- Gribanova, Vera. To appear. Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. *Natural Language and Linguistic Theory* 31(1).
- Hoji, Hajime. 1998. Null object and sloppy identity in Japanese. *Linguistic Inquiry* 29:127–152.
- Kazenin, Konstantin. 2006. Polarity in Russian and typology of predicate ellipsis. Ms., Moscow State University.
- Kim, Soowon. 1999. Sloppy/Strict identity, empty objects, and NP ellipsis. Journal of East Asian Linguistics 8:255–284.
- McCloskey, James. 2011. The shape of Irish clauses. In *Formal approaches to Celtic linguistics*, ed. by Andrew Carnie, 143–178. Newcastle upon Tyne: Cambridge Scholars Publishing.
- McShane, Marjorie. 2005. A theory of ellipsis. Oxford: Oxford University Press.
- Otani, Kazuyo, and John Whitman. 1991. V-raising and VP-ellipsis. Linguistic Inquiry 22:345–358.
- Payne, John R. 1985. Complex phrases and complex sentences. In Language typology and syntactic description. Vol. 2, Complex constructions, ed. by Tim Shopen, 3–41. Cambridge: Cambridge University Press.
- Saito, Mamoru. 1985. Some asymmetries in Japanese and their theoretical implications. Doctoral dissertation, MIT, Cambridge, MA.
- Winter, Yoad. 1995. Syncategorematic conjunction and structured meanings. In *Proceedings of SALT 5*, ed. by Mandy Simons and Teresa Galloway. Available at http://elanguage.net/journals/salt/issue/view/288.

Raising from the Dead Keir Moulton UCLA

1 Quantification in the Clause

There's a family of proposals now suggesting that the quantificational force for noun phrases is associated with heads situated higher in the extended projection of the clause (Beghelli and Stowell 1997, Szabolcsi 1997, Hallman 2000, Sportiche 2005). While these proposals differ in their implementation, all converge on the expectation that the absence of such projections limits the scope options for quantified nouns. Sportiche (2005) points out that this view may offer a way to under-

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¹ The proposals differ in whether the quantificational force itself is introduced higher (Sportiche, Hallman) or whether quantificational force is merely licensed in various high positions (Beghelli and Stowell). I will use the term *license* without committing to either implementation. Indefinites have long been treated this way (Heim 1982). I leave decisions about the compositional implementation of such approaches—alternative semantics, (un)selective binding, choice functions—for another occasion.

stand why the small clause subject (SCS) in (1a) fails to take scope under the raising verb *seem*, in contrast to the subject raised from the infinitive in (1b).

(1) a. Someone seems sick.

someone > seem; *seem > someone

b. Someone seems to be sick.

someone > seem; seem > someone (Williams 1983:293, (40a))

These data were used by Williams (1983) to argue that the SCS in (1a) does not raise from a Stowellian small clause (Stowell 1983). On the view that nominal quantification is dependent on some amount of clause structure, an SC analysis remains tenable: SCs are simply too small to house the heads that license nominal quantification. What has gone unnoticed is that SCSs can have lowered scope interpretations and that this depends on the choice of predicate in the SC. When the SC predicate is a modal adjective like *necessary*, the SCS can be interpreted in the scope of that adjective, and as a result within the scope of the embedding verb. No such lowering is possible with a nonmodal adjective, like *available* or *sick*.

- (2) a. A new solution seems necessary. But none presently exists
 - A new solution seems available. #But none presently exists.

On all viable theories of scope reconstruction—whether syntactic (Fox 1999, Sauerland and Elbourne 2002) or semantic (Cresti 1995)—the lowered interpretation in (2a) is tied to movement.² This means that SCs are raising constructions, and as a consequence the lack of narrow scope in (1a) and (2b) cannot be attributed to lack of raising.

The difference is conditioned, instead, by the nature of the positions to which the SCS can reconstruct (see Hallman 2004 on the diversity of such positions). Adjectives like *available* and *sick* denote garden-variety properties of individuals. Modal adjectives (MAs) such as *necessary*, I argue, are like intensional transitive verbs, particularly in embedding covert clausal material (McCawley 1974, Larson, Den Dikken, and Ludlow 1997). This covert clause is large enough to contain at least some of the functional structure that licenses quantification. The SCS in (2a) is interpreted in this covert clause and raises from it. SCs, as always, reveal the functional scaffolding of the clause, even when those clauses go silent.

² A nonmovement account could compose the matrix verb with the embedded complement via function composition (Jacobson 1992). With certain assumptions about modal adjectives, this could give the SCS a lowered interpretation (Moulton, to appear), but at the expense of introducing compositional mechanisms into the grammar.

2 Scope Reconstruction in Small Clauses

Williams's observations extend to a range of scope-taking SCSs (Heycock 1995). These include numeral indefinites, which give rise to scope interactions that are more easily truth-conditionally distinguishable.³

- (3) There are several empty seats in our otherwise totally full classroom.
 - a. #Two students seemed sick today.

$$2 > seem; *seem > 2$$

b. Two students seemed to be sick today.

Scope reconstruction *is* possible, however, when the SC contains an MA, like *necessary*, *likely*, or *required*. A range of indefinites, including existentially interpreted *some* and *at least*, fall in the scope of the MA in the SC.

(4) a. At least two more Green senators seem necessary.

b. Some policemen appear necessary.

$$appear > necessary > \exists$$

c. A storm seems likely.

$$seem > likely > \exists$$

d. Five police officers seemed required by the regulations. seem > require > 5

In virtue of being interpreted narrowly with respect to the embedded predicate, these SCSs are interpreted narrowly with respect to the embedding predicate.⁴

Scope reconstruction is also shown by "split" readings of negative quantifiers. Negative quantifiers appear to be composed of two parts: sentential negation and existential quantification (Klima 1964, Ladusaw 1992, Larson, Den Dikken, and Ludlow 1997). That these two components can obtain independent scopes is diagnosed by the intervening modal in (5). SCs that contain an MA allow a split reading (6).⁵

³ It is hard to tell whether universals take narrow scope because the embedding predicate is a universal (modal) quantifier. Nonetheless, speakers often perceive a difference between *Every student seems sick* and *Every student seems to be sick*.

⁴ While one may be tempted to see (ia) as a case of reconstruction into the SC, this likely involves a generic operator outside the SC (Heycock 1995). This is corroborated by the fact that DPs that resist being understood as generics—like *at least*–NPs—only have a wide scope, existential interpretation as SCSs (ib).

⁽i) a. A BMW seems expensive.

b. At least one BMW seems expensive.

⁵ The neg-raising properties of *appear/seem* obscure their relative syntactic scope with respect to negation (Iatridou and Sichel 2011).

(5) No book about Nixon has to be written next year.

 $Neg > has to > \exists$

- \approx It isn't required that a book about Nixon be written (Iatridou and Sichel 2011:606)
- (6) No reference letter appears necessary. (But they'll take one.)

 Neg > necessary > ∃

More evidence that SCSs undergo scope reconstruction—when there is an MA in the SC—is to be found in negative polarity item (NPI) licensing. An NPI can be licensed by non- (surface) c-commanding negation when its containing phrase takes scope below this negation.

(7) A doctor who knew anything about acupuncture wasn't available.

(Linebarger 1980:227, (21a))

When an SCS takes inverse scope below a negated MA, an NPI within it is licensed.

- (8) a. A doctor who knows anything about acupuncture seems unnecessary.
 - b. *?A doctor who knows anything about acupuncture seems not available.

If scope reconstruction is necessary for NPI-licensing here, SCSs must undergo scope reconstruction in (8a).

Scope reconstruction can feed the evaluation of Condition C (Lebeaux 1988, Romero 1998, Fox 2000). In (9), a disjoint reference effect obtains if the quantified expression is interpreted in the scope of the raising verb (an interpretation promoted by the choice of a creation verb).

- (9) For these issues to be clarified,
 - a. many more/new papers about his₁ philosophy seem to Ouine₁ to be needed.
 - b. #many more/new papers about Quine₁'s philosophy seem to him₁ to be needed.
 (Fox 2000:9, (18))

Likewise, scope reconstruction into SCs feeds Condition C. A modal adjective promotes scope reconstruction, and this gives rise to a disjoint reference effect. A nonmodal adjective (*outdated*, *capable*), however, forces wide scope, and no Condition C effect obtains.

- (10) a. #Papers about Quine₁'s philosophy seem necessary to him.
 - Papers about Quine₁'s philosophy seem outdated to him₁.
- (11) a. #A new student of David₁'s seems necessary to him₁.
 - b. A new student of David₁'s seems very capable to him₁.

If Condition C effects diagnose movement, then at least the NP portions of these SCSs must originate within the SC. What is the difference

between MAs and other adjectives such that the former allow SCSs to reconstruct?

3 Modal Adjectives and Covert Clauses

3.1 Evidence for a Covert Clause

MAs, unlike garden-variety intersective adjectives, are intensional operators that interact scopally with DPs.⁶ In this section, I show that MAs are like intensional transitive verbs (ITVs) such as *want*. Like ITVs (12a), MAs have semantically opaque object positions (12b). Familiar tests, like failure of extensional substitution and lack of existential import, diagnose that the objects in (12) fall in the "scope" of the ITV and the MA (Quine 1960, Montague 1974).

- (12) a. My advisor wanted a hat like mine, thinking I owned a
 - b. A hat like mine is necessary.

One analysis of ITVs posits a covert, clause-sized complement equivalent to that expressed with *have* in (13b) (McCawley 1974, Ross 1976, Larson, Den Dikken, and Ludlow 1997). The covert clause analysis is supported—for at least some ITVs—by the ambiguity of temporal modifiers.

- (13) a. A week ago Bill wanted your car tomorrow.
 - b. A week ago Bill wanted to have your car tomorrow.
 - c. *A week ago Bill painted your car tomorrow. (McCawley 1974:2, (4))

In (13a), there are two temporal modifiers, the first modifying the verb *want*, the second an implicit clause, overtly expressed in (13b). A regular transitive verb, like *paint* in (13c), allows no such possibility.

Similar conclusions hold for MAs. The examples in (14)–(16) allow a variety of MAs to be modified by one temporal modifier and allow another to modify covert content. They behave just as their paraphrases with overt propositional complements do.

- (14) a. Until the funding cut, two more seminars were possible next term.
 - b. Until the funding cut, it was possible to have two more seminars next term.

⁶ These adjectives are exceptional in this respect. A reviewer points out a possible connection to 'unaccusative' adjectives (Cinque 1990).

⁷ The terms *de dicto/de re* are often used in this regard. Here, we are just looking at quantifier scope, to be distinguished from the transparent/opaque distinction (Fodor 1970).

⁸ The alternative to a covert clausal complement is property-type NPs (Zimmermann 1993) or intensional generalized quantifiers (Montague 1974, Moltmann 1997). The temporal modification facts argue for a covert clause, and I thank a reviewer for pressing this point.

- (15) a. Yesterday, a new grill was necessary tonight. We no longer need one.
 - b. Yesterday, it was necessary for there to be a new grill tonight. We no longer need one.⁹
- (16) a. Right now a storm is likely tomorrow.
 - b. Right now a storm is likely to happen tomorrow.

Propositional anaphora provide further evidence that MAs take a covert clausal complement. McCawley (1974) reports that *it* in (17a) refers to having horses, just as it does when such a clause is overt (17b). MAs also support propositional anaphora.

- (17) a. Joe wants some horses but his mother won't allow it. (McCawley 1974:6, (10b))
 - John wants to have some horses but his mother won't allow it.
 - c. Some paperclips are necessary, but the budget won't allow it.
 - d. It's necessary that we have/there be some paperclips, but the budget won't allow it.

In (17c), it refers to a proposition, just as it does when its antecedent is overt (17d).

3.2 Scope of Negation

Countenancing a clausal complement under MAs means, then, that they are raising constructions. ¹⁰ The fact that an MA can outscope its subject follows from a raising analysis: the subject takes its scope within an embedded clause. This in turn explains restrictions on the kinds of quantificational expressions that can be interpreted low—restrictions that hold generally of raising constructions (Lasnik 1999, Iatridou and Sichel 2011).

Certain ITVs, like *want* and active *need*, can put the negative component of a NegDP in their scope.

(18) I'm trying to finish my paper this weekend so I need no visitors.

(attributed to Irene Heim and Kai von Fintel; see Schwarz 2006:266)

MAs do not permit NegDP subjects to be interpreted in their scope (19a)/(20a). This is true even when there is an overt raising comple-

⁹ Of course, the necessity statement as a whole will be true at the time at which its prejacent may hold.

¹⁰ Not all MAs take an overt raising complement (*possible*); some speakers find *necessary* acceptable with an overt (*tough*-construction) complement: *A new fridge is necessary to have.*

ment to reconstruct into (19b)/(20b). Compare these with (19c)/ (20c), where a NegDP in the finite complement takes narrow scope.

- (19) I'm trying to finish my paper this weekend . . .
 - a. #So no visitors are required/necessary.
 - b. #So no visitors are required/necessary to be here.
 - c. So it is required/necessary that no visitor be here.
- (20) Don't worry about having any food . . .
 - a. #No one is certain/guaranteed.
 - b. #No one is certain/guaranteed to come to your party.
 - It is certain/guaranteed that no one will come to your party.

This is expected if MAs embed a covert clausal complement.¹²

3.3 Summary

We began with the hypothesis that SCSs don't reconstruct because SCs don't contain the clausal structure necessary to license nominal quantification. This led to a prediction: when quantifiers *are* interpreted in SCs—as documented here with MAs—that option must be provided by clause-level material introduced by the adjective, not by the SC per se. And that prediction was borne out: as the argument in section 3.2 shows, MAs embed covert clausal material. Whatever the exact implementation (see footnote 1), these observations recommend a theory in which the heads that license quantificational noun phrases (like the Qs in (21)) are situated in the clausal spine. SCs lack such heads, and noun phrases must associate with a Q in the matrix clause (21a). MAs, on the other hand, embed covert clauses that are large enough to house O heads (21b).¹³

This analysis would have to say more to account for the temporal modification facts and complex quantifiers like *at least* and *more than n* (see Van Geenhoven and McNally 2005). The neg-split cases would be a problem, too: putting the existential portion of a NegDP into the denotation of an adjective is not compatible with the morphological composition of NegDPs (Zeijlstra 2004).

¹² If, as Iatridou and Sichel (2011) argue, the (un)availability of NegDPs taking narrow scope is correlated with neg-raising, then these data provide no evidence for covert complements under MAs, none of which are neg-raisers.

¹³ A reviewer points out a further prediction: SCSs cannot take intermediate scope, below the matrix predicate but above the MA (*I believe two Green senators necessary*). My impression is that this prediction is borne out, but more systematic testing is needed.

¹¹ A property analysis (Zimmermann 1993) also accounts for the lack of low negation, as it does for those ITVs like *look for* for which a covert clausal analysis is less accepted (Partee 1974). MAs could also be given a property-type analysis.

⁽i) a. $[necessary] = \lambda P_{\langle e,st \rangle}$. $\lambda s. \forall s' \in \text{Nec}(s) [\exists x [P(x)(s')]]$ b. $[A \text{ fridge is necessary}] = \forall s' \in \text{Nec}(s_0) [\exists x [\text{fridge}(x)(s')]]$

(21) a. [... Q... seem [AP (*Q) at least one student sick]]b. [seem [AP necessary [XP... Q... at least one fridge]]]

Here, then, is an account for both Williams's (1983) case in (1a)—itself a long-standing obstacle for SC analyses—and those cases where scope reconstruction is possible. The resolution hinges, however, on taking seriously the idea that the quantificational force for nouns is licensed by clausal material. SCs remove that material, letting us uncover another source: surprisingly, silent clauses are larger than small but overt ones.¹⁴

4 Strong Quantifiers and the Content of Covert Complements

There is one respect in which the MAs discussed above do not pattern either like their counterparts that take overt clauses, or like certain ITVs such as *need* and *want*. These can put a strong quantifier like *most* in their scope (Schwarz 2006), as in (22a). MAs that take covert clauses, however, cannot put *most* in their scope (22b). Compare with the overt finite complement in (22c).¹⁵

- (22) Context: It takes five people to lift a heavy box. There are seven people in the room.
 - a. Most of the people in this room are needed (to move the box). needed > most
 - b. Most of the people in this room are necessary (to move the box). *necessary > most
 - c. It's necessary to have most of the people in this room (to move the box). necessary > most

This is not due to any restriction against interpreting *most* below raising adjectives. This is possible when *likely* takes an overt raising complement (23a) (after von Fintel and Iatridou 2003). But when *likely* takes a covert clausal complement (23b), *most* cannot scope low.

- (23) How many of our students will be foreigners?
 - a. Most students are likely to be foreigners in a few years' time.
 - b. #Most students are likely in a few years' time.

*likely > most

The infelicity of (23b) may, however, reveal a restriction on the content of the covert clausal complement. While ITVs like *need* and *want* appear to select for clauses with *have* or *get* (McCawley 1974, Larson, Den Dikken, and Ludlow 1997) or the abstract primitive HAVE (Harley 2004), the content of the covert clause selected by some MAs

¹⁴ PPs must be large enough to house quantificational heads, since their objects can take scope within SCs (Williams 1983).

¹⁵ In this respect, MAs resemble ITVs like *look for* (Zimmermann 1993). The scope facts and the temporal modification facts, which usually pattern together, do not for MAs. I thank a reviewer for the contexts illustrating scope of *most*.

appears to be restricted to an abstract BE. That is, when the context merely requires the complement to express an existential commitment, a covert clause is possible.

- (24) What do you expect to happen?
 - a. A coup is likely/guaranteed/certain.
 - b. A coup is likely/guaranteed/certain to happen.
 - c. It's likely/guaranteed/certain there will be a coup.

If the content of the covert clause needs to have richer content—say, *topple*—the result is odd, even with an indefinite subject.

- (25) What will topple the government?
 - a. #A coup is likely/guaranteed/certain.
 - A coup is likely/guaranteed/certain to topple the government.

If the covert content of MAs is that of an existential statement, as in (26a), this may explain why (25a) is not a very good answer to (25). Moreover, the restriction against strong quantifiers like *most* taking narrow scope is reduced to that found in overt existential statements (26b) (e.g., Milsark 1974).

- (26) a. likely [THERE BE a coup/*most students]
 - b. There was a coup/*most coups.

A covert existential clause resolves the tension between the facts that support a property analysis (wide scope for *most*) and the evidence in favor of a covert clause (neg-split, temporal modification, propositional anaphora). Whether this is merely a syntactic variant of the property analysis (see footnote 11) I leave to further investigation.¹⁶

If a covert clause analysis can be maintained, we've uncovered a surprising thing: there are many more raising adjectives in English than previously recognized. The puzzle is why *possible* and *necessary* and perhaps others admit a raising complement only when that complement goes silent.

References

Beghelli, Filippo, and Tim Stowell. 1997. Distributivity and negation: The syntax of *each* and *every*. In *Ways of scope taking*, ed. by Anna Szabolcsi, 71–108. Dordrecht: Kluwer.

Cinque, Guglielmo. 1990. Ergative adjectives and the lexicalist hypothesis. *Natural Language and Linguistic Theory* 8:1–41.

Cresti, Diana. 1995. Extraction and reconstruction. *Natural Language Semantics* 3:79–122.

von Fintel, Kai, and Sabine Iatridou. 2003. Epistemic containment. Linguistic Inquiry 34:173–198.

¹⁶ Of course, the question arises why strong DPs raised from this position that take wide scope (as in *John's tools/Most of his theorems are necessary*) can leave traces compatible with the requirement of existential sentences.

- Fodor, Janet Dean. 1970. The linguistic description of opaque contexts.

 Doctoral dissertation, MIT, Cambridge, MA.
- Fox, Danny. 1999. Reconstruction, binding theory, and the interpretation of chains. *Linguistic Inquiry* 30:157–196.
- Fox, Danny. 2000. *Economy and semantic interpretation*. Cambridge, MA: MIT Press.
- Hallman, Peter. 2000. The structure of predicates: Interactions of derivation, case and quantification. Doctoral dissertation, UCLA, Los Angeles, CA.
- Hallman, Peter. 2004. NP-interpretation and the structure of predicates. *Language* 80:707–747.
- Harley, Heidi. 2004. Wanting, having, and getting: A note on Fodor and Lepore 1998. *Linguistic Inquiry* 35:255–267.
- Heim, Irene. 1982. The semantics of definite and indefinite noun phrases. Doctoral dissertation, University of Massachusetts, Amherst.
- Heycock, Caroline. 1995. The internal structure of small clauses: New evidence from inversion. In NELS 25, ed. by Jill Beckman, 223–238. Amherst: University of Massachusetts, Graduate Linguistic Student Association.
- Iatridou, Sabine, and Ivy Sichel. 2011. Negative DPs, A-movement, and scope diminishment. *Linguistic Inquiry* 42:595–629.
- Jacobson, Pauline. 1992. Raising without movement. In Control and grammar, ed. by Richard K. Larson, Sabine Iatridou, Utpal Lahiri, and James Higginbotham, 149–194. Dordrecht: Kluwer.
- Klima, Edward S. 1964. Negation in English. In *The structure of language: Readings in the philosophy of language*, ed. by Jerry A. Fodor and Jerrold J. Katz, 246–323. Englewood Cliffs, NJ: Prentice Hall.
- Ladusaw, William. 1992. Expressing negation. In *Proceedings of SALT II*, ed. by Chris Barker and David Dowty, 237–259. Ohio State Working Papers in Linguistics 40. Columbus: Ohio State University, Department of Linguistics.
- Larson, Richard K., Marcel den Dikken, and Peter Ludlow. 1997. Intensional transitive verbs and abstract clausal complementation. Ms., SUNY at Stony Brook and Vrije Universiteit Amsterdam.
- Lasnik, Howard. 1999. Chains of arguments. In *Working Minimalism*, ed. by Samuel David Epstein and Norbert Hornstein, 189–215. Cambridge, MA: MIT Press.
- Lebeaux, David. 1988. Language acquisition and the form of the grammar. Doctoral dissertation, University of Massachusetts, Amherst.
- Linebarger, Marcia. 1980. The grammar of negative polarity. Doctoral dissertation, MIT, Cambridge, MA.
- McCawley, James D. 1974. On identifying the remains of deceased clauses. Bloomington: Indiana University Linguistics Club.

- Milsark, Gary. 1974. Existential sentences in English. Doctoral dissertation, MIT, Cambridge, MA.
- Moltmann, Friederike. 1997. Intensional verbs and quantifiers. *Natural Language Semantics* 5:1–52.
- Montague, Richard. 1974. The proper treatment of quantification in ordinary English. In *Formal philosophy: Selected papers of Richard Montague*, ed. by Richmond H. Thomason, 247–270. New Haven, CT: Yale University Press.
- Moulton, Keir. To appear. Small clause subjects do reconstruct. In *NELS 41*, ed. by Yelena Fainleib, Nicholas LaCara, and Yangsook Park. Amherst: University of Massachusetts: Graduate Linguistic Student Association.
- Partee, Barbara H. 1974. Opacity and scope. In Semantics and philosophy, ed. by Milton K. Munitz and Peter K. Unger, 81–101. New York: New York University Press.
- Quine, W. V. O. 1960. Word and object. Cambridge, MA: MIT Press. Romero, Maribel. 1998. Focus and reconstruction effects in whphrases. Doctoral dissertation, University of Massachusetts, Amherst.
- Ross, John. 1976. To have have and to not have have. In Linguistic and literary studies in honor of Archibald A. Hill, ed. by Mohammad Ali Jazayery, Edgar C. Polomé, and Werner Winter, 1:263–270. Lisse: Peter de Ridder Press.
- Sauerland, Uli, and Paul Elbourne. 2002. Total reconstruction, PF movement, and the derivational order. *Linguistic Inquiry* 33: 283–319.
- Schwarz, Florian. 2006. On *needing* propositions and *looking for* properties. In *Proceedings of SALT 16*, ed. by Masayuki Gibson and Jonathan Howell, 259–276. Available at http://elanguage.net/journals/index.php/salt/issue/view/297.
- Sportiche, Dominique. 2005. Division of labor between Merge and Move: Strict locality of selection and apparent reconstruction paradoxes. Available at http://ling.auf.net/lingBuzz/000163.
- Stowell, Tim. 1983. Subjects across categories. *The Linguistic Review* 2:285–312.
- Szabolcsi, Anna, ed. 1997. *Ways of scope taking*. Dordrecht: Kluwer. Van Geenhoven, Veerle, and Louise McNally. 2005. On the property analysis of opaque complements. *Lingua* 115:885–914.
- Williams, Edwin. 1983. Against small clauses. *Linguistic Inquiry* 14: 287–308.
- Zeijlstra, Hedde. 2004. Sentential negation and negative concord. Doctoral dissertation, University of Amsterdam.
- Zimmermann, Thomas Ede. 1993. On the proper treatment of opacity in certain verbs. *Natural Language Semantics* 1:149–180.