

WH-movement in Seediq and Tagalog

Edith Aldridge
Cornell University

1. Introduction

This paper discusses two kinds of restriction found in wh-question formation in the Austronesian languages Seediq and Tagalog. One type is the familiar absolutive restriction, which allows wh-questions to be formed only on absolutives. For example, the patient can be extracted from a transitive clause, as in (1), a Seediq example, and (2), from Tagalog.

- (1)S: **Maanu** ka wada burig-**un** na ape?
what Abs Perf buy-Tr Erg Ape
“What did Ape buy?”
- (2)T: **Ano** ang b-**in**-a-basa ni Maria?
what Abs Red-Tr.Perf-read Erg Maria
“What is Maria reading?”

The agent of a transitive clause, however, cannot be extracted, as shown in (3) and (4).

- (3)S: ***Ima** ka wada burig-**un** patis-ni?
who Abs Perf buy-Tr book-Def
“Who bought this book?”
- (4)T: ***Sino** ang b-**in**-abasa ang libro?
who Abs Red-Tr.Perf-read Abs book
“Who is reading the book?”

In order to extract the agent, the clause must be antipassivized, as in (5) and (6).

- (5)S: **Ima** ka wada m-ari patis-ni?
who Abs Perf AP-buy book-Def
“Who bought this book?”
- (6)T: **Sino** ang b-**um**-abasa ng libro?
who Abs Red-AP.Perf-read Obl book
“Who is reading the book?”

The absolutive restriction holds for both Seediq and Tagalog. The other constraint examined in this paper is on adjunct wh-question formation. Seediq obeys this constraint, as shown in (8), where the locative wh-word

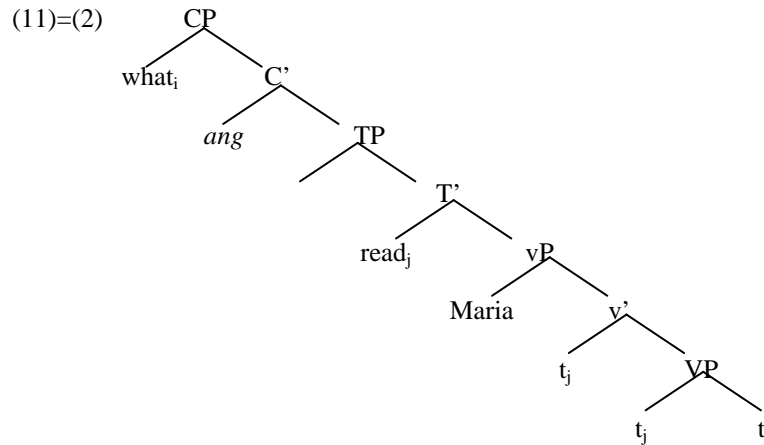
cannot move to clause-initial position.

- (7)S: M-n-ari **inu** patis ape?
 AP-Perf-buy where book Ape
 “Where did Ape buy books?”
- (8)S: ***Inu** m-n-ari patis ape?
 where AP-Perf-buy book Ape

(9) and (10), however, show that locative wh-words can and do appear clause-initially in Tagalog.

- (9)T: **Saan**-ka b-um-ili ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 “Where did you buy the books?”
- (10)T: **Kailan**-ka pu-punta sa Maynila?
 When-2sAbs AP.Red-go Dat Manila
 “When will you go to Manila?”

It is typically assumed that all clause-initial wh-words in Austronesian languages have moved to [Spec, C] (e.g. Nakamura 1994 and Richards 1996 for Tagalog; Chang 1997 and Holmer 1996 for Seediq).¹



The current paper, on the other hand, takes a different view. I argue in what follows that argument and adjunct wh-questions have different structural properties, and hence the two kinds of wh-question formation are constrained in different ways. Argument wh-questions take the form of pseudo-clefts. The absolute restriction on extraction is a consequence of the formation of the headless relative clause in the cleft construction. The analysis of argument wh-questions as pseudo-clefts is given in section 2.

¹ It has also been suggested for other Austronesian languages that questions are formed on clefts and therefore do not involve overt wh-movement. (C-L Chang 1996, Tsai 1997, Y-Y Chang 1998, Liu 1999, Martohardjono 1993, Georgopoulos 1991.

In contrast to argument wh-questions, adjunct wh-questions are formed via overt movement, in the usual way. Whether adjunct wh-words appear in clause-initial position is the result of the interaction between the basic structures of the languages and familiar movement constraints. In section 3, I show that Seediq word order generation involves XP predicate fronting. VP-internal adjuncts are contained within the moved predicate and hence cannot move to clause-initial position without invoking an island constraint. Tagalog, on the other hand, is not an XP predicate fronting language, and adjunct wh-words can move freely.

2. Argument Wh-questions as Psuedo-clefts

In this section, I argue that argument wh-questions in both Seediq and Tagalog take the form of pseudo-clefts. First, note the formal similarity between wh-questions and pseudo-clefts. In the pseudo-clefts in (12) and (13), a predicate nominal, shown in italics, forms the matrix predicate, while the subject consists of a free relative, indicated by brackets (formal properties of pseudo-clefts noted by Akmajian 1970, Chomsky 1977, Knowles 1986, among others). Seediq and Tagalog, as is the case with most Austronesian languages, do not have a copula; the predicate nominal alone functions as the predicate. The subject relative clause is preceded by an absolutive case marker, given in bold.

- (12)S: *Bulebun* **ka** [b-n-ari na ape]
 banana Abs -Perf-buy Erg Ape
 “A banana is what Ape bought.”
- (13)T: *Isda* **ang** [b-in-ili ni Maria]
 fish Abs -Perf.Tr-buy Erg Maria
 “A fish is what Maria bought.”

Evidence that the constituent following the absolutive case marker is a headless relative clause is given below, where *bnari na ape* (“what Ape bought”) and *binili ni Maria* (“what Maria bought”) are used as NPs in argument position.

- (14)S: Malu uqun ka **b-n-ari** **na** **ape.**
 good eat Abs -Perf-buy Erg Ape
 “What Ape bought tastes good.”
- (15)T: Hindi-ko gusto ang **b-in-ili** **ni** **Maria.**
 Neg-1sErg like Abs -Perf.Tr-buy Erg Maria
 “I don’t like what Maria bought.”

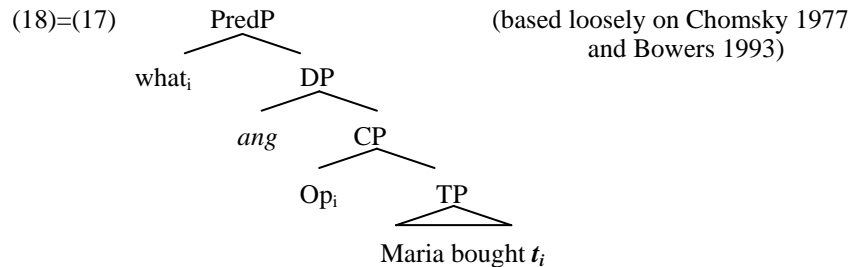
In terms of pragmatic import, the relative clause part of a pseudo-cleft typically conveys given information, while the predicate nominal provides new and focused information (Prince 1978, Bromser 1984, Kamio 1991, Collins 1991, Fitchner 1993). This is also the case with (12) and (13) above. For these to be felicitous, it should be understood by the hearer that Ape bought something in (12), and that Maria bought something in (13). The predicate nominals *bulebun* (“banana”) and *isda* (“fish”) supply the missing information

as to what it was that was bought.

The outward appearance of wh-questions is identical to the pseudo-clefts in (12) and (13). The wh-words function as the predicate nominals and appear in initial position, followed by absolutive case markers and the same headless relatives as above.

- (16)S: *Maanu ka [b-n-ari na ape]*
 what Abs -Perf-buy Erg Ape
 “What did Ape buy?”
- b. *Bulebun ka [b-n-ari na ape]*
 banana Abs -Perf-buy Erg Ape
 “A banana is what Ape bought.”
- (17)T: *Ano ang [b-in-ili ni Maria]*
 fish Abs -Perf.Tr-buy Erg Maria
 “A fish is what Maria bought.”
- b. *Isda ang [b-in-ili ni Maria]*
 fish Abs -Perf.Tr-buy Erg Maria
 “A fish is what Maria bought.”

In the following, I show that argument wh-questions in Seediq and Tagalog also have the biclausal structure associated with pseudo-clefts, where the wh-word appears in the matrix predicate position, and the rest of the clause functions as the subject of that predicate.



One indication that this is the correct analysis comes from pronominal agreement registered by clitics on the verb. Both examples below are from Seediq, since Tagalog does not have clitic doubling. Ergative and absolutive nominals show agreement when topicalized in Seediq. (19) shows ergative agreement for the agent *tama* (“father”). *Tama* has been topicalized and appears in clause-final position, following the absolutive case marker. The absolutive case marker in Seediq is used not only to identify the absolutive, but can also occur with a topicalized agent. (20) shows absolutive agreement for the benefactive *yaku* (“I”).

- (19)S: *Wada-na s-bari hulama laqi-na*
 Perf-3sErg App-buy treat child-3sPoss
ka tama.
 Top father

In a cleft, however, the clitic has to stay below the nominal predicate and absolutive marker which follows it. In (27), the 3rd person Seediq ergative clitic attaches to the tense auxiliary, and in (28) the Tagalog 2nd person ergative clitic attaches to the verb.

- (27)S: Ima ka wada-**na** s-bari hulama?
 who Abs Perf-3sErg App-buytreat
 “Who did she buy a treat (for)?”
- (28)T: Ano ang g-in-a-gawa-**mo**?
 what Abs Red-Perf-do-2sErg
 “What are you doing?”

These clitics cannot move up and attach to the wh-word or the absolutive case marker.

- (29)S: *Ima-**na** ka wada s-bari hulama?
 who-3sErg Abs Perf App-buytreat
 “Who did she buy a treat (for)?”
- (30)T: *Ano-**mo** ang g-in-a-gawa?
 What-2sErg Abs Red-Perf-do
 “What are you doing?”
- (31)S: *Ima ka-**na** wada s-bari hulama?
 who Abs-3sErg Perf App-buy treat
 “Who did she buy a treat (for)?”
- (32)T: *Ano ang-**mo** g-in-a-gawa?
 what Abs-2sErg Red-Perf-do
 “What are you doing?”

This is not what we expect if (27) and (28) are mono-clausal. If this were the case, then they should have the structures below, where the wh-words have moved to [Spec, C], and the clitics should be able to attach to the wh-words or to *ka* and *ang*, which would be analyzed as complementizers under this view.

- (33)S: *_{CP} Ima-**na**_i [_C ka [_{TP} wada s-bari hulama [_C _{t_i}]]]
 who-3sErg Abs Perf-3sErg App-buy
 treat
 “Who did she buy a treat (for)?”
- (34)T: *_{CP} Ano-**mo**_i [_C ang [_{TP} g-in-a-gawa [_C _{t_i}]]]
 What-2sErg Abs Red-Perf-do
 “What are you doing?”

Clearly, this mono-clausal structure does not explain the positions of the clitics in (27) and (28). However, the bi-clausal cleft analysis given above does account for this. The wh-word and absolutive case marker in each example are not contained in the CP where the clitic originates. The highest position available to the clitic in these examples is the verb or auxiliary verb in residing in initial position in the embedded CP. In (27) this is the auxiliary

wada, as shown in (35). For (28), this is the verb *ginagawa*, as shown in (36). The operators in [Spec, C] are phonetically null and so cannot host clitics.

- (35)S: Ima_i ka [_{CP} Op_i [_{TP} wada-**na** s-bari *t_i* hulama]]
 who Abs Perf-3sErg App-buytreat
 “Who did she buy a treat (for)?”
- (36)T: Ano_i ang [_{CP} Op_i [_{TP} g-in-a-gawa-**mo** *t_i*]]
 What Abs Red-Perf-do-2sErg
 “What are you doing?”

This section has shown that argument wh-questions in Seediq and Tagalog take the form of pseudo-clefts. As shown above, these clefts have biclausal structures and are composed of a predicate nominal and a headless relative clause, which functions as the argument of this predicate. The predicate nominal is associated with the gap inside the relative via coindexation with the null operator which moves to [Spec, C] of the relative clause. In light of this, the absolutive restriction on extraction in argument wh-questions can be accounted for in the same way as in relative clause formation. Relative clause formation in these languages shows the same absolutive restriction as argument wh-questions. For example, a patient can be relativized in a transitive clause, as in (37a), but not an agent, as in (37b). An agent can only be relativized in an antipassive, as in (37c).

- (37)a.S: bulebun b-n-ari na ape
 banana -Perf-buy Erg Ape
 “the banana which Ape bought”
- b. *seediq b-n-ari bulebun
 person -Perf-ari banana
 “the person who bought a banana”
- c. seediq m-n-ari bulebun
 person AP-Perf-buy banana
 “the person who bought a banana”

Discussion of relative clause formation is a topic designated for future research and beyond the scope of the current paper.

3. Predicate Fronting and Adjunct Wh-questions

This section discusses generation of adjunct wh-questions in Seediq and Tagalog. In contrast to argument wh-questions, adjunct wh-questions do not resemble clefts. They are not composed of a predicate nominal followed by a free relative. In the Seediq example below, the wh-word appears inside the clause, immediately following the verb.

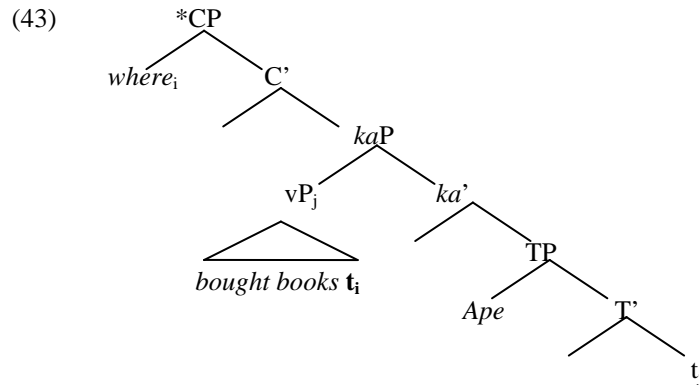
- (38)S: M-n-ari **inu** patis ape?
 AP-Perf-buy where book Ape
 “Where did Ape buy books?”

Also unlike argument wh-questions, questions formed on adjuncts are mono-clausal, as can be seen by the position of clitic pronouns. Clitics attach to the fronted wh-word, showing that the wh-word is located in the same CP as the clitic's base position.

- (39)T: Saan-**ka** b-um-ili ng libro?
 Where-2sAbs -AP.Perf-buy Obl book
 "Where did you buy the books?"
- (40)T: [_{CP} Saan_i-**ka** [_{TP} b-um-ili ng libro *t_i*]]
 Where-2sAbs -AP.Perf-buy Obl book
 "Where did you buy the books?"

In what follows, I show that extraction possibilities in adjunct wh-question formation can be explained by structural differences between the two languages, specifically, whether basic word order is generated via XP predicate fronting or not.³ In an XP predicate fronting language, the absolutive moves to a checking position and the remnant clause fronts to its left, thereby generating VOS word order. The fact that VP-internal adjuncts cannot appear in clause-initial position is explained by the fact that extracting any nominal from the fronted remnant violates the CED (Huang 1982). I propose that Seediq is an XP predicate fronting language. Locative wh-words, contained inside the fronted predicate, never move to clause-initial position.

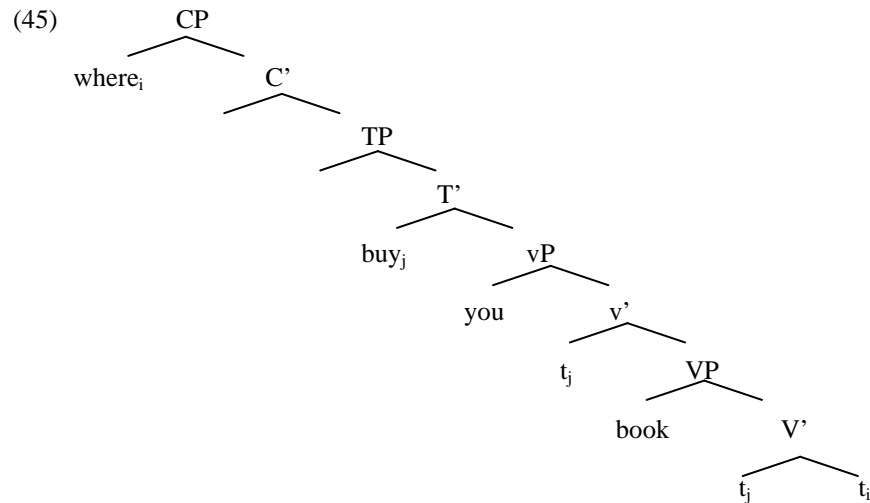
- (41)S: M-n-ari **inu** patis ape?
 AP-Perf-buy where book Ape
 "Where did Ape buy books?"
- (42)S: ***Inu** m-n-ari patis ape?
 where AP-Perf-buy book Ape



³ Predicate fronting analyses for VOS Austronesian languages include Pensalfini (1995), Pearson (1998), Rackowski (1998), Rackowski & Travis (2000), Massam (2000), Massam (2001), Aldridge (1999), and Aldridge (2000). The current analysis is a revised version of Aldridge (2000).

Tagalog, on the other hand, I do not analyze as an XP predicate fronting language. Tagalog basic word order is VSO, nominals generally appearing in their thematic order. Adjunct wh-words in Tagalog also typically appear in clause-initial position. This is easily explained if Tagalog verb-initial word order is generated by simply moving the verb. Adjuncts are then not contained in an island and can front freely.

(44)T: **Saan** ka b-um-ili ng libro?
 where 2sABS -ATP.PERF-buy OBL book
 “Where did you buy the books?”



Detailed analyses of word order generation in Seediq and Tagalog are given in Aldridge (2000). The key arguments are repeated below. First is word order. Seediq absolutes must appear in clause-final position and never in medial position. This indicates that these nominals must move overtly to a fixed position.

(46)S: Wada m-ari hulama laqi **ka** **ape**.
 Perf AP-buy treat child Abs Ape
 “Ape bought the child a treat.”

(47)S: *Wada m-ari **ka** **ape** hulama laqi.
 Perf AP-buy Abs Ape treat child
 “Ape bought the child a treat.”

(48)S: Wada-na s-tabu huling **ka** **buuts** **rodux**.
 Perf-3sErg App-feed dog Abs bone chicken
 “She fed the chicken bones to a/the dog.”

(49)S: *Wada-na s-tabu **ka** **buuts** **rodux** huling.
 Perf-3sErg App-feed Abs bone chicken dog
 “She fed the chicken bones to a/the dog.”

Another indication that Seediq and Tagalog differ structurally with respect to predicate fronting comes from the case-marking system. There is reason to believe that what have traditionally been analyzed as case markers in Seediq (Li 1997, Holmer 1996, Chang 1997) are not determiner-type heads taking nominal elements as their complements but rather clause-level functional categories which attract all or part of the predicate. One way in which Seediq case markers are different from Tagalog is the fact that there are only two, absolutive *ka* and ergative *na*. Tagalog has a comparatively richer system, marking not only absolutive and ergative but additionally dative and locative.

- (58)T: B-in-ili **ng** babae **ang** isda **kay** Huan.
 -Tr.Perf-buy Erg woman Abs fish Dat Juan
 “The woman bought the fish from Juan.”
- (59)T: Pu-punta **si** Maria **sa** Maynila.
 Red-go Abs Maria P Maynila
 “Maria will go to Manila.”

Tagalog markers also make certain semantic distinctions like whether the nominal it selects is a common noun or personal name.

- (60)T: Um-iyak **si** Maria.
 Intr.Perf-cry Abs Mari
 “Maria cried.”
- (61)T: Um-iyak**ang** bata.
 Intr.Perf-cry Abs child
 “The child cried.”

Tagalog markers can also sometimes distinguish specific from non-specific nominals.

- (62)T: K-um-ain ako **ng** isda.
 -AP.Perf-eat 1sAbs Obl fish
 “I ate a fish.”
- (63)T: K-um-ain ako **sa** isda.
 -AP.Perf-eat 1sAbs Dat fish
 “I ate the fish.”

This semantic connection seen in Tagalog makes it reasonable to assume that the case markers select the nominals following them. No such semantic information is encoded in Seediq “case” markers, however.

Another interesting fact is that dislocated nominals in Tagalog retain their case markers, indicating that these form a constituent together.

- (64)T: Pu-punta ako **sa** **Maynila**.
 Red-go 1sAbs Dat Manila

- “I will go to Manila.”
- (65)T: **Sa** **Maynila**ako pu-punta.
 Dat Manila 1sAbs Red-go
 “I will go to Manila.”
- (66)T: Pu-punta **si** **Maria** sa Maynila bukas.
 Red-go Abs Maria Dat Manila
 tomorrow
 “Maria will go to Manila tomorrow.”
- (67)T: **Si** **Maria** ay pu-punta sa Maynila
 Abs Maria Top Red-go Dat Manila
 bukas.
 tomorrow
 “As for Maria, she will go to Manila tomorrow.”

This is not the case with Seediq, however. A “case” marker cannot appear with a fronted nominal, indicating that these do not form as constituent.

- (68)S: Wada-na kudal-unhuling **ka** **but** **rodux**.
 Perf-3sErg feed-Tr dog Abs bone chicken
 “She fed the chicken bones to the/a dog.”
- (69)S: **But** **rodux** wada-na kudal-un huling.
 Bone chicken Perf-3sErg feed-Tr dog
 “The chicken bones, she gave to a/the dog.”
- (70)S: ***ka** **But** **rodux** wada-na kudal-unhuling.
 Abs Bone chicken Perf-3sErg feed-Tr dog

One final indication that the Seediq absolutive marker is not a case marker is the fact that it marks not only absolutives but topics, generally.

- (71)T: Wada-na s-bari hulama laqi-na
 Perf-3sErg App-buy treat child-3sPoss
ka tama.
Top father
 “The father bought his child a treat.”

Based on the above evidence, I propose that the Seediq marker *ka* is a clause-level head whose function is to attract the predicate, thereby inducing predicate fronting in this language. Tagalog is not a predicate fronting language. And its case markers are D-level functional heads that select the nominals that follow them.

5. Conclusion

This paper has examined two types of wh-question in Austronesian languages. First, I have challenged the traditional assumption that all wh-questions are formed by moving the wh-word into [Spec, C] and proposed that argument wh-

questions instead take the form of pseudo-clefts. The well-known absolutive restriction on extraction can then be reduced to the constraints governing the formation of the headless relative clause portion of the pseudo-cleft construction.

On the other hand, I proposed that wh-questions formed on adjuncts do involve movement of the wh-word to [Spec, C]. The fact that adjunct wh-words appear clause-initially in Tagalog but not in Seediq can be explained by positing that Seediq is an XP predicate fronting language, while Tagalog is not.

The aim of this paper has been to clarify the structures of wh-questions in Seediq and Tagalog as well as to suggest a direction for studies in word order typology in Austronesian languages.

References

- Akmajian, Adrian (1970). On deriving cleft sentences. *Linguistic Inquiry* 1: 147-168
- Aldridge, Edith (1998). "Reconsidering Tagalog phrase structure with reference to Indonesian. Paper presented at AFLA V, University of Hawaii, Honolulu
- Aldridge, Edith (1999). Leftward movement and case-checking: Evidence from Atayalic languages. Paper presented at AFLA VI, University of Toronto, Canada
- Aldridge, Edith (2000). Nominalization and wh-movement in Seediq and Tagalog. Paper presented at the Workshop on Nominalization in Formosan Languages, Academia Sinica
- Bowers, John (1993). The syntax of predication. *Linguistic Inquiry* 24: 591-656
- Bromser, B. (1984). Towards a functional description of cleft constructions. *Lingua* 62: 325-348
- Chang, Chung-liang (1996). *A Study of Seediq Interrogatives* (in Chinese). MA Thesis, National Tsing-Hwa University, Taiwan
- Chang, Ya-yin (1998). *Wh-constructions and The Problem of Wh-movement in Tsou*. MA Thesis, National Tsing Hua University, Taiwan
- Chang, Yung-li (1997). *Voice, Case and Agreement in Seediq and Kavalan*. Ph.D. dissertation, National Tsing Hua University, Taiwan
- Chomsky, Noam (1977). On wh-movement. in P. Culicover, T. Wasow, and A. Akmajian (eds.), *Formal Syntax*, New York: Academic Press
- Chomsky, Noam (1995). *The Minimalist Program*, Cambridge, Mass.: MIT Press
- Collins, Peter (1991). Pseudocleft and cleft constructions: A thematic and informational interpretation. *Linguistics* 29: 481-519
- Diesing, Molly (1992). *Indefinites*, Cambridge, Mass.: MIT Press
- Dixon, R.M.W. (1994). *Ergativity*, Cambridge University Press
- Fichtner, Edward (1993). Cleft sentences in English: A comprehensive view. *Word* 44(1): 1-30
- Georgopoulos, Carol (1991). *Syntactic Variables*, Dordrecht: Kluwer Academic Publishers
- Guilfoyle, E., H. Hung, and L. Travis (1992). Spec of IP and spec of VP: Two subjects in Austronesian languages. *NLLT* 10: 375-414
- Holmer, Arthur (1996). *A Parametric Grammar of Seediq*, Lund University Press
- Huang, C-T James (1982). *Logical Relations in Chinese and the Theory of Grammar*. Ph.D. Dissertation, MIT
- Huang, Lillian, E. Zeitoun, M. Yeh, A. Chang, J. Wu (1999). Interrogative constructions in some Formosan languages. *Chinese Languages and Linguistics* 5
- Kamio, Akio (1991). Cleft sentences and the territory of information. In C. Georgopoulos & R. Ishihara (eds.), *Interdisciplinary Approaches to Language*, Dordrecht: Kluwer Academic Publishers

- Kayne, Richard (1994). *The Antisymmetry of Syntax*, Cambridge, Mass.: MIT Press
- Knowles, John (1986). The cleft sentence. *Lingua* 69: 295-317
- Li, Paul (1997). Structure of Formosan languages. Course given at LSA Linguistics Institute, Cornell University
- Liu, Tsai-hsiu (1999). *Cleft Constructions in Amis*, MA Thesis, Taiwan University
- Martohardjono, Gita (1993). *Wh-movement in the Acquisition of a Second Language: A Cross-linguistic Study of 3 Languages with and without Overt Movement*, Ph.D. dissertation, Cornell University
- Massam, Diane (2000). VSO and VOS: Aspects of Niuean word order. In A. Carnie & Eithne Guilfoyle (eds.), *The Syntax of Verb Initial Languages*, Oxford University Press
- Massam, Diane (2001). Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19(1): 153-197
- Pearson, Matthew (1998). Predicate raising and 'VOS' order in Malagasy. *UCLA Occasional Papers in Linguistics* 20
- Pensalfini, Robert (1995). Malagasy phrase structure and the LCA. Papers from the Fifth Annual Meeting of the Southeast Asia Linguistics Society
- Prince, Ellen (1978). A comparison of wh-clefts and *it*-clefts in discourse. *Language* 54(4): 883-906
- Rackowski, Andrea & Lisa Travis (2000). V-initial languages: X or XP movement and adverbial placement. In A. Carnie and Eithne Guilfoyle (eds.), *The Syntax of Verb Initial Languages*, Oxford University Press
- Richards, Norvin (1996). Subjects in Tagalog and Icelandic. In Marian Klamer (ed.), *Voice in Austronesian*, Jakarta: NUSA
- Schachter, Paul (1976). The subject in Philippine languages. In Charles Li (ed.), *Subject and Topic*, New York: Academic Press
- Tsai, Wei-Tien (1997). Taiwan Nandaoyu yiwenci de wuding yongfa: Kavalan, Tsou, ji Seediq de bijiao yanjiu" [Indefinite rses of wh-words in Formosan languages: comparative research on Kavalan, Tsou, and Seediq], *Tsing Hua Journal of Chinese Studies* 27(4): 381-421
- Whitman, John (2000). KAYNE 1994: P. 143, FN. 3. In Galina Alexandrova (ed.) *The Minimalist Parameter*, Amsterdam: John Benjamins

Department of Linguistics
Morrill Hall, Cornell University
Ithaca, NY USA

eca3@cornell.edu