

COMPLEMENTS OF EPISTEMIC PREDICATES*

Michiya Kawai
Huron University College, University of Western Ontario

1. Introduction

This paper deals with the complements of epistemic predicates and exceptional Case-marking (ECM) – i.e., accusative marking of the embedded subject by the matrix predicate as in (1).

- (1) a. John considers Mary to be intelligent. (Infinitive)
- b. John considers Mary intelligent. (Small Clause)
- (2) a. The advisor expected the student to pass the exam.
- b. Jack forced Mary to leave.

The class of predicates in question is referred to as “b-type” (Postal 1974): e.g., *believe*, *consider*, *show*, *prove*, and *find*. Postal (1974) demonstrates that B-type predicates behave differently from other classes of predicates with an infinitival complement, such as *expect*, *persuade*, *try*, and *force* (2). In this paper, we will focus on complements of b-verbs (*b-complements*, henceforth). Unlike English, French disallows an infinitival ECM b-complement (3).

- (3) Jean croit Marie (*être) intelligente. (Kayne 1983)
- ‘Jean believes Marie (to be) intelligent.’

Below, we will be referring to the English-like languages as *Infinitive-Small Clause (ISC-)languages*, and to the French-like languages, as *Small Clause-(SC-)languages*. This paper briefly examines existing analyses, such as Brecht 1974, Kayne 1983, Bošković 1997, and Castillo 2001, and sketches an analysis, in its preliminary form, for capturing the SC-/ISC-distinction within the minimalism.

Section 2 and 3 present the descriptive properties of b-complements as I outline some of the existing analyses. Section 4 sketches a proposal that the infinitival ECM results from the “weak” (i.e., less-than-full-CP) status of the complement. Brief concluding remarks are given in Section 5.

Throughout the discussion, we will be assuming the following. First, I follow Postal (1974) and Lasnik and Saito (1991) in that ECM as in (1) involve

* I would like to thank Gabriela Alboiu, Michael Barrie, Oxana Borzdyko, Joyce Bruhn de Garavito, David Heap, Jacques Lamarche, Diane Massam, Ileana Paul, Yehor Tsedryk, and the audience at the 2005 CLA meeting at The University of Western Ontario. I am indebted to Jami B. Kawai for editing this paper. As usual, any remaining errors are my own.

raising-to-object as illustrated in (4): *Mary* moves to a matrix A-position where *believes* licenses its accusative Case.

- (4) John believes Mary [~~Mary~~ (to be) intelligent]

Second, I adopt Chomsky's (2000) theory of phase (CP and vP) and the Phase-Impenetrability Condition, with which A-movement across a CP boundary is blocked (*contra* Bruening 2001). Third, I assume that ECM is under a single Case-licensing mechanism, be it for an infinitive or a small clause; to be more specific, I have in mind Pesetsky and Torrego's (2004) feature-sharing view of *Agree*, although nothing crucial hinges upon the choice in this paper. Finally, in this paper, we will leave open the specific mechanism of obligatory Control.

2. ECM and Two Types of Languages

2.1 Brecht 1974

The raising analysis of ECM was extensively investigated in the 1970's (e.g., Postal 1974). Brecht (1974) compares the ECM in English, Latin, and Russian. English is an ISC-language, but many languages are SC-languages: e.g. Russian (5a), Italian (5b), Spanish (5c) (Kitagawa 1986, Castillo 2001), and Serbo-Croatian (5d) (Lasnik 1997), in addition to French, which we have already seen in (3)).

- (5) a. Ja sčitaju Ivana [(*byt') umnym]
'I consider Ivan (to be) smart.'
- b. Ritengo Giovanni [(*essere) intelligente]
'I believe Giovanni (to be) intelligent.'
- c. Considero a Juan [(*ser) inteligente]
'I consider Juan (to be) intelligent.'
- d. Smatram Ivana [(*biti) pametnim]
'I consider Ivan (to be) smart.'¹
- (6) a. John believes Mary to be/to have been here late.
- b. Jean croit arriver/avoir arrivé en retard.
Jean believes to-arrive/have-inf arrived late
'Jean believes himself to have been late.'

¹ In Kawai 2000, to appear, I argue that Japanese raising-to-object also involves a small clause complement, instead of a finite or infinitive clause. If this is indeed the case, then it strongly suggests that a small clause is the default option for a complement of b-type complement, since in Japanese the corresponding finite and infinitive clauses are phonetically indistinguishable.

Brecht accounts for the SC-/ISC-contrast as follows. The English infinitive can “signal time distinction in complements” (p. 204) as seen in (6a), whereas the Russian infinitive is “incapable of being inflected for tense” (p. 202). For b-type predicates in both English and Russian, “the time of the action expressed in the complement is in no way determined” (pp. 201–202). Further, “every infinitive must receive a specific time reference in its semantic representation.” Russian b-complements fail to satisfy this requirement, because neither the matrix predicate nor the complement specifies it. In English, on the other hand, the tense of the b-infinitive satisfies this requirement. This account fails, however, since French, an SC-language, can also “signal time distinction” inside the b-complements in (6b), much like (6a). Due to the space limitation, we will not investigate the specifics of Brecht’s (1974) proposal any further. It suffices to note that subsequent analyses seem to agree with Brecht’s intuition that the presence/absence of the infinitival tense is a key factor.

2.2 Government-and-Binding Framework: ECM and PRO-Control

In the GB-framework (Chomsky 1981, 1986), ECM is treated as Case-marking into the specifier of IP. Case-marking takes place under government, and the desired distinction is made between ISC- and SC-languages in terms of the (un)governed status of the embedded subject position:

- (7) The embedded subject of an infinitival b-complement is
- a. uncontrolled and, thus, Caseless, in SC-languages; but
 - b. controlled by the matrix verb in ISC-languages.

Consider SC-languages first. With (7a), being uncontrolled and Caseless, any lexical subject of a b-complement violates the Case filter: *[Caseless lexical NPs]; thus, infinitival ECM is impossible. In ISC-languages, on the other hand, the embedded subject is accusative-marked by the matrix verb. (7) in turn is derived from the following parameter: b-complements of ISC-languages are IPs, whereas those of SC-languages are CPs. The matrix verb governs into the spec of a bare IP, but not into the spec of IP inside a CP.

(7) makes a prediction, if coupled with the PRO Theorem (Chomsky 1981): PRO must be uncontrolled (and Caseless). Namely, SC-languages are predicted to host a PRO-controlled infinitival b-complement, given that the embedded subject position is uncontrolled/Caseless. This prediction is borne out in (8) (Postal 1974, Kayne 1983, McCawley 1986, Castillo 2001, among others).

- (8) a. Je_1 crois [PRO₁ être intelligent].
 ‘I believe myself to be intelligent.’
- b. $Juan_1$ considera *a José/ $\sqrt{PRO_1}$ ser un buen político.
 ‘John considers *José/himself to be a good politician.’
- c. $Juan_1$ creía *a José/ $\sqrt{PRO_1}$ correr más rápido que ellos.
 ‘John believed *José/himself to run faster than them.’

This, Kayne (1983) calls “negative relation between government and control.”

The GB-analysis of ECM is quite successful, although it is not without problems (See Kitagawa 1987, for example). This line of the analysis was abandoned in the Minimalist Framework (Chomsky 1995, 2000) as *government* ceased to be a legitimate theoretical notion.

3. Minimalist Analyses

Within the Minimalist Framework, Case-licensing is understood as a part of agreement, and ECM is A-movement from the embedded subject to a Case-checking position of the matrix verb (spec of v , or Agr_0).

3.1 Castillo 2001

Castillo (2001) proposes the following parameter on Tense (T) within the minimalist framework (Chomsky 1995), attributing the basic idea to Platzack.

- (9) An infinitival T of ISC-languages has an interpretable Tn feature, whereas that of SC-languages does not.

For an infinitive to license an overt subject, Castillo argues, the uninterpretable tense (Tn) feature of the embedded subject DP must be checked against the interpretable Tn feature of T – a requirement known as a *Tense Criterion* (Rizzi 1996, 1997, Haegeman 1995). Given that “all relations of predication need a temporal interpretation, it is subjects that typically instantiate a relation of predication with the predicate,” Castillo infers that “subjects need to be temporally interpreted” (p. 121). The agreement between the embedded subject DP and the infinitival T allows the temporal interpretation of the predication relation in English. In SC-languages, on the other hand, infinitives cannot license an overt subject within, given (9). PRO, on the other hand, is allowed in this environment, according to Castillo (2001), because PRO is “interpreted in relation to its controller,” thus not respecting the Tense Criterion.

For the grammaticality of ECM with a small clause b-complement, Castillo states that small clauses involve predication without a Tn feature. Thus, the predication relation in a small clause needs an alternative method of temporal interpretation: viz., a small clause is a predicate embedded in an Aspect Phrase (AspP), and must be “licensed” by being selected by the matrix predicate. “[A]spects, contrary to tense, ... can function simply as a predicate operator” (p. 133).

This is unsatisfactory, however. For this analysis to work, in addition to the $[\pm Tn]$ parameter in (9), we need three distinct methods of the temporal interpretation of the subject-predicate relation: (i) infinitives with an overt subject; (ii) infinitives with PRO subject (Control); and (iii) a small clause. Further, the $[\pm Tn]$ parameter lacks motivation; the parameter makes the desired distinction, but without any independent evidence for its existence.

3.2 Bošković 1997

Bošković (1997) proposes a Case-theoretic account of the SC-/ISC-distinction. His account is anchored within the theory of null Case and PRO (Chomsky and Lasnik 1993, Martin 1996) where null Case is the Case designated for PRO:

- (10) a. The infl I of a b-complement of ISC-languages is Caseless.
 b. The infl I of a b-complement of SC-languages has a null Case.
- (11) a. I remembered PRO_[-finite, +tense] to turn off the computer.
 b. I believe Mary to_[finitic, -tense] to be in charge of computers.
 c. Mary seems to_[finitic, -tense] to be in charge of computers.

According to Martin (1996), (10) in turn derives from the feature specification of I of the SC- and ISC-languages, respectively: [-finite, -tense], and [-finite, +tense]. Let us limit our attention to the [-finite] varieties. [+tense] is associated with the presence of null Case and the unrealized future interpretation (Stowell 1982): e.g., (11a). This contrasts with the lack of the comparable tense interpretation in the raising infinitive in (11b/c). With (10), SC-languages allow a PRO-controlled b-complement, while excluding a lexical embedded subject, not being able to check a null Case. Small clauses, lacking an I, have no null Case, and, thus, host raising-to-object in both SC-/ISC-languages. In short, this analysis accounts for both infinitival- and small clause-b-predicates of the two types of languages under a single parameter.

However, the null Case-based account has problems (See Baltin and Barrett 2002, Hornstein 2003, among others). In particular, the presumed correlation among the presence/absence of the unrealized future tense, ±PRO/Lexical subject, and [±tense] does not hold. See also Wurmbrand 2005. There are PRO-control infinitives without an unrealized future interpretation. Just as in the English RO-complement in (12a), the PRO-controlled b-predicate in (12c) does not exhibit the future interpretation associated with null Case, as found in (12b).

- (12) a. John believes Mary to be a good politician.
 ‘John believes that Mary is/*will be a good politician.’
- b. John expects [PRO to be the winner].
 ‘John expects that he *is/will be the winner.’
- c. Juan crea [PRO ser un buen político].
 ‘Juan believes that he is/*will be a good politician.’

Additionally, the unrealized future interpretation is absent in the complement of *tough*-constructions (13a/b), which arguably involve obligatory Control (Epstein 1984, Kawai 1992).

- (13) a. The exam is difficult (for me_i) [PRO_i to finish (*tomorrow)].

b. The theorem is hard (for him₁) [PRO₁ to prove (*next week)].

The range of the facts above strongly suggests that the “presence vs. absence of an [unrealized] future interpretation does not correlate with the control vs. ECM/raising distinction” (Wurmbrand 2005).

4. An Alternative

The lesson from the discussion above is that we cannot derive the SC-/ISC-language distinction and the associated temporal interpretation from a single [±tense]/±Tn parameter of the embedded infinitival head. Tense interpretation of nonfinite clauses seems to be too complex to be captured by a simple two-way distinction. Rather, the relevant tense interpretation seems to be best captured in terms of the properties of both the matrix predicate and the infinitive (Lenci 1998, Wurmbrand 2005, among others). An alternative analysis outlined here takes small clause ECM b-complements as default and infinitival ECM as a derivative case. The relevant difference between the two types of languages arises from the configurational difference of the infinitives. This is reminiscent of the intuition behind the GB-analysis discussed in Section 2.2.

Impressionistically speaking, SC-languages, rather than ISC-languages, seem to be the default case. This seems to be the case even with English, an ISC-language. Thornton (2001) observes that in child grammar the ECM with small clauses arises with the emergence of accusative Case, whereas the ECM with infinitives in English emerges later. (See also discussions in Lasnik and Uriagereka with Boeckx 2004, and the conclusion drawn in footnote 1). Let us suppose, then, that small clause b-complements are the universally available option, in the absence of some language-particular reason(s) that would block raising-to-object entirely.²

A small clause must be a legitimate b-complement. Syntactically, a small clause is not an island, not being a phase, nor does it Case-license the subject internally. The subject of a small clause thus A-raises to the matrix object position. Semantically speaking, epistemic evaluation of time is known to “coincide with the moment of utterance” (Boogaart 1999).

- (14) a. He must be intelligent.
b. He must leave.

The root modal (or *obligation*) reading is available in both (14a/b); however, an epistemic reading is not available in (14b), because the eventive complement is incompatible with a simultaneous reading. The small clauses, not having a tense/aspect, are compatible with the epistemic interpretation.³

In addition to small clauses, b-type predicates of SC-languages select a propositional (CP) complement. With a nonfinite CP complement, raising-to-

² German is reported not to allow ECM constructions. I suspect that this is due to some properties of the German Case marking system, although, naturally, further investigation is in order.

³ Here we continue to restrict our attention to b-complements, excluding small clause complements of direct perception verbs: e.g., *I saw Mary dance*.

object is blocked, but PRO is licensed in the embedded [spec, IP]. Evidence for the full CP-hood is available from European Portuguese (EP) (15a/b) and Italian (15c/d) (Kayne 1983, Raposo 1987, Wharram 1997):

- (15) a. * Eu pense [os deputados terem trabalhado pouco]
 I think the deputies to-have-Agr worked little
- b. Eu pense [terem os deputados trabalhado pouco]
- c. Ritengo [essere [loro in grado di pagare il riscatto]]
 I-believe to-be they able to pay the ransom
 ‘I believe them to be able to pay the ransom.’
- d. Gianni crede [CP di [IP PRO essere intelligente.]].
 Gianni believes of to-be intelligent
 ‘Gianni believe himself to be intelligent.’

The inflected infinitives of EP license a nominative within non-finite clause, but raising of the agreement bearing item to the left-periphery of the embedded clause must take place, which Raposo calls Aux-to-Comp movement. Likewise, in Italian (15c), the raising of *essere* licenses a nominative subject, suggesting the parallelism between EP and Italian. Further, according to Kayne (1983), the preposition *di* in (19d) is a complementizer. Thus, the infinitive in (15) must be a full CP. Generalizing this to SC-languages, PRO-controlled b-complements are best analyzed as full CPs, as was assumed in the GB-analysis we saw in Section 2.2. The full CP-status of PRO-controlled b-complement also explains how some types of temporal expressions are licensed therein, as shown in (16) (Bošković 1997)

- (16) Anna croyait arriver en retard hier.
 Anna believes to arrive late yesterday
 ‘Anna believes herself to have arrived/*arrive late yesterday.’

Non-finite CPs license its event position, thereby licensing the time-denoting adverb therein.

The present analysis up to this point is summed up as follows:

- (17) A b-type predicate selects (a) a small clause as its non-finite complement, and (b) a noneventive CP as its non-finite complement.

Let us turn to ISC-languages. I suggest that infinitival ECM b-complements are an extension of (17a), with a “weak” infinitival head – a “weak/defective” tense “almost like” a small clause head. Being semantically as transparent as the small clause head, it satisfies the semantic requirement on b-complements. If this is the case, an infinitive with a “defective” head does not project CP, unable to agree with the C head. As a result, English infinitival ECM b-complements seem to be more restricted than typical infinitival b-complements in terms of

temporal deixis licensing. The sentence in (18), which is from Abusch 2004, shows that the temporal adverb *last night* is not licensed in English, unlike *hier* ‘yesterday’ in French, as shown in (16) above.

(18) *Guido is believed to be at Monique’s place last night.

This is expected, if the infinitival b-complement in (18) involves a configuration without an event position – say, a Modal Phrase, or whatever the minimal category that hosts *to* (Gelderen 2002). This also explains why infinitival ECM is possible in English. Without the tense/inflection head internal to the complement, PRO cannot be licensed, because PRO licensing presumably requires a richer configuration (e.g., C^0) for PRO identification.⁴

This analysis crucially relies upon the existence of a “defective/weak” infinitive, a notion calling for further investigation; at this point, I do not have an articulated theory of such a notion. However, there are suggestive pieces of evidence in favor of the present approach. Consider Swedish and Norwegian examples (Platzack 1986):

(19) a. Jag anser mig ha rätt (Swedish)
I think me have right
‘I believe myself to be right.’

b. * Jag anser mig att ha rätt. c. * Jag anser mig ha att rätt.
I think me to have right. I think me have to right

(20) a. * Jeg anser meg ha rett. (Norwegian)
I think me have right
‘I believe myself to be right.’

b. Jeg anser meg å ha rett c. * Jeg anser meg ha å rett
I think me to have right I think me have to right.

Norwegian allows infinitival ECM (20b), but Swedish does not (19b). Platzack (1986: fn 11) adds that in colloquial Swedish, an infinitival ECM is acceptable if the infinitival marker is reduced to *o* from *att*. If the phonetic reduction of the infinitival marker *att*

⁴ A question arises as to whether English can also have a full CP infinitive (PRO-controlled) b-complement. The standard answer to this question is negative, as seen in (ia). However, McCawley (1988) reports that it seems marginally acceptable (ib) (Franck Herbert, *Children of Dune*, p. 43).

- (i) a. * Mary₁ believes [PRO₁ to be intelligent].
b. They skim the surface of melange and believe thereby to attain grace.

If (ib) is indeed the relevant epistemic (b-type) construction, then, in principle, a full CP complement must be available for English, though not entirely free.

mirrors the reduction in syntax as well, then raising-to-object is available only from the “reduced” infinitives.⁵

Also, Romanian ECM may support the less-than-full CP status of b-complements. (21a) shows that Romanian is an ISC-language (Alboiu (p.c.)).

- (21) a. Ion o crede pe Maria [a fi inteligentă].
 Ion cl.f3.sg believes pe-Maria to be intelligent.f.sg
- b. ... [_{ForceP} [_{Mood/FiniteP} [_{Neg} [_{IP} ... (Isac and Jakab 2004)
- c. * Ion crede [PRO a fi inteligentă].
 Ion believes to be intelligent

According to Alboiu (2004a, 2004b), Isac and Jakab (2004), and Hill (2003), infinitival particle *a* in (21a) is in Mood/Finite position, and Mood/Finite is lower than Force (21b) (cf. Rivero and Terzi 1995). Further, Hill (2003) argues that Romanian infinitive – and subjunctive – clauses do not project a full CP (ForceP) configuration, thereby not constituting a phase. This explains why raising-to-object is successful from within the embedded infinitive in (25a). Related, PRO is not licensed under this configuration, as expected (21c). If so, Romanian ECM occurs in a less-than-full-CP b-complement; this is consistent with the present analysis.

A question immediately arises as to the raising constructions of SC-languages as shown in Spanish examples (22).

- (22) a. Parece que los niños leyeron los libros.
 Seems that the children read the books.
 ‘It seems that the children read the books.’
- b. Los niños parecen haber leído los libros.
 The children seem to-have read the books
 ‘The children seem to have read the books.’

Unlike the raising-to-object, raising-to-subject is available in both SC-and ISC-languages, indicating that raising predicates select a “weak” infinitive, not a full-CP infinitive. The present analysis suggests, following Lenci (1996), that subject-raising predicates are essentially copula-like elements, incompatible with a full CP complement.

5. Conclusions and Further Questions

This study examined four tense-based analyses of ECM, and outlined an analysis that derives the SC-/ISC-language distinction. Briefly put, the b-type predicates impose interpretive restriction on its predicate, and both small clauses

⁵ Platzack (1986: fn 11) further notes that “Norwegian examples like [(20a)] are not as frequent as the corresponding Swedish examples,” strongly suggesting the “nonstandard” status of infinitival ECM b-complements in Norwegian.

and non-eventive CP with a controlled PRO satisfy the restriction, deriving the SC-languages. In ISC-languages, infinitival b-complements are suggested to be headed by a less than full-CP projection (e.g., Modal Phrase in English and MoodP in Romanian), although the details need to be worked out.

Naturally, further investigation into the nature of ECM is in order. The scope of this paper is very limited, leaving untouched a number of questions regarding the ECM of the languages not considered here (See Massam 1985, Bruening 2001, Reinhart and Siloni 2005, among others).

In this study, we limited our attention to b-complements. However, ECM is present in direct perception verbs in most of SC- and ISC-languages (Felser 1998 and references cited there).

- (23) a. Jean a vu Marie dancer.
 John have seen Mary dance_{inf}
 ‘John saw Mary (*to) dance.’
- b. John makes/expected/want Mary leave.
- c. Qui_i crois-tu [t_i être intelligent].
 Who believe-you to-be intelligent
 ‘Who do you believe to be intelligent?’

Observe that SC-languages are hosting infinitival ECM in (23a), which appears to be contradictory to the present analysis. However, the infinitive in (23a) may not be a full CP clause, even though its appearance is indistinguishable. Suppose that the fundamental properties of direct perception verb constructions hold across languages; then, the presence of a bare infinitive in English suggests the infinitive in (23a) is also less than a full CP infinitive. If so, the possibility of ECM in direct perception constructions may also be explained in terms of the less-than a full CP configuration. We also need to investigate the nature of ECM in causative and E-/W-type predicates (Postal 1974, Rooryck 2000), as in (23b). Clearly, the current analysis does not apply directly to the complements of these classes of predicates. The complements therein are eventive, suggesting the existence of more complex internal clausal structure. Also left unaccounted for is how to deal with the successful infinitival ECM with *wh*-movement in French (23c) (Postal 1974, Kayne 1983, Bošković 1997).⁶ Bošković’s (1997) analysis of the *wager* class seems promising, although how the analysis fits into the present proposal remains to be seen.

References

- Abusch, D. 2004. On the temporal composition of infinitives. In *The Syntax of Time*, eds. J. Guéron and J. Lecarme, 27–53. Cambridge, MA: MIT Press.
- Alboiu, G. 2004a. Movement out of control is under control. Ms., York University.

⁶ This is not a universal characteristic of SC-languages, however; the sentence comparable to (23b) in Spanish, for example, is not grammatical (Zagona 2002).

- Alboiu, G. 2004b. Shared Arguments in Control. In *Toronto Working Papers in Linguistics* 22, ed. Ch. Frigeni, 53–74.
- Baltin, M., and L. Barrett. 2002. The null content of null Case. Ms., New York University.
- Boogaart, R. 1999. *Aspect and Temporal Ordering: A Contrastive Analysis of Dutch and English*. The Hague: Holland Academic Graphics.
- Bošković, Ž. 1997. *The Syntax of Nonfinite Complementation: An Economy Approach*. Cambridge, MA: MIT Press.
- Borzdyko, O. 2004. *La Disjonction, L'Indéfinition et L'Interrogation: La Particule Ci du Biélorusse*. Doctoral dissertation, The University of Western Ontario.
- Brecht, R. 1974. Tense and infinitive complements in Russian, Latin, and English. In *Slavic Syntax*, eds. R. Brecht and C. V. Chvany, 193–218. Ann Arbor: The Department of Slavic Languages and Literatures of The University of Michigan.
- Bruening, B. 2001. Raising to object and proper movement. Ms., University of Delaware.
- Castillo, C. 2001. The configuration on ECM structures. *Studia Linguistica* 55: 113–139.
- Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Chomsky, N. 1995. *The Minimalist Syntax*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 2000. Minimalist inquiries: The framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, eds. R. Martin, D. Michaels, and J. Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, N., and H. Lasnik. 1993. The theory of principles and parameters. Reprinted in Chomsky 1995, 13–127.
- Epstein, S. D. 1984. Quantifier-pro and the LF representation of PRO_{arb}. *Linguistic Inquiry* 15: 499–505.
- Felser, C. 1998. Perception and Control: A Minimalist analysis of English direct perception complements. *Journal of Linguistics* 34: 351–385.
- Gelderen, Elly van. 2002. *To not or not to: Optionality in Syntax?* Ms., Arizona State University.
- Haegeman, L. 1995. *The Syntax of Negation*. Cambridge: Cambridge University Press.
- Hill, V. 2003. Reduced CP fields and phases. *University of Bucharest Working Papers in Linguistics* V(1): 44–53.
- Isac, D., and E. Jakab. 2004. Mood and force features in the languages of the Balkan. In *Balkan Syntax and Semantics. Linguistik Aktuell/Linguistics Today* 67, ed. O. M. Tomic, 315–338. Amsterdam: John Benjamins.
- Kawai, M. 1992. *Missing Object Constructions and Null Operator Predication*. Doctoral dissertation, The University of Connecticut.
- Kawai, M. 2000. Raising in Japanese: Evidence for small clause analysis. In *The Proceedings of 2000 Canadian Linguistic Association Meeting. Cahier linguistique d'Ottawa*, eds. J. T. Jensen and G. Van Herk, 185–196. Ottawa: University of Ottawa.
- Kawai, M. To appear. Raising to object in Japanese: A small clause analysis. *Linguistic Inquiry* 37.
- Kayne, R. 1983. Connectedness and Binary Branching. Dordrecht: Foris.

- Kitagawa, Y. 1986. Barriers to government. In *Proceedings to the Sixteenth Annual Meeting of North-Eastern Linguistics Society*, eds. S. Berman, J-W. Choe, and J. McDonough, 249–273. GLSA, University of Massachusetts, Amherst.
- Lasnik, H. 1998. Exceptional Case marking: Perspectives old and new. In *Annual Workshop on Formal Approaches to Slavic Linguistics: The Connecticut Meeting 1997*, eds. Ž. Bošković, S. Franks, and W. Snyder, 187–211. Ann Arbor: Michigan Slavic Publications.
- Lasnik, H. 1999. *Minimalist Analysis*. Oxford: Blackwell.
- Lasnik, H., and M. Saito. 1991. On the subject of infinitives. Reprinted in Lasnik 1999, 7–24.
- Lasnik, H., and J. Uriagereka with C. Boeckx. 2005. *A Course in Minimalist Syntax: Foundations and Prospects*. Malden: Blackwell Publishing.
- Lenci, A. 1996. Predication theory and epistemic small clauses. *Quaderni del Laboratorio di Linguistica della Scuola Normale Superiore* 10. Available at <http://alphalinguistica.sns.it/QLL96.htm>
- Lenci, A. 1998. The structure of Predication. *Synthese* 114: 233–276.
- Martin, R. 1996. *A minimalist theory of PRO and control*. Doctoral dissertation, The University of Connecticut.
- Massam, D. 1985. *Case Theory and the Projection Principle*. Doctoral dissertation, MIT.
- McCawley, J. D. 1988/1998. *The Syntactic Phenomena of English* (Second Edition). Chicago: University of Chicago Press.
- Pesetsky, D., and E. Torrego. 2004. The syntax of valuation and the interpretability of features. Ms., MIT and University of Massachusetts at Boston.
- Platzack, C. 1986. COMP, INFL, and Germanic word order. In *Topics in Scandinavian Syntax*, eds. L. Hellan and K. K. Christensen, 185–234. Dordrecht: Reidel.
- Postal, P. 1974. *On Raising*. Cambridge, MA: MIT Press.
- Reinhart, T. and T. Siloni. 2005. The lexicon-syntax parameter: Reflexivization and other arity operation. *Linguistic Inquiry* 35: 389–436.
- Rivero, M. L., and A. Terzi. 1995. Imperatives, V-movement and logical mood. *Journal of Linguistics* 31: 310–332.
- Rizzi, L. 1996. Residual verb second and the *Wh*-Criterion. In *Parameters and Functional Heads: Essays in Comparative Syntax*, eds. A. Belletti, and L. Rizzi, 63–90. Oxford: Oxford University Press.
- Rizzi, L. 1997. The fine structure of the left periphery. In *Elements of Grammar*, ed. L. Haegeman, 281–337. Dordrecht: Kluwer Academic Publisher.
- Rooryck, J. 2000. *Configuration of sentential complementation*. London: Routledge.
- Stowell, T. 1982. The tense of infinitives. *Linguistic Inquiry* 13: 561–570.
- Thornton, R. 2001. A-movement in early English. In *Proceedings of the second Tokyo Conference on Psycholinguistics*, ed. Y. Otsu, 227–250. Tokyo: Hituzi Syobo.
- Wharram, Douglas. 1997. On the distribution of (Nominative) Case: Subjunctivity and non-finite clauses. In *'Is the Logic Clear?' Papers in Honor of Howard Lasnik. University of Connecticut Working Papers in Linguistics* 8, eds. J.-S. Kim, S. Oku, and S. Stjepanović, 307–323. MIT Working Papers in Linguistics, MIT.
- Wurmbrand, Susi. 2005. Tense in infinitives. Ms., The University of Connecticut.
- Zagona, K. 2002. *The Syntax of Spanish*. Cambridge: Cambridge University Press.