CONJUNCTION REDUCTION and ITS CONSEQUENCES for NOUN PHRASE MORPHOSYNTAX in KOREAN

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1. Introduction

This paper investigates the properties of two types of surface NP coordinations in Korean and claims that one pattern is constituent coordination of NPs whereas the other is derived by ellipsis from a larger, clausal, coordination. We investigate the morphosyntax of the two types of coordinations and show how the morphosyntactic differences between the two types are systematically correlated with the interpretive and distributional differences between the two types.

The result of our investigation will support a view of Korean nominal inflection where the particles that realize nominal morphosyntactic properties are syntactically independent elements, despite the fact that their phonological and morphological properties are typical of lexical affixes. Finally, we discuss some ways in which the elliptical nature of the second type of NP coordination can be modeled.

2. Ellipsis in Nominal Conjunction

2.1. NP Coordinations As Constituent Coordinations

The earliest work on coordination in generative grammar assumed that only sentences can be coordinated as constituents (Chomsky 1957; Gleitman 1965, etc.). Surface coordinations of non-sentential constituents were assumed to arise from reduction - commonly dubbed Conjunction Reduction. However, the sentential analysis of all non-sentential coordinations faces non-trivial problems from facts such as those in (1) below. This is because the putative source of the NP coordinations in (1), the sentences in (2), is ill-formed.

- (1) a. The king and queen are an amiable couple
 - b. Tom, Dick, and Harry are similar
- (2) a. *The king is/an amiable couple and the queen is an amiable couple
 - b. The king and queen *is/are an amiable couple

One response to this state of affairs has been to posit that all surface NP coordinations are constituent coordinations. Nonetheless, if we should find that a surface conjunction of NPs fails to denote a plurality of entities – as diagnosed by syntactic and semantic tests – we may infer that it may be because the conjunction arises from an underlying conjunction of sentences by ellipsis. This was the argument in Aoun, Benmamoun, Sportiche (1994, 1999). They argued that in certain Arabic dialects, VSO sentences with conjoined subjects demonstrating First Conjunct Agreement (FCA) are clausal conjunctions whose surface form is derived by (PF) ellipsis. The argument for the clausal analysis of FCA cases comes from the fact that these sentences, despite possessing a surface string of two NPs linked by conjunction, systematically fail to license elements requiring plural NPs.

We show in this paper that there is another language where a surface string of NPs linked by conjunction is amenable to a similar analysis. One type (Type A) is constituent NP conjunction, while the other (Type B) is an elliptical conjunction deriving from a larger, clausal, conjunction. Type B

©2005 James Hye Suk Yoon and Wooseung Lee Cascadilla Proceedings Project. Completed May 2, 2005 coordinations in Korean never form NPs, in either the underlying or the surface level of representation. They simply appear to be a constituent conjunction of NPs because of the way that ellipsis works.

3. Two Types of Nominal Conjunction in Korean

A string of NPs can be coordinated in different ways in Korean (Cho & Morgan 1986; Yu-Cho and Sells 1995). We will focus here on the following two types, which we designate Type A and B:

<u>Type A</u>: case is marked only on the final conjunct and non-final conjuncts carry the nominal conjunctive suffix -(k)wa (or other conjunctive suffixes such as -hako). <u>Type B</u>: case-markers occur on all conjuncts and *kuliko* occurs between the conjuncts.

The two types differ in their morphosyntax, prosody, interpretation, and their syntactic distribution.

Morphosyntactically, Type A is marked by a (nominal) conjunctive suffix (-*kwa* or -*hako*) on non-final conjuncts. The final conjunct does not carry the conjunctive (for the conjunctive –*kwa*) and is case-marked. It is possible for the analytic conjunctor *kuliko* to be added after the conjunctive-marked NP. However, this sounds redundant. We thus examine forms without the doubled *kuliko* in what follows. In Type B, all conjuncts carry case-markers and the analytic conjunction *kuliko* occurs between all conjuncts. The two types are illustrated in (3a-b) below.

(3)	a.	John-kv	va Ma	ry-ka	cip-ey	ka-ss-ta	(Type A)
		J-conj	M-i	nom	home-loc	go-pst-decl	
	b.	John-i	kuliko	Mary-ka	ı cip-ey	ka-ss-ta	(Type B)
		J-nom	and	M-nom	home-lo	c go-pst-decl	
		'John ai	nd Mary	went hom	ie.'		

Prosodically, Type B conjunction is characterized by a pause after the first (case-marked) conjunct, whereas in Type A, a pause is not necessary. Interpretively, the two differ as follows. (3a) describes a situation where John and Mary could have gone home together or separately, whereas (3b) implies separate events of John and Mary going home.

Now, since 'going home' can be distributive, the two readings are not disambiguated clearly. However, in the following cases, the differences become more salient. For example, (4a) is interpreted primarily in the collective sense (reading 2) by most speakers. (4b), by contrast, draws an almost unambiguous response as a distributive.

(4)	a.	John-kwa	Mary-ka	a ochen-p	owul-ul	pelessta	
		J-conj	M-nom	5000-de	ollars-acc	made	
	b.	John-i	kuliko	Mary-ka	ochen-pwu	l-ul	pelessta
		J-nom	conj	M-nom	5000-dolla	rs-acc	made
		#1: John and #2: John and (4a): 2 > 1	l Mary ea d Mary to (4b): 1 >	ch made \$50 ogether made	000 \$5000		

Now, because it implies multiple events, the interpretation of Type B coordinations in most cases is similar to distributivity. And, on the basis of the initial preference for a collective interpretation, we might think that Type A is either an obligatorily collective NP coordination, or else a Comitative structure, since Comitatives are collective. However, this is not the case. Type A coordinations are compatible with both collective and distributive predicates. This is shown in (5) below.

(5)	a.	John-i	cip-ey	Mary-w	a ka-ss-ta	a (Comita	tive)		
		J-nom	home-loc	M-with	go-pst-	decl			
	'John went home with Mary.'								
	b.	*John-i	cip-ey	kakkak	Mary-wa	ka-ss-ta	(Comitative)		
		J-nom	home-loc	each	M-with	go-pst-decl			
		'*John went home with Mary each.'							

c. John-kwa Mary-ka kakkak cip-ey ka-ss-ta (Type A) J-conj M-nom each home-loc go-pst-decl 'John and Mary each went home.'

Morphosyntactically, Type A structures seem to be what Johannesen (1997) calls Unbalanced Coordination. Type B looks like a Balanced Coordination, as it is case-marked symmetrically on all conjuncts. However, it turns out that Type A is the normal, balanced, constituent NP coordination and Type B is not a constituent NP coordination at all. The argument for the latter rests on demonstrating that Type B coordinations do not have properties we expect constituent NP coordinations to have.

3.1. Arguments for the Ellipsis Analysis of Type B Coordinations

Conjoined NPs denote a plurality of entities. If Type B coordinations do not form constituent NPs, we expect them to be incompatible with predicates or modifiers that require plural NPs. This prediction is confirmed, as we see below.

3.1.1. Collective Modifiers

(6)	a.	Cheli-wa	Yenghi-	ka chayksa	ing-ul	hamkke	y mantul-e	ss-eyo
		C-conj	Y-nom	desk-ac	с	together	make-pa	st-decl
	b.	*?Cheli-ka	kuliko	Yenghi-ka	chayksa	ing-ul	hamkkey	mantul-ess-eyo
		C-nom	conj	Y-nom	desk-ac	c	together	make-past-decl
	'Chelswu and Yenghi made a desk together.'							

As shown in (6), the collectivizing reading of the modifier *hamkkey* (as opposed to the accompaniment reading – Lasersohn 1995) is incompatible with Type B coordinations. This is predicted if Type B conjunctions are not constituent NP conjunctions and do not form a plural-denoting conjoined NP.

3.1.2. Collective Predicates

Likewise, Type B coordinations are marginal with collective and symmetric predicates, unlike Type A coordinations. This is expected if they derive from a clausal source with singular NP subjects.

(7)	a.	Cheli-wa	Yenghi-ka	pwupwu-ya	
		C-conj	Y-nom	couple-cop.decl	
	b.	*Cheli-ka	kuliko	Yenghi-ka	pwupwu-ya
		C-nom	conj	Y-nom	couple-cop.decl
		'Cheli and Y	enghi are a co	ouple.'	
(8)	a.	Cheli-wa	Yenghi-ka	heyeci-ess-ta	
		C-conj	Y-nom	break.up-pst-decl	
	b.	*Cheli-ka	kuliko	Yenghi-ka	heyeci-ess-ta
		C-nom	conj	Y-nom	break.up-pst-decl
		'Cheli and Y	enghi broke u	ıp.'	

3.1.3. Collective Prenominal Modifiers (Heycock and Zamparelli 2003)

Collective pronominal modifiers yield an even sharper contrast between Type A and B coordinations. This is shown in (9) below. The ill-formedness of the pre-ellipsis source of (9b) is the culprit.

(9)	a.	cal	ewulli-nun	namca-wa	yeca-ka	pang-ulo	tuleossta	ı	
		well	matched-rel	man-conj	woman-Nom	n room-into	enter-ps	t-decl	
	b.	*cal	ewulli-nun	namca-ka	kuliko	yeca-ka	pang-ulo	tuleoassta	
		well	matched-rel	man-nom	conj	woman-Nom	room-into	entered	
	'A well-matched man and woman entered the room.'								

3.1.4. Type B Coordinations Are Not Constituents

While Type B coordinations allow adverbs to intervene between the two conjuncts, and, more importantly, allow two different adverbs of the same type modifying two different events, as shown in (10a'), Type A coordination in (10a) cannot be separated by adverbs. And even when adverbs don't separate the conjuncts, only one adverb of a given type can occur, as shown in (10b-b').

(10) a.	*Cheli-wa	himtulkey	Yenghi-	ka il-ul	ha-nta				
	C-conj	with.difficult	y Y-nom	work-Ad	cc do-decl				
	'Cheli and Y	enghi do the v	work with a le	ot of effort.'					
a'.	Cheli-ka	himtulkey	kuliko	Yenghi-ka	swipkey	il-ul	hanta		
	C-nom	with.difficult	y conj	Y-nom	easily	work-Acc	do-decl		
	'Cheli does the work with difficulty and/but Yenghi does the work with ease.'								
b.	Swipkey	Cheli-wa	Yenghi-ka	chayksang-u	l olmkyes	sta			
	Easily	C-conj	Y-nom	desk-acc	moved				
	'Cheli and Y	enghi moved	the desk with	ease.'					
b'. [:]	*Swipkey	Cheli-wa	Yenghi-ka	himtulkey	chayksa	ng-ul ol	mkyessta		
	Easily	C-conj	Y-nom	with.difficut	ly desk-Ac	c m	oved		
	'Cheli moved the desk easily and/but Yenghi moved the desk with difficulty.'								

The string *Cheli-ka himtulkey* in (10a) is not a constituent, as its constituency cannot be verified by any other standard constituency test except for Type B coordination. This is expected on the ellipsis analysis. The non-constituency of Type B coordinations receives further support from the following types of evidence.

3.1.5. Type B Coordinations Do Not Have NP Distribution

There are certain positions where only NPs can occur. Naturally, Type B coordinations cannot occupy such positions, while Type A coordinations can.

Free-standing NPs

A free-standing NP can be Type A coordinate structure, but not Type B. This is shown below in (11).

(11) a.	Il-ul	swipkey	ha-nun	Cheli-wa	Yenghi		
	work-acc	easily	do-rel	C-conj	Y		
b.	*Il-ul	swipkey	ha-nun	Cheli-ka	kuliko	Yenghi	
	work-acc	easily	do-rel	C-nom	conj	Y	
	'Cheli and Yenghi, who do the work effortlessly'						

The reason Type B coordinations are out as free-standing NPs is that there is no larger source from which they can be reduced.

Focus of Cleft

The focus of Cleft is an NP with no case-marking (Yoon 2003, J-M Jo 2004, etc.). Type A but not Type B coordinations can occur as the focus of a Cleft construction. This is predicted if Type B structures are not NPs.

(12)a.	Il-ul	swipkey	hanun	kes-un	Cheli-wa	Yenghi	-i-ta
	work-acc	easily	do.rel	thing-nom	C-conj	Y-cop-o	lecl
b.	*Il-ul	swipkey	hanun	kes-un	Cheli-ka	kuliko	Yenghi-(ka)-i-ta
	work-acc	easily	do.rel	thing-nom	C-nom	conj	Y-(nom)-cop-decl
	'It is Cheli and Yenghi who do the work with no effort.'						

Only (-man)

Type A coordinations, being an NP, can be marked with *-man* (only) taking scope over the conjoined NP. Type B cannot, by contrast:

(13)a.	John-kwa	Maı	y- man -i	o-ass-ta
	J-conj	M-c	only-nom	come-pst-decl
b.	*John-i k	uliko	Mary-man-i	o-ass-ta
	J-nom c	onj	M-only-nom	come-pst-decl
	Intended:	'Only J	ohn and Mary	y came.'

The source of the Type B conjunction in (13b), (14), is ill-formed. It asserts that John came, so it cannot be the case that only Mary came.

(14) *John-i	o-ass-ta	kuliko	Mary-man-i	o-ass-ta
J-nom	come-pst-decl	conj	M-only-nom	come-pst-decl

3.1.6. Disjunction and Negation

We can also find Type A and Type B coordinations in disjunctive coordination. Han and Romero (2004) note the following contrast.

(15)a.	Chelswu-ka	kophi-na	cha-lul	masi-ess-ni?	
	C-nom	coffee-or	tea-acc	drink-pst-Q	
b.	Chelswu-ka	kophi-lul	animyen	cha-lul	masi-ess-ni?
	C-nom	coffee-acc	or	tea-acc	drink-pst-Q

(15a) has two readings:

#1: y/n reading =It is true or not that C drank coffee or tea?#2: alternative reading = Did C drink coffee or he did drink tea?

(15b) has only the second, alternative reading. Han and Romero (2004) attribute the difference to the fact that the latter is derived by Ellipsis from a clausal disjunction (where in 15b disjunction scopes above the question operator).

4. The Morphosyntax of Case-marked Nominals and Nominal Conjunctions

In most languages with morphological case-marking, a string of conjoined NPs must be individually case-marked in each conjunct. This is shown in the German sentence below:

(16))Der	Vater	und	seine	Tochter	gehen	ins
	the.masc.nor	m father	and	his.fem.ne	om daughter	go	to.the
	Kino zusamme						
	theater together						
'The father and his daughther go t				to the theate	er together.'		

Therefore, the questions that the two types of nominal conjunctions in Korean raise are the following: Why is Type A coordination case-marked only on the final conjunct? Why are Type B coordinations case-marked on all conjuncts? And, why does case-marking correlate with constituent vs. elliptical coordination?

We will propose the following. Case-markers (Nom, Acc minimally) are syntactically Head-initial functional heads which c-select verbal constituents as complements (Kayne 1994; Whitman 1998; Yoon 1998; J-M Jo 2004, etc.). Thus, case-markers are not lexically attached suffixes. Their surface position is the result of morphological encliticization of the case-marker to the right margin of XPs in their Spec. What is crucial in this analysis is that a string of NP followed by the case-marker is not a syntactic constituent (but the NP without a case-marker is). The analysis is illustrated below:



Many questions remain about the exact implementation of this type of analysis (such as the analysis of Scrambling), but it should be obvious that this analysis derives two central facts about Type B coordinations - they are clausal and do not form constituents.

In particular, the analysis implies that a case-marked NP without a following predicate is an elliptical structure, because a case-marker always selects a verbal XP as complement. The structure of Type B coordination is shown schematically in (18a).

(18)a. $[N_{OMP} \ [NP Chelswu] \ [N_{Om'} - ka \ \Psi]]$ kuliko $[N_{OMP} \ [NP Yenghi] \ [N_{Om'} - ka \ VP]]$... b. [_{NP} [_{NP} Chelswu]-wa [_{NP} Yenghi]] [_{Nom'} –ka VP]] NomP

Type A coordinations (shown in 18b), by contrast, are NPs. The analysis also predicts that Type A coordinations are case-marked once on the final conjunct because the entire conjoined NP is in the Specifier of NomP.

5. **Mechanisms of Ellipsis/Reduction**

5.1. The Generalizations

ABS's (1994, 1999) argument for a clausal analysis of FCA in Arabic rested on the demonstration that the surface string of conjoined NPs does not act as plural-denoting with respect to elements that are sensitive to number (Number Sensitive Items, NSIs). Our argument thus far has been based on collective modifiers and predicates, non-constituency, non-NP distribution, and the scope of disjunction of Type B coordinations relative to Type A coordinations. However, when we turn to other NSIs, such as distributive modifiers, they are unexpectedly acceptable with Type B coordinations. This is something that is not predicted under the ellipsis analysis.

The expression *kakkak* ('each') is possible in Type B coordinations.

(19)a.	Cheli-wa	Yenghi-	ka kakkak	cip-ulo	kass-ta	ì	
	C-conj	Y-nom	each	home-lo	oc went-c	lecl	
b.	Cheli-ka	kuliko	Yenghi-ka	kakkak	cip-ulo	kass-ta	
	C-nom	conj	Y-nom	each	home-loc	went-decl	
	'Cheli and Yenghi each went home.'						

Now, the problem with the acceptability of (20) is that the putative pre-Ellipsis structure is not grammatical.

(20)	*Cheli-ka	kakkak	cip ulo		kass ta	kuliko	(=19b)
	C-nom	each	home-lo	ж	went-decl	conj	
	Yenghi-ka	kakkak	cip-ulo	kas	s-ta		
	Y-nom	each	home-loc	wei	nt-decl		

D-H Chung (2004) notes a similar problem with the RNR-ed sentence in (21) below.

(21)a.	John-un	sengkyeng-ul	kuliko	Mary-nun	capci-lul	kakkak	ilk-ess-ta
	J-top	bible-acc	conj	M-top	magazine-acc	each	read-pst-decl
	'John read t	he bible and Mary	a magaz	ine.'			
b.	*John-un	sengkyeng-ul	<u>kakkak</u>	ilk ess t	a kuliko		
	Mary-nun	capci-lul	kakkak	ilk-ess-t	ta		

The Copied Plural Marker (CPM) -tul, which is normally thought to require a plural NP subject, can show up in the shared predicate of a Type B coordination. This is a problem as illustrated schematically in (22b).

(22) a.	John-i	kuliko	Mary-ka	swukcey-lu	l a	cip-eyse-tul	hayssta			
	J-nom	conj	M-nom	homework-a	acc 1	nome-loc-CPM	did			
	'John and Mary did their homework at home.'									
b.	*John-i	swukce	y-lul e	ip eyse tul	hays	sta kuliko				
	Mary-ka	swukce	y-lul c	ip-eyse-tul	hays	sta				

Though these problems seem to cast doubt on the ellipsis-from-clause analysis, there are also facts that support it, as we have seen earlier. We thus need to make sure that whatever account we adopt does justice to the full range of generalizations discovered thus far. These are stated in (23) below.

(23) a. Type B coordinations are not constituents.

b. Type B coordinations differ interpretively from Type A coordinations.

c. Certain NSI's cannot occur in the predicate of Type B coordinations (collective predicates and modifiers).

d. NSI's that can occur in the shared predicate in Type B coordinations are modifiers of plural (pluractional – Lasersohn 1995) events, rather than modifiers that depend on the plurality of the subject NP.

We have already established the first and second points. The argument we are making now, in light of the claims in (23c,d), is that distributives like *kakkak* and the Copied Plural Marking -tul are, or have uses as, modifiers of plurational events, rather than/in addition to being modifiers of plural-denoting nominals as in (24).

- (24) a. *kakkak*: Modifier of pluractional events and modifiers of plural nominals (cf. Benmamoun 1999 on two types of QFloat in Arabic)
 - b. CPM -tul: Marks event plurality (H-G Lee 1992; Ym 2002)

The occurrence of -tul with singular subjects in (25) below illustrates its event-modifying use.

(25)	?ai-ka	phwungsen-ul	hana-ssik	kacko-tul	nolassta
	child-nom	balloon-acc	one-dist	holding-CPM	played
	'The child p	played with each bal	lloon.'		

In sum, we want an analysis of Type B coordinations that treats them as non-constituents, disallows genuine collectives but allows modifiers of pluractionality. In what follows, we sketch two possible analyses that will do the job.

5.2. Multi-dominance Analyses

A multi-dominance analysis of ellipsis in Type B coordination in the style of McCawley (1982, 1989), Wilder (1997, 1999), and D-H Chung (2004) is sketched in (26) below. The VP below is dominated by two NomP's (with two Subjects, and hence, denoting two separate events) but each NomP has a singular NP in its Specifier:



There are several advantages of such analyses. First, the analysis explains the non-constituency of Type B coordinations. Second, if we make the assumption that this kind of structure is interpreted as denoting plural events but not plural entities, as suggested above, we can see how this analysis explains the generalization that modifiers of pluractional events are possible, but not modifiers that depend on having plural NPs as licensors.

5.3. Ellipsis and Displacement

A way to salvage the Ellipsis (PF-Deletion) analysis is to capitalize on the fact that the event modifiers in the shared predicate portion of Type B coordinations can occur once in an unreduced sentential coordination, taking scope over the entire structure. We illustrate this with *kakkak*.

(27) Cheli-ka	cip-ey	kassta	kuliko	Yenghi-ka	hakkyo-ey	kassta,	kakkak
C-nom	home-loc	went	conj	Y-nom	school-loc	went	each

The idea is to posit such structures as the source of Type B coordinations, with optional displacement of verbs following Ellipsis. Both outputs (with and without Displacement) are attested.

(28) Cheli-ka kassta kuliko Yenghi-ka hakkyeo-ey kassta kakkak cip-ey \rightarrow Ellipsis Cheli-ka kuliko Yenghi-ka hakkyo-ey kassta kakkak eip cassta \rightarrow Displacement Cheli-ka kuliko Yenghi-ka hakkyo-ey kakkak kassta \rightarrow No Displacement Cheli-ka kuliko Yenghi-ka hakkyo-ey kassta kakkak

Displacement explains why *kakkak* cannot occur in the first conjunct in Type B coordinations (which allows remnants other than the subject NP, yielding RNR, as we have seen).

(29) a.	Cheli-ka	ecey	kuliko	Yenghi-l	ka	onul	kakkak	ttenassta
	C-nom	yesterday	conj	Y-nom		today	each	left
b.	*Cheli-ka	ecey	kakkak	kuliko	Yenghi-l	ka o	nul	ttenassta
	C-nom	yesterday	each	conj	Y-nom	to	oday	left

6. Conclusion

The purpose of this paper has been to show that a surface string consisting of case-marked NPs connected by a conjunctor is not a constituent NP coordination. The morphosyntax of case-marking in Korean, coupled with ellipsis, provide an explanation of why this is so. Though works remains, we take this to be an encouraging first step in the right direction.

References

- Aoun, Joseph, Elabbas Benmamoun, and Dominique Sportiche. 1994. Agreement, Word Order, and Conjunction in Some Varieties of Arabic. *Linguistic Inquiry* 25, 195-220.
- Aoun, Joseph, Elabbas Benmamoun, and Dominique Sportiche. 1999. Further Remarks on First Conjunct Agreement. *Linguistic Inquiry* 30, 669-681.

Benmamoun, Elabbas. 1999. The syntax of Quantifiers and Quantifier Float. Linguistic Inquiry 30, 621-642.

Cho, Jae Ohk and Jerry Morgan. 1986. Some problems on NP coordination in Korean. Studies in the Linguistic Sciences 16:2, 45-66

Chomsky, Noam. 1957. Syntactic Structures. The Hague: Mouton.

Chung, Dae-Ho. 2004. Multiple Dominance Analysis of Right Node Raising Constructions. *Language Research* 40, 791-812.

Gleitman, Lila. 1965. Coordinating Conjunctions in English. Language 41:260-293.

- Han, Chung-hye and Maribel Romero. 2004. Syntax of *Whether/Q...Or* Questions: Ellipsis Combined with Movement. *Natural Language & Linguistic Theory*, 22:3, 527-564.
- Heycock, Caroline and Robert Zamparelli. 2003. Friends and Colleagues: Plurality, Coordination, and the Structure of DP. Ms., University of Edinburgh, Universit`a di Bergamo.
- Jo, Jung-Min. 2004. Grammatical Effects of Topic and Focus Information, Doctoral Dissertation, University of Illinois at Urbana-Champaign.
- Johannesen, Janne Bondi. 1997. Coordination, Oxford University Press, New York/Oxford.
- Kayne, Richard S. 1994. The Antisymmetry of Syntax, MIT Press, Cambridge, MA.
- Lasersohn, Peter. 1995. *Plurality, conjunction and events*, Volume 55 of studies in linguistics and philosophy. Dordrecht London: Kluwer.
- Lee, Han-Gyu. 1992. The Pragmatics and Syntax of Pragmatic Morphemes in Korean, Doctoral Dissertation, University of Illinois at Urbana-Champaign.
- McCawley, John. 1982. Parentheticals and Discontinuous Constituent Structure. Linguistic Inquiry, 13:1, Winter.
- McCawley, John. 1989. Individuation in and of Syntactic Structures, in M. Baltin and A. Kroch eds., *Alternative Conceptions of Phrase Structure*, University of Chicago Press, Chicago, 117-138.
- Whitman, John. 1998. Kayne 1994, p.143, fn.3, in G. Alexandrova ed., *Challenges of Minimalism*, John Benjamins.
- Wilder, Chris. 1997. English Finite Auxiliaries in Syntax and Phonology. In *Clitics, Pronouns and Movement*, eds. James R Black and Virginia Motapanyane. Amsterdam/Philadelphia: John Benjamins.
- Wilder, Chris. 1999. Right Node Raising and the LCA. In *The Proceedings of WCCFL* 18 eds. Sonya Bird, Andrew Carnie, Jason D. Haugen, and Peter Norquest, 586-598. Somerville, Mass.: Cascadilla Press
- Ym, Changguk. 2002. The Semantics of Non-nominal tul in Korean. Journal of the International Circle of Korean Linguistics 11, 183-202.
- Yoon, James Hye Suk. 1998. The Functional Structure of the (Ad)nominal Phrase in Korean. *Talk Presented at the USC Workshop on East Asian Syntax*. LA. CA.

Yoon, James Hye-Suk. 2003. What the Korean copula reveals about the interaction of morphology and syntax, Japanese-Korean Linguistics 11, edited by Pat Clancy, CSLI Publications, 34-50

Yu-Cho, Young-Mee and Peter Sells. 1995. A Lexical Account of Inflectional Suffixes in Korean, *Journal of East Asian Linguistics* 4: 119-174.