.

---

[5]Alternatively, if the *wh* moves above the intervener to avoid the intervention configuration, the NPI will not be licensed and we again predict ungrammaticality.

(15)   **The PLA restricts covert movement of *wh*-in-situ, causing an intervention effect:**

    a.   <u>Baseline:</u> I can tell you *which* student read *which* book.

    b.   <u>Context:</u> The students in the class were supposed to read one book *and* one article about syntax. However, everyone got confused and read one book *or* one article. I've been reading everyone's squibs. I've finished all the ones about books, so:

        ?? I can tell you which student **only** read [*which* <u>book</u>$_F$ (about syntax)].

2.1.3 Restricted Movement and Intervention Effects: Bound Variables

Finally, I use bound variable interpretations to restrict the possible movement of the (surface) in-situ *wh*-phrase. In particular, I introduce a pronoun into the *wh*-phrase that is to be bound by a c-commanding quantifier. In order to establish the binding relationship, it is necessary for the pronoun to remain within the c-command domain of the quantifier. Movement above this position is thus restricted. As in the cases we saw above, when movement is restricted, intervention effects re-emerge above the highest possible landing site of movement in superiority-obeying questions.

Example (16) is one relevant test case. Example (16a) provides a baseline for a superiority-obeying multiple question with an intervener, *no girl*. As with other such examples (cf. (2)–(6) above), the pair-list reading of the question is available despite the presence of the intervener—that is, we do not observe an intervention effect. Examples (16b–c) contain a reflexive and a bound pronoun, respectively, occurring inside the (surface) in-situ *wh*-phrase in the question. The binder in both cases is the DP *no girl*, which also serves as an intervener (see also (6a–b)). These examples are judged by native speakers as degraded.

(16)   **Bound variable interpretation blocks covert *wh*-movement and lead to intervention:**

    a.   ✓ Which boy gave **no girl** [*which* picture of Kennedy]?

    b.   ?? Which boy gave **no girl** [*which* picture of <u>herself</u>]?

    c.   ?? Which boy gave **no girl** [*which* picture of <u>her best friend</u>]?

At least some speakers prefer an interpretation of these questions that appeals to a functional reading. If this is so, the examples in (16) may not be a fair test case for those speakers. For these speakers, I provide an additional example, (17). (17a) provides a baseline for a superiority-obeying question with an intervener, *only Ms. Jones*. Like other examples of this kind, it is grammatical despite the presence of the interevner. Example (17b) is minimally different from this baseline in that it contains a bound pronoun occurring inside the (surface) in-situ *wh*-phrase in the question. Like in (16), the binder of this pronoun is the intervener, *only Ms. Jones*, hence blocking covert *wh*-movement above the intervener and forcing the intervention configuration (8a). Although both the baseline (17a) and the test sentence (17b) are quite complex, speakers report a contrast between these two examples.

(17)   **Bound variable interpretation blocks covert *wh*-movement and lead to intervention:**

    a.   ✓ Which parent believed that **only Ms. Jones** praised [*which* of the students]?

    b.   ?? Which parent believed that **only Ms. Jones** praised [*which* of <u>her</u> students]?

2.2 Avoiding Intervention in Superiority-Violating Questions

In this section I turn to the second half of Pesetsky's correlation: superiority-violating questions are subject to intervention effects. Following Pesetsky, this is because the (surface) in-situ *wh*-phrase in a superiority-violating question is interpreted in-situ at LF, and cannot covertly move above interveners. Below I show that intervention can be avoided in superiority-violating questions, if (a) the intervener can scope out of the question; (b) the intervener can reconstruct below the in-situ *wh*; or (c) the in-situ *wh* can be given exceptionally wide scope.

2.2.1 No Intervention if Intervener Scopes Out of Question

The first observation, that intervention is avoided if the intervener is able to scope out of the question is already found in Pesetsky (2000). Schematically, the relevant LF is shown in (18): the intervener is no longer in the way, and therefore the intervention schema in (8) is avoided.

(18)   **Avoiding intervention when the intervener scopes out of the question:**
       LF: $\checkmark$ **intervener** [$_{CP}$ wh$_2$ C ... **intervener** ... wh$_1$ ... t$_2$

The ability to scope out of the question is a property of universal quantifiers. Consider first the superiority-obeying question in (19), which has two possible readings. The first (19a) is a list of triples, achieved by assigning *everyone* wide scope over the question. The second (19b) is a list of pairs, achieved by assigning *everyone* narrow scope in its pronounced position. Pesetsky (2000) notes that the superiority-violating question (20) only has one reading, described in (19a).

(19)   *Everyone* **scopes out of a superiority-violating question to avoid intervention:**
       Which newspaper did **everyone** write to _____ about *which* book?
       a. Wide-scope answering pattern ($\forall$ > *newspaper-book pairs*):
           Bill wrote to the New York Times about book X,
           Mary wrote to the Boston Globe about book Y, and
           Tom wrote to the Maquoketa Sentinel about book Z.
       b. Narrow-scope answering pattern (*newspaper-book pairs* > $\forall$):
           Everyone wrote to the New York Times about book X,
           everyone wrote to the Boston Globe about book Y, and
           everyone wrote to the Maquoketa Sentinel about book Z.

(20)   Which book did **everyone** write to *which* newspaper about ____?
       Only has answer pattern a, but not b.

Following Beck (1996), who shows similar behavior in German, Pesetsky argues that this is an intervention effect: *everyone* must move out of the way the in superiority-violating question, to avoid an intervention effect. Moreover, Pesetsky shows that floating the quantifier (here: *each*) fixes its scope, thus preventing it from moving out of the way of the in-situ *wh*. As a result, the intervention configuration (8) cannot be avoided, and the result is an intervention effect.

(21)   **Floated quantifier blocks wide scope for *each*, leading to intervention:**
       ?? Tell me which book the kids will **each** try to persuade *which* adult to read ____.

Compare this with the baseline in (22), where the quantifier is not floated and a wide scope reading for "each of the kids" is available.[6]

(22)   **Wide scope available if *each* is not floated (Seth Cable, p.c.):**
       ✓ Tell me which book **each** of the kids will try to persuade *which* adult to read ____.

2.2.2   No Intervention if Intervener Reconstructs Below (Surface) In-Situ *Wh*

A second way to avoid intervention in superiority-violating question comes about if the intervener is able to reconstruct below the in-situ *wh*, thus again avoiding the intervention configuration in (8).

(23)   **Avoiding intervention when the intervener reconstructs below in-situ *wh*:**
       LF: ✓ $[_{CP}$ wh$_2$ C ... intervener ... wh$_1$ ... t_2 **intervener**

We begin with the baseline in (24), in which *all* is pronounced in an unraised position. This question has the meaning that we are after: it is a request for topic-professor pairs, such that the professor thought that all the students enjoyed that topic—that is, a list-of-pairs reading.[7]

(24)   **Baseline: Superiority-violating question with a raising predicate and low *all*:**
       Context: The first-year students took several classes this past semester, taught by different professors. Each professor thought that the students particularly enjoyed one topic that she taught. Tell me,
       ✓ Which topic did it seem to *which* professor that **all** of the students enjoyed ____?

Example (25) provides a second baseline, showing that a raised universal is generally able to reconstruct and take narrow scope in our test environment.

(25)   **Baseline: *All* can reconstruct to base position, inverse scope possible:**
       Context: The first-year students took several classes this past semester, taught by different professors. As their TA, I know that:
       [All of the students]$_1$ seemed to some professor t_1 to have enjoyed learning about binding.
       ✓ $\forall > \exists$, ✓ $\exists > \forall$

Example (26) provides the crucial test-case. When read with same context as in (24), supporting the list-of-pairs reading with narrow scope for the quantifier, the question is judged as grammatical, despite the (surface) intervening quantifier:

(26)   **Superiority-violating question with raised *all* can have reconstructed reading:**
       ✓ Which topic did **all** of the students seem to *which* professor to have enjoyed ____?

---

[6]Yet another case of missing intervention effects in the context of frozen scope in double object constructions (Bruening, 2001) was brought to my attention by an anonymous reviewer, with a proposed solution involving movement of the intervener outside the question, to avoid the intervention configuration. Space considerations prevent me from further investigating this very intriguing idea, which, if correct, would provide additional support for the proposal I am advancing here.

[7]A parallel grammaticality pattern to (24)–(28) obtains with the universal quantifier *each*.

That is, we have successfully avoided intervention, despite appearing to have an intervention configuration on the surface. However, at LF, the intervener is given narrow scope, below the in-situ *wh*. Notice that when the quantifier is floated, preventing it from reconstructing to its base position, the question is judged as degraded, and the list-of-pairs reading is lost.

(27) **Intervention effects reemerge with floated *all*:**

  ?? Which topic did the students **all** seem to *which* professor to have enjoyed ____?

The question again becomes grammatical if the quantifier is floated. The narrow scope reading for *all* now becomes not only available but required.

(28) **Intervention effects disappear if *all* is floated below *wh*:**

  ✓ Which topic did the students seem to *which* professor to have **all** enjoyed ____?

2.2.3 No Intervention if (Surface) In-Situ *Wh* Scopes Above Intervener

Finally, although—following Pesetsky (2000)—*wh*-in-situ in superiority-violating questions do not undergo covert *wh*-movement, we predict that intervention can be avoided if *wh* can be assigned wide scope above an intervener through non-interrogative movement.

  It is well known that Right-Node Raising (RNR) constructions allow exceptional extraction of a *wh*-element across certain islands (Bachrach and Katzir, 2009:, a.o.):[8]

(29) **RNR allows for exceptional extraction of *wh*-elements out of islands:**

  a. * Which book did John meet the man who wrote *t* ?

  b. ✓ Which book did [John meet the man who wrote ____], and [Mary meet the man who published ____] *t*?

It is additionally possible to extract only part of a RN, leaving overt material on the right. The conjuncts in (30) contain relative clause islands, making it unlikely that the *wh*-phrase was extracted before RNR applied to the remnant. Instead, it appears that the availability of RNR facilitates the exceptional movement.

(30) **Movement can target just part of the *wh*-phrase:**

  Which animal did John say that Mary knew [a man who wrote], and [a woman who published ____] an encyclopedia article about t_1?

Given this state of affairs, we predict that a multiple question with an RNR construction should give an in-situ *wh* exceptionally wide scope, allowing it to evade intervention effects in superiority-violating questions. This is indeed the case, as exemplified in examples (31)–(32).

(31) **No intervention in superiority-violating question with RNR:**

  a. ?? Which book did **only John** allow *which* student to read ____?

  b. ✓ Which book did [**only John** allow ____], and [**only Mary** prohibit ____], *which* student to read *t*?

---

[8]For notational convenience, I am illustrating the fact that the RN is shared across both conjuncts with a ____, and the exceptional wide scope (which feeds *wh*-movement) with a *t*.

(32)   a.   ?? Which topic did he **never** claim *which* student would talk about ____?

     b.   ✓ Which topic did [John **never** claim ____], and [Mary **never** promise ____], (that) *which* student would talk about *t*?

See Branan (this volume) for two additional instances of *wh*-in-situ undergoing covert movement through non-interrogative movement in superiority-violating questions. In particular, Branan discusses extraposition and parasitic gaps, which are both shown to license exceptional movement of an otherwise in-situ *wh*-phrase in a superiority-violating question. Questions containing these triggers of non-interrogative movement exhibit exceptional licensing of Antecedent Contained Deletion and an exceptional insensitivity to intervention effects, two hallmarks of interpretation of *wh*-in-situ through (covert) movement.

3   Intervention Correlates With Availability of Covert Movement

The data presented in section 2 above supports the following generalization: **Intervention effects occur whenever *wh*-movement is restricted, forcing a *wh* element to be interpreted below an intervener at LF**. Although this pattern normally correlates with superiority, this correlation is only apparent. What matters is only the movement options available to *wh*-in-situ: if movement above the intervener is possible, intervention is avoided. If movement is blocked, intervention occurs.

I have shown that Grammar possesses several strategies for avoiding intervention effects. In superiority-obeying questions, we normally have the option of covertly moving the (surface) in-situ *wh*-phrase to C, above any potential interveners in the question (33b), as proposed in Pesetsky (2000). Only when this movement is restricted do we observe intervention effects in superiority-obeying questions. In superiority-violating questions, covert *wh*-movement is not available, but other operations may still be used to evade the intervention configuration. One option is to give *wh*-in-situ wide scope above the intervener through non-interrogative movement, as in the case of Right Node Raising and as observed overtly in the case of scrambling in German (33c). Alternatively, we may scope the intervener out of the way, either above the question or below *wh*-in-situ (33d–e).

(33)   **The extended intervention schema:**

     a.   * LF: [$_{CP}$ C ... **intervener** ... *wh*]

     b.   ✓ LF: [$_{CP}$ *wh*   C ... **intervener** ... ____]

     c.   ✓ LF: [$_{CP}$ C ... *wh*   **intervener** ... ____][9]

     d.   ✓ LF: **intervener**   [$_{CP}$ C ... intervener ... *wh*]

     e.   ✓ LF: [$_{CP}$ C ... intervener ... *wh* ... **intervener**]

The fact that Grammar provides us with multiple ways to "fix" the structure makes intervention a rather infrequent occurrence. Only when no solution is possible—and the structure in (33a) is

---

[9]See Kotek (2014a) for a proposal that, in fact, covert movement in English always resembles scrambling in German, hence assimilating the structures in (33b) and (33c).

forced—do we observe an intervention effect. This may help explain why judgments relating to intervention effects are often quite subtle: the phenomenon is both rare and lends itself to a variety of structural solutions avoiding the ungrammaticality.

References

Bachrach, Asaf, and Roni Katzir. 2009. Right-node raising and delayed spellout. In *Interphases: Phase-theoretic investigations of linguistic interfaces*, ed. Kleanthes K. Grohmann. Oxford University Press.

Beck, Sigrid. 1996. Quantified structures as barriers for LF movement. *Natural Language Semantics* 4:1–56.

Beck, Sigrid. 2006. Intervention effects follow from focus interpretation. *Natural Language Semantics* 14:1–56.

Beck, Sigrid, and Shin-Sook Kim. 2006. Intervention effects in alternative questions. *Journal of Comparative German Linguistics* 9:165–208.

Bruening, Benjamin. 2001. QR obeys superiority: Frozen scope and ACD. *Linguistic Inquiry* 32:233–273.

Dayal, Veneeta. 1996. *Locality in wh quantification*. Kluwer Academic Publishers.

Grohmann, Kleanthes K. 2006. Top issues in questions: Topics—topicalization—topicalizability. In *Wh-movement: Moving on*, ed. Lisa Lai-Shen Cheng and Norbert Corver. MIT Press.

Kotek, Hadas. 2014a. Composing questions. Doctoral Dissertation, Massachusetts Institute of Technology.

Kotek, Hadas. 2014b. Intervention out of islands. In *Proceedings of NELS 44*, ed. Leland Kusmer and Jyoti Iyer, Vol. 1, 234–246. Amherst: GLSA.

Ladusaw, William A. 1980. *Polarity sensitivity as inherent scope relations*. Garland Publishing.

Lebeaux, David. 2009. *Where does binding theory apply*. Linguistic Inquiry Monographs. MIT Press.

Li, Haoze, and Jess Law. 2014. Generalized focus intervention. In *Proceedings of SALT 24*, 473–493.

Mayr, Clemens. 2014. Intervention effects and additivity. *Journal of Semantics* 31:513–554.

Pesetsky, David. 2000. *Phrasal movement and its kin*. Cambridge, Mass.: MIT Press.

Tancredi, Chris. 1990. Not only EVEN, but even ONLY. Manuscript, MIT.

Tomioka, Satoshi. 2007. Pragmatics of LF intervention effects: Japanese and Korean interrogatives. *Journal of Pragmatics* 39:1570–1590.