

# In Search of Evidence for the Placement of the Verb in Korean and Japanese

CHUNG-HYE HAN  
*Simon Fraser University*

## 1. Introduction<sup>1</sup>

One of the most frequently used arguments for or against verb-raising to inflection (INFL) is the placement of the verb with respect to certain type of adverbs or negation (Emonds 1978, Pollock 1989). For example, ‘verb-adverb’ order is taken to be evidence for verb-raising in French (1), and ‘adverb-verb’ order is taken to be evidence for INFL-lowering in English (2).

- (1) Jean embrasse souvent Marie. / \*Jean souvent embrasse Marie.  
Jean kisses often Marie / Jean often kisses Marie
- (2) John often kisses Mary. / \*John kisses often Mary.

But in a head-final language like Korean and Japanese, the string order between the verb and such diagnostic elements is uninformative, as the verb will occur to their right whether it raises or not, as in (3).

- (3) a. Tori-ka cacwu maykcwu-lul masi-n-ta.  
Tori-NOM often beer-ACC drink-PRES-DECL  
‘Tori often drinks beer.’ (Korean)

---

<sup>1</sup> The work reported here is part of a larger project with Jeffrey Lidz and Julien Musolino. I thank the audience at JK 15 for helpful comments and questions. This work was supported by SSHRC Standard Research Grant #410-2003-0544.

- b. Tori-ga sibasiba biiru-o nom-u  
 Tori-NOM often beer-ACC drink-PRES  
 ‘Tori often drinks beer.’ (Japanese)

Since string order cannot be used as evidence for or against verb-raising, syntacticians have had to resort to other ways to make the case for the placement of the verb. Using data pertaining to wide range of phenomena including coordination, scrambling, null objects, and NPI licensing, arguments in both directions have been made, with some arguing that there is verb-raising and others arguing that verb-raising does not occur.

In this paper, I reevaluate the arguments presented in the literature to demonstrate the placement of the verb in Korean and Japanese, and show that none of them are conclusive as all of the data intended to support a verb-raising analysis are compatible with a non-verb-raising analysis and vice-versa (Section 2). I then motivate scope of short negation and quantified object NP as potentially being a good test for verb placement, if the language has a clitic-like negation that associates with the verb in syntax. It will be shown, however, that the extant literature on this topic reports conflicting judgments on crucial data, making it impossible for us to draw any conclusions (Section 3). I will conclude with a speculation on what this conflicting situation in the literature implies for the acquisition of verb placement and the grammar of head-final languages. In the remaining of the paper, to streamline and simplify the presentation, all the examples and discussions will be based on Korean. When the original arguments in the literature are based on facts in Japanese, I have duplicated them here using Korean examples.

## 2. Reevaluation of Arguments in the Literature on the Placement of the Verb

### 2.1. Null Object Constructions (NOCs)

Otani and Whitman (1991) argue that the fact that NOCs in Japanese (and Korean) appear to allow a sloppy reading, as illustrated in (4), is evidence for verb-raising. They propose that through verb-raising, NOCs result in an empty VP, and that this results in a structure analogous to VP ellipsis in English, which can have a sloppy reading, as in (5).

- (4) A: John-un **caki-uy pyenci-lul** pely-ess-ta.  
 John-TOP self-GEN letter-ACC discard-PST-DECL  
 ‘John threw away self’s letter.’
- B: Mary-to [e] pely-ess-ta.  
 Mary-also discard-PST-DECL  
 ‘Mary<sub>j</sub> also threw out self<sub>j</sub>’s letters.’ (sloppy reading)  
 ‘Mary also threw out John’s letters.’ (strict reading)

- (5) John threw away his letter; Mary did [<sub>VP</sub> e] too.

Hoji (1998) however shows that the sloppy-like reading in NOCs is not the genuine sloppy reading attested in a VP ellipsis structure. While English VP-ellipsis examples generally have sloppy readings available, the corresponding Korean NOCs do not always do so, as illustrated in (6) and (7). Hoji concludes that sloppy-like readings in NOCs arise because of the way the content of the null argument is recovered from discourse, and therefore the NOC examples with sloppy-like readings have no bearing on the issue of verb-raising.<sup>2</sup>

- (6) A: Every Korean couple consoled each other.  
 B: Every American couple did too. (√sloppy)
- (7) A: Motun hankwukin khepul-i **selo-lul**  
 every Korean couple-NOM each other-ACC  
 wilohayecwu-ess-ta.  
 console-PST-DECL  
 ‘Every Korean couple consoled each other.’
- B: Motun mikwukin khepul-to [e] wilohayecwu-ess-ta.  
 every American couple-also console-PST-DECL  
 ‘Every American couple consoled them, too.’ (√strict, \*sloppy)

## 2.2. Scrambling and Coordination

Koizumi (2000) argues that the verb raises all the way up to COMP in Japanese (and Korean), using examples from coordination and scrambling. According to Koizumi, ‘Subject [Object and Object] Verb’ coordinate structure is derived through VP-coordination, with across-the-board (ATB) verb-raising at least to INFL, as illustrated in (8), and ‘[Subject Object] and [Subject Object] Verb’ coordinate structure is derived through IP coordination, with ATB verb-raising to COMP, as illustrated in (9). Importantly, the coordinate structures (VP and IP below) can be scrambled, supporting the fact that they form constituents.

- (8) Mary-ka [<sub>VP</sub> [motun sakwa-lul t] kuliko [motun panana-lul t]]  
 Mary-NOM every apple-ACC and every banana-ACC  
 mek-ess-ta.  
 eat-PST-DECL  
 ‘Mary ate every apple and every banana.’

<sup>2</sup> Arguments against NOCs as evidence for overt verb-raising are also provided in S.-W. Kim (1999), with examples of NOCs with a non-empty VP that nevertheless have a sloppy reading.

- (9) [*IP* [Mary-ka motun sakwa-lul t] kuliko [Nancy-ka motun  
Mary-NOM every apple-ACC and Nancy-NOM every  
panana-lul t]] mek-ess-ta.  
banana-ACC eat-PST-DECL  
'Mary ate every apple and Nancy ate every banana.'

But similar examples can be constructed where the material shared by the two conjuncts contains more than just the verb, as in (10). This means that the ATB extraposition can target more than just the verb, making the kind of data Koizumi provides a sub-case of a more general phenomenon, not relevant to the issue of verb-raising.<sup>3</sup>

- (10) a. Mary-ka [[motun sakwa-lul] kuliko [motun panana-lul]]  
Mary-NOM every apple-ACC and every banana-ACC  
culkekey mek-ess-ta.  
joyfully eat-PST-DECL  
'Mary ate every apple and every banana joyfully.'
- b. [[Mary-ka motun sakwa-lul] kuliko [Nancy-ka motun  
Mary-NOM every apple-ACC and Nancy-NOM every  
panana-lul]] culkekey mek-ess-ta.  
banana-ACC joyfully eat-PST-DECL  
'Mary ate every apple and Nancy ate every banana joyfully.'

In fact, the derivation of all these examples with apparent ATB extraposition may not involve a rightward syntactic movement of the material in the ATB extraposed position. D. Chung (2004) has shown that plurality-dependent expressions such as plural-marked adverbs are licensed in an ATB extraposed position as in (11a) when the same expressions cannot be licensed in each conjunct as in (11b). The contrast in (11a) and (11b) shows that the two examples cannot be derivationally related and poses a serious problem for the rightward ATB raising analysis in general for the examples discussed in this section.<sup>4</sup>

- (11) a. John-un nonmwun-ul kuliko Mary-nun chayk-ul yelsimhi-tul  
John-TOP article-ACC and Mary-TOP book-ACC hard-PL  
ilk-ess-ta.  
read-PST-DECL  
'John read the article hard and Mary read the book hard.'

<sup>3</sup> See Fukui and Sakai (2002) for a critique of Koizumi's arguments on string-vacuous verb-raising in Japanese.

<sup>4</sup> I thank Daeho Chung for pointing this out to me.

- b. John-un nonmwun-ul yelsimhi(\*-tul) ilk-ess-ko Mary-nun  
 John-TOP article-ACC hard-PL read-PST-CONJ Mary-TOP  
 chayk-ul yelsimhi(\*-tul) ilk-ess-ta.  
 book-ACC hard-PL read-PST-DECL  
 ‘John read the article hard and Mary read the book hard.’

### 2.3. NPI Licensing

In a negative sentence, an NPI can appear in both subject and object positions, as in (12) and (13). Descriptively, NPIs are possible as long as there is a licenser (negation) in the same clause (Clause-mate Condition, H.-S. Choe (1988)). Y.-S. Choi (1999) takes this as evidence for verb-raising. Assuming that negation is a clitic on the verb, he argues that NPIs in both subject and object positions are licensed because they are in the scope of negation once the verb moves up along with the cliticized negation.

- (12) a. John-un **amwukesto an** mek-ess-ta.  
 John-TOP anything NEG eat-PST-DECL  
 ‘John didn’t eat anything.’  
 b. John-un **amwukesto** mek-ci **ani** ha-yess-ta.  
 John-TOP anything eat-CI Neg do-PST-DECL  
 ‘John didn’t eat anything.’
- (13) a. **Amwuto** kwaca-lul **an** mek-ess-ta.  
 anyone cookie-ACC NEG eat-PST-DECL  
 ‘Nobody ate the cookies.’  
 b. **Amwuto** kwaca-lul mek-ci **ani** ha-yess-ta.  
 anyone cookie-ACC eat-CI NEG do-PST-DECL  
 ‘Nobody ate the cookies.’

It can be shown however that scope of negation and NPI licensing domain do not always go together, and so NPI licensing has no bearing on the issue of verb-raising. First, as we will see in section 3, Korean speakers do not agree on judgments concerning the scope of negation and argument quantified phrases (QPs), but there is no disagreement as to the status of sentences with NPIs like (12) and (13). Second, in sentences with inherently negative predicates, NPIs are licensed even though the negative predicate does not take scope over it, as shown in Chung and Park (1997) with examples as in (14).

- (14) a. **Motun mwulken-i** chayksang-wiey **eps-ta**.  
 every thing-Nom desk-on not\_exist-Decl  
 ‘Nothing is on the desk.’ ( $\sqrt{\text{every}} > \text{neg}$ ,  $*\text{neg} > \text{every}$ )  
 b. **Amwukesto** chayksang-wiey **eps-ta**.  
 any thing desk-on not\_exist-Decl  
 ‘Nothing is on the desk.’

Third, Chung and Park show that some NPIs, such as *celtaylo* ‘absolutely’, cannot be in the scope of negation, even though it requires a clause-mate negation to be licensed, as illustrated in (15).

- (15) a. Ku-nun **celtaylo** kukos-ey ga-ci **ani** ha-yess-ta.  
 he-Top absolutely there-to go-Ci Neg do-Past-Decl  
 ‘It is absolutely true that he did not go there.’  
 ‘\*It is not the case that he absolutely went there.’
- b. Ku-nun **celtaylo** kukos-ey **an** ga-ss-ta.  
 he-Top absolutely there-to Neg go-Past-Decl  
 ‘It is absolutely true that he did not go there.’  
 ‘\*It is not the case that he absolutely went there.’

#### 2.4. Coordination of an Untensed and a Tensed Conjunct

J. Yoon (1994) makes an argument against verb-raising, using coordinate structures conjoining an untensed clause and a tensed clause. Yoon proposes that while the coordinate structure instantiates clausal conjunction at IP-level when tense is specified in all the conjuncts, as in (16), it instantiates VP-level conjunction as in (17) when tense is specified only on the verb in the last conjunct, and that the inflections on I and C combine with the verb in the final conjunct by lowering onto the appropriate places in morphology.

- (16) [<sub>IP</sub> [John-i pap-ul mek-ess-ko] [Mary-ka kulus-ul  
 John-NOM meal-ACC eat-PST-CONJ Mary-NOM dishes-ACC  
 chiwu-ess]]-ta.  
 clean-PST-DECL  
 ‘John ate the meal and Mary cleaned the dishes.’

- (17) John-i [<sub>VP</sub> [pap-ul mek-ko] [kulus-ul chiwu]]-ess-ta.  
 John-NOM meal-ACC eat-CONJ dishes-ACC clean-PST-DECL  
 ‘John ate the meal and cleaned the dishes.’

Yoon provides three supporting arguments for his proposed coordinate structures. First, NPI *amwuto* (‘anyone’) is licensed in (18a) with VP-level coordination because it is in the same clause as negation *ani*. But in (18b), with IP-level coordination, *amwuto* is not licensed as it is not in the same clause as *ani*.

- (18) a. **Amwuto** [<sub>VP</sub> [pap-ul mek-ko] [kulus-ul chiwu-ci]] **ani**  
 anyone meal-ACC eat-CONJ dishes-ACC clean-CI NEG  
 ha-yess-ta.  
 do-PST-DECL  
 ‘No one ate the meal and cleaned the dishes.’

- b. \* [<sub>IP</sub> [**Amwuto** pap-ul mek-ess-ko] [kulus-ul chiwu-ci  
anyone meal-ACC eat-PST-CONJ dishes-ACC clean-CI  
**ani** ha-yess]]-ta.  
NEG do-PST-DECL  
'No one ate the meal and cleaned the dishes.'

Second, in (19a), scrambling of *pap-ul* ('meal-ACC') is fine because it adjoins to VP, and from there it properly binds its trace, in the sense of Saito's (1985) Proper Binding Condition. But in (19b), scrambling of *pap-ul* is ruled out because it has moved into the first clausal conjunct, and from there it cannot properly bind its trace in the second clausal conjunct.

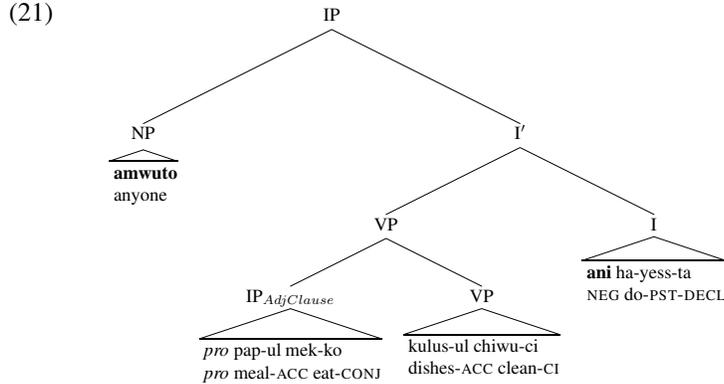
- (19) a. John-i **pap-ul** [<sub>VP</sub> [chayk-ul ilk-ko] [t  
John-NOM meal-ACC book-ACC read-CONJ  
mek]]-ess-ta.  
eat-PST-DECL  
'John read the book and ate the meal.'
- b. \* [<sub>IP</sub> [John-i **pap-ul** chayk-ul ilk-ess-ko] [t  
John-NOM meal-ACC book-ACC read-PST-CONJ  
mek-ess]]-ta.  
eat-PST-DECL  
'John read the book and ate the meal.'

Third, while negation in (20a) can scope over both conjuncts or the second conjunct, it can only scope over the second conjunct in (20b). For Yoon, this contrast follows from the distinction between VP- and IP-level coordination.

- (20) a. John-i [<sub>VP</sub> [pap-ul mek-ko] [kulus-ul chiwu-ci]] **ani**  
John-NOM meal-ACC eat-CONJ dishes-ACC clean-CI NEG  
ha-yess-ta.  
do-PST-DECL  
'John didn't eat the meal and clean the dishes.'  
'John ate the meal but didn't clean the dishes.'
- b. [<sub>IP</sub> [John-i pap-ul mek-ess-ko] [kulus-ul chiwu-ci  
John-NOM meal-ACC eat-PST-CONJ dishes-ACC clean-CI  
**ani** ha-yess]]-ta.  
NEG do-PST-DECL  
'John ate the meal but he didn't clean the dishes.'

J.-B. Kim (1995) however demonstrates that while coordination of two tensed clauses is a real case of coordination, coordination of an untensed conjunct with a tensed one is a case of clausal adjunction. Under this analysis, Yoon's NPI example with VP coordination (18a) can be reanalyzed as

a structure with an IP adjunct containing a *pro* subject, as in (21). In this structure, the NPI is licensed as it is in the same clause as the negation.



Further, under the adjunction approach to untensed conjuncts, scrambling facts are accounted for without appealing to Saito's Proper Binding Condition. Scrambling out of the tensed clause conjoined with an untensed clause is predicted to be possible because this is a case of local scrambling across an adjunct clause, as in (22).

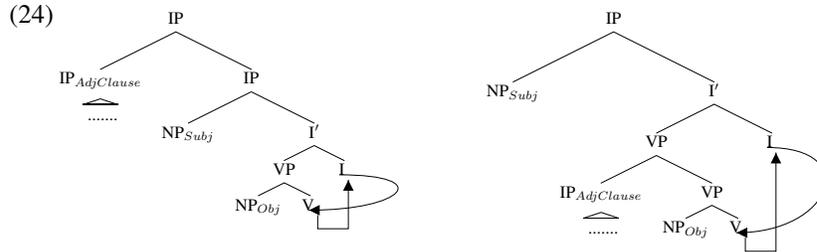
- (22) John-i **pap-ul** [<sub>IP</sub> **pro** chayk-ul ilk-ko] **t** mek-ess-ta.  
 John-NOM meal-ACC book-ACC read-CONJ eat-PST-DECL  
 'John read the book and ate the meal.'

The ambiguity concerning the scope of negation in (20a) can also be accounted for under the adjunction analysis, where the untensed conjunct is an IP adjunct containing a *pro* subject, as in (23). The ambiguity can be seen as part of a general phenomenon having to do with the interpretation of matrix negation in complex sentences, in which either the matrix clause or the embedded clause is negated.

- (23) John-i [<sub>IP</sub> **pro** pap-ul mek-ko] kulus-ul chiwu-ci **ani**  
 John-NOM meal-ACC eat-CONJ dishes-ACC clean-CI NEG  
 ha-yess-ta.  
 do-PST-DECL  
 'John didn't eat the meal and clean the dishes.'  
 'John ate the meal but didn't clean the dishes.'

With the untensed conjunct as an adjunct clause, the verb in the final tensed clause can combine with inflections through verb-raising as well as INFL-lowering, as illustrated in (24). Therefore, coordination of an untensed con-

junct with a tensed one does not have any bearing on the issue of verb-raising.<sup>5</sup>



### 3. Scope of Short Negation and Object QP as Evidence for Verb Placement

Korean has two types of negation: long negation in a postverbal position, and short negation in a preverbal position. These two types of negation occupy distinct syntactic positions, as they can both occur in a sentence, as in (25).

- (25) Toli-ka maykcwu-lul **an** masi-ci **ani** ha-yess-ta  
 Toli-NOM beer-ACC NEG drink-CI NEG do-PST-DECL  
 ‘Toli didn’t not drink beer.’ (Toli drank beer)

Because of three independent facts about Korean, scope interaction between short negation and object QP can be used as a diagnostic for verb placement. First, Korean, as in Japanese, exhibits frozen scope. That is, in a sentence with canonical SOV order as in (26) with subject and object QPs, only the reading in which the subject scopes over the object is available (S.-H. Ahn 1990, Hagstrom 2000, Y. Joo 1989, K.-W. Sohn 1995).

- (26) **Nwukwunka-ka manhun salam-ul** piphanhay-ss-ta.  
 someone-NOM many person-ACC criticize-PST-DECL  
 ‘Someone criticized many people.’ (some > many, \* many > some)

Second, object NP raises out of VP, as it must precede VP-adjoined adverbs such as *cal* (‘well’), as in (27) (Hagstrom 2000, 2002).

- (27) a. Toli-ka **maykcwu-lul cal** masi-n-ta.  
 Toli-NOM beer-ACC well drink-PRES-DECL  
 ‘Toli drinks beer well.’  
 b. \* Toli-ka **cal maykcwu-lul** masi-n-ta.  
 Toli-NOM well beer-ACC drink-PRES-DECL  
 ‘Toli drinks beer well.’

<sup>5</sup> Storoshenko (2004) goes through arguments presented in the literature regarding verb-raising in Japanese and shows that none of them are conclusive.

Third, short negation has the morphosyntactic status of a clitic (Y.-S. Choi 1999, H. Han and M.-K. Park 1994), as in many Romance languages (Cinque 1999), and is treated as a unit with the verb in overt syntax. It must occur immediately before the verb, as in (28).

- (28) a. Toli-ka maykcwu-lul cal **an mas-in-ta**.  
 Toli-NOM beer-ACC well NEG drink-PRES-DECL  
 ‘Toli doesn’t drink beer well.’
- b. \*Toli-ka maykcwu-lul **an** cal **mas-in-ta**.  
 Toli-NOM beer-ACC NEG well drink-PRES-DECL  
 ‘Toli doesn’t drink beer well.’

Taken together, these facts suggest that scope facts in sentences containing both short negation and object QP as in (29) could provide a clear test for the height of the verb.

- (29) Tori-ka **motun** chayk-ul **an** ilk-ess-ta.  
 Tori-NOM every book-ACC NEG read-PST-DECL  
 ‘Tori didn’t read every book.’

Given scope freezing, the scope of argument QPs will be determined in their surface positions without recourse to QR or reconstruction, and so the scope of negation and the object QP will reflect the position of negation, relative to the object QP in the clause structure. And, given object raising and Neg-cliticization, the availability of Neg>objectQP reading will be evidence for verb-raising.

Although the predictions are clear, we cannot draw any conclusions regarding verb-raising based on what is reported in the extant literature, because the scope judgments reported in the literature for sentences containing negation and quantified argument NPs often conflict with each other. For instance, Hagstrom (2000) and J.-H. Suh (1989) report that sentences like (29) only have ‘every > neg’ reading, whereas Y.-K. Baek (1998) and J.-B. Kim (2000) report that they are ambiguous between ‘every > neg’ and ‘neg > every’ readings.<sup>6</sup>

#### 4. Conclusion: Implications for the Grammar

I have shown that none of the arguments in the literature for verb-raising or INFL-lowering in Korean is definitive, and the data used in the argumentation has explanations consistent with either analysis. I have further shown that though scope of short negation and an object QP can be a good test for demonstrating the height of the verb, conflicting judgments reported in the literature makes it impossible for us to draw any conclusions.

<sup>6</sup> Storoshenko (2004) also found that conflicting scope judgments are reported in the literature on Japanese sentences with negation and argument QPs.

I speculate that this conflicting situation in the literature is not an accident, but a reflection of the fact that evidence regarding the verb placement in a head-final language like Korean and Japanese is truly hard to come by, not only for linguists developing an analysis of verb placement but also for children acquiring the language. This lack of evidence then raises a question as to how Korean and Japanese children acquire verb placement. This question is taken up in Han et. al. (2005). Building upon the idea that insufficient input can lead to distinct grammars in a single speech community, a widely postulated idea in diachronic syntax literature (Kroch 1989, Pintzuk 1991, Santorini 1992, Taylor 1994) and in language acquisition literature (Roeper 1999, Yang 2003), they hypothesize that there are two populations of Korean speakers: one with verb-raising and one without. Under this hypothesis, the paucity of relevant evidence may result in a situation where one group has scope judgments consistent with verb-raising grammar and another group consistent with INFL-lowering grammar.

### References

- Baek, J. Y.-K. 1998. Negation and Object Shift in Early Child Korean. *The Interpretive Tract*, volume 25 of *MIT Working Papers in Linguistics*, 73–86. Cambridge: MITWPL.
- Choe, H.-S. 1988. Restructuring Parameters and Complex Predicates: A Transformational Approach. Doctoral Dissertation, MIT.
- Choi, Y.-S. 1999. Negation, its Scope and NPI Licensing in Korean. *Proceedings of ESCOL*, eds. R. Daly and A. Riehl, 25–36. Ithaca, NY: Cornell University.
- Chung, D. 2004. A Multiple Dominance Analysis of Right Node Sharing Constructions. *Language Research* 40:791–811.
- Chung, D. and H.-K. Park. 1997. NPIs Outside of Negation Scope. *Japanese/Korean linguistics*, volume 6, eds. H.-M. Sohn and J. Haig, 415–435. Stanford: CSLI.
- Fukui, N., and H. Sakai. 2003. The Visibility Guideline for Functional Categories: Verb Raising in Japanese and Related Issues. *Lingua* 113:321–375.
- Hagstrom, P. 2000. Phrasal Movement in Korean Negation. *Proceedings of SCIL*, volume 9, 127–142. Cambridge: MITWPL.
- Hagstrom, P. 2002. Implications of Child Error for the Syntax of Negation in Korean. *Journal of East Asian Linguistics* 11:211–242.
- Hahn, K.-J. P. 1981. The Development of Negation in One Korean Child. Doctoral Dissertation, University of Hawaii.
- Han, C.-H., J. Lidz, and J. Musolino. 2005. Verb-raising and Grammar Competition in Korean: Evidence from Negation and Quantifier Scope. Manuscript, Simon Fraser University, University of Maryland, Indiana University. Based on a talk presented at *Workshop on UG Principles and Input Data: How do we get Plato's Heaven into Skinner's Box?*, Michigan State University in East Lansing, Aug. 1-2, 2003.
- Han, H., and M.-K. Park. 1994. The Syntax of Negation in Korean and its Development in Child Language. *Proceedings of ESCOL*, 152–162.
- Joo, Y. S. 1989. A Cross-linguistic Approach to Quantification in Syntax. Doctoral

- Dissertation, University of Wisconsin, Madison.
- Kim, J.-B. 1995. On the Existence of NegP in Korean. *Harvard Studies in Korean Linguistics*, volume 6, 267–282.
- Kim, J.-B. 2000. *The Grammar of Negation: A Constraint-based Approach*. Stanford: CSLI.
- Kim, S. 1999. Sloppy/strict Identity, Empty Objects, and NP Ellipsis. *Journal of East Asian Linguistics* 8:255–284.
- Koizumi, M. 2000. String Vacuous Overt Verb Raising. *Journal of East Asian Linguistics* 9:227–285.
- Kroch, A. 1989. Function and Grammar in the History of English Periphrastic *do*. *Language variation and change*, eds. R. Fasold and D. Schiffrin, Current Issues in Linguistic Theory 52, 133–172. Amsterdam, Philadelphia: Benjamins.
- Otani, K., and J. Whitman. 1991. V-raising and VP-ellipsis. *Linguistic Inquiry* 22:345–358.
- Park, M.-K. 1998. Negation and Placement of Verb in Korean. *Language Research* 34:709–736.
- Pintzuk, S. 1991. Phrase Structures in Competition: Variation and Change in Old English Word Order. Doctoral Dissertation, University of Pennsylvania.
- Roeper, T. 1999. Universal Bilingualism. *Bilingualism: Language and Cognition* 2:169–186.
- Santorini, B. 1992. Variation and Change in Yiddish Subordinate Clause Word Order. *Natural Language and Linguistic Theory* 10:596–640.
- Sohn, K.-W. 1995. Negative Polarity Items, Scope and Economy. Doctoral Dissertation, University of Connecticut.
- Storoshenko, D. R. 2004. Negation Scope and Phrase Structure in Japanese. Master's thesis, Simon Fraser University.
- Suh, J. 1989. Scope Interaction in Negation. *Harvard Studies in Korean Linguistics*, volume III, 527–536. Department of Linguistics, Harvard University.
- Taylor, A. 1994. The Change from SOV to SVO in Ancient Greek. *Language Variation and Change* 6:1–37.
- Yang, C. 2002. *Knowledge and Learning in Natural Language*. Oxford.
- Yoon, J. H.-S. 1994. Korean Verbal Inflection and Checking Theory. *The Morphology-Syntax Connection*, volume 22 of *MIT Working Papers in Linguistics*, 251–270. Cambridge: MITWPL.