Immobile wh-phrases in Tagalog[*]

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1. Introduction

This paper will bring some new data to bear on the question of how "overt movement" is to be

characterized. I will argue that Probes which trigger overt movement cannot be requiring

movement to a position c-commanding them, as standardly assumed. The account will be

consistent with accounts like that of Richards (2010, 2016), which require only that "overt

movement" land in a position which is linearly close to the triggering Probe.

The data will all come from Tagalog. We will see, first, that Tagalog wh-movement is

generally obligatorily overt. However, there is a class of wh-phrases in Tagalog (*wh-predicates*),

which I will argue are incapable of overt wh-movement. We will see that these wh-phrases can

form wh-questions just if they are linearly adjacent to the interrogative complementizer which

begins the clause, and that they are never in the structural position occupied by wh-moved

phrases.

2. Wh-predicates in Tagalog

Tagalog is a predicate-initial language. Predicates of any lexical category are typically initial in

the clause:

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(1)   a.   Na-sa   unibersidad ang   lola   ninyo

            PRED-DAT university   ANG grandmother your.PL

            'Your grandmother is at the university'

       b.   Mabilis   ang   butiki

            fast   ANG house.lizard

            'The house lizard is fast'

       c.   Pangulo   si   Duterte

            president ANG   Duterte

            'Duterte is president'

       d.   Bibilh-in   ni   Juan ang   mga   libro-ng ito

            FUT.buy-ACC   UNM Juan ANG PL   book-LI   this

            'Juan will buy these books'

And wh-questions, whether matrix or embedded, may have initial predicates as their wh-

phrases[1]:

(2)   a.   **Na-saan**   ang   lola   ninyo?

            PRED-where ANG grandmother   your.PL

            'Where is your grandmother?'

       b.   **Gaano   kabilis** ang   butiki?

            how   fast   ANG house.lizard

            'How fast is the house lizard?'

c. **Ano-ng   klase-ng   Pangulo**   si   Duterte?

what-LI kind-LI   president   ANG   Duterte

'What kind of president is Duterte?'

d. **Aanh-in**   ni   Juan ang   mga libro-ng   ito?

FUT.what-ACC UNM Juan ANG   PL   book-LI   this

'What will Juan do with these books?'

(3)   a.   Hindi ko   alam [kung   **na-saan**   ang lola   ninyo]

not   UNM.I know C_OP   **PRED-where** ANG grandmother your.PL

'I don't know where your grandmother is'

b.   Hindi ko   alam [kung **gaano kabilis**   ang   butiki]

not   UNM.I know C_OP   **how   fast**   ANG house.lizard

'I don't know how fast the house lizard is'

c.   Hindi ko   alam [kung **ano-ng klase-ng Pangulo** si   Duterte]

not   UNM.I know C_OP **what-LI kind-LI   president** ANG Duterte

'I don't know what kind of president Duterte is'

d.   Hindi ko   alam [kung **aanh-in**   ni   Juan ang mga libro-ng ito]

not   UNM.I know C_OP **FUT.what-ACC** UNM Juan ANG PL   book-LI this

'I don't know what Juan will do with these books'

The boldfaced material in (2-3) actually has two reasons to be initial in the Tagalog clause. Not only are these predicates, in a generally predicate-initial language, but they are wh-phrases, and wh-movement is obligatory in Tagalog[2]:

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[2] Here there is apparently some cross-speaker variation: Law and Gärtner (2005) describe speakers of Tagalog who accept (4b). Speakers that I have consulted have uniformly rejected it. All that will be important for the claims to be made here is that speakers who reject (4b) exist; speakers with the grammar described by Law and Gärtner will also be consistent with the paper's claim, though they will not offer the same kind of evidence for it.

(4)　a.　*Pumunta **saan** si　Maria?

　　　　　went　　　where ANG Maria

　　　　　'Where did Maria go?'

　　b.　* Bumili　　　ng　isda **ang alin-g　babae**?

　　　　　NOM.bought　UNM fish　ANG which-LI woman

　　　　　'Which woman bought fish?'

But in fact, we will see evidence that wh-predicates in Tagalog are incapable of wh-movement; they must remain in situ. One piece of evidence for this conclusion comes from long-distance wh-questions. It turns out that wh-predicates in Tagalog cannot be extracted long-distance:

(5)　a.　* **Na-saan**　　ninyo　　　sinabi　[-ng __　ang　lola　　　　ninyo]?

　　　　　PRED-where　UNM.you.PL　ACC.said C　　　ANG　grandmother　your.PL

　　　　　'Where did you say your grandmother was?'

　　b.　* **Gaano kabilis** sinabi　ng　dalubhasa　[na __　ang　butiki]?

　　　　　how　fast　ACC.said UNM expert　　　　C　　ANG house.lizard

　　　　　'How fast did the expert say the house lizard was?'

　　c.　* **Ano-ng klase-ng Pangulo** ang sinasabi　ng　mga diyaryo [na __ si　D.]?

　　　　　what-LI kind-LI president ANG ACC.saying UNM PL　newspaper C　ANG D.

　　　　　'What kind of president are the newspapers saying Duterte is?'

　　d.　* **Aanh-in**　　sinabi　ng　guro　[na　__　ni　Juan ang　mga libro-ng ito]?

　　　　　FUT.what-ACC ACC.said UNM teacher C　　UNM Juan ANG PL　book-LI this

　　　　　'What did the teacher say Juan would do with the books?'

Demonstrating that wh-predicates cannot wh-move in monoclausal questions in Tagalog is harder to do, since predicates and wh-phrases are both typically clause-initial. I turn to that task in the next section.

3. Wh-predicates in monoclausal wh-questions

Much of the literature on Tagalog agrees that predicate-initial word order is created by movement of the predicate to a syntactic position higher than the arguments of the clause (Kroeger 1993, Richards 1993, 2000, Rackowski 2002, Aldridge 2004, and much other work). Certain kinds of material can intervene between the fronted predicate and overt complementizers, indicating that the landing site of predicate fronting is not C:

(6)   Sinabi   ni   Maria [na **hindi** naintindih-an   ng   propesor ang kanyang tanong]

ACC.said UNM Maria C   not   understood-DAT UNM professorANG her   question

'Maria said that the professor did not understand her question'

In (6), the predicate of the embedded clause, *naintindihan* 'understood', is separated from the embedding complementizer *na* by the negative morpheme *hindi*. Data like (6) have been taken to argue (for example, by Richards 2003 and Aldridge 2004), not only that the landing site of predicate fronting is not C, but that it should not be the sister of C, either; there must be a certain amount of syntactic space between C and the position of the predicate.

Negation is not the only kind of material that can occupy this space. Certain kinds of phrases may be fronted to positions before the predicate, where they are followed by an invariant morpheme *ay*:

(7) a. Si Maria ay Pilipina.

ANG Maria AY Filipina

'Maria is Filipina.'

b. Hindi ko   alam kung si Maria ay Pilipina.

not   UNM.I know C_OP   ANG Maria AY Filipina

'I don't know whether Maria is Filipina'

I will refer to the process in (7), following Schachter and Otanes (1972), as *ay-inversion*. It is generally optional, and if it has effects on information structure, they are quite subtle. *Ay-*inverted material precedes negation:

(8) a. Si Maria ay hindi Pilipina.

ANG Maria AY not   Filipina

'Maria is not Filipina'

b. * Hindi si   Maria ay Pilipina

not   ANG Maria AY Pilipina

Descriptively, then, the Tagalog clause can begin with at least the following items, in this order:

(9) C   [*ay*-inverted phrase]   Neg   Predicate

To this description we may add the landing site of ordinary fronted wh-phrases. These must precede *ay*-inverted phrases, and follow the complementizer:

(10)   Alamin   muna bago   ka   magsimula-ng tumaya

        ACC.know   first   before ANG.you   start-LI   NOM.bet

                kung   kailan ikaw   ay   hihinto.

                C$_{OP}$ when   ANG.you   AY   NOM.will.stop

        'Figure out first before you start betting **when you will stop**'

         (http://www.casinopatnubay.com/pagseset-ng-budget/, accessed 5/22/20)

In embedded wh-questions, the order in (10) is the only possible one for these elements. In

particular, an *ay*-fronted phrase cannot intervene between the interrogative complementizer *kung*

and the fronted wh-phrase:

(11) *Alamin   muna **kung   ikaw   ay   kailan hihinto.**

        ACC.know   first   C$_{OP}$ ANG.you   AY   when   NOM.will.stop

        'Figure out first **when you will stop**'

We can think of (11) as an illustration of what it means to say that Tagalog has obligatory wh-

fronting; wh-fronting is to a position just to the right of the embedding complementizer *kung*,

and the wh-phrase cannot be separated from this position. We can update the description in (9)

as follows:

(12)   C   [*wh*-phrase]   [*ay*-inverted phrase]   Neg   Predicate

The description in (12) is not exhaustive; there are other kinds of things that can precede the

Tagalog predicate, such as fronted topics and certain kinds of adverbs. But this description will

suffice for our purposes.

      The fact that the wh-phrase follows the complementizer *kung* rather than preceding it is

surprising on conventional assumptions about the architecture of the clause; if wh-movement

lands in the specifier of CP, we should expect that wh-phrase to precede the complementizer.

The literature contains several plausible proposals about this problem, any of which would be consistent with the point being made here. Kroeger (1993) and Otsuka and Tanaka (2016) claim that Tagalog wh-movement is to the specifier of a projection below the one headed by *kung*. Sabbagh (2014) posits wh-movement to the specifier of *kung*, together with conditions on how Tagalog syntactic structure is mapped onto prosodic structure which guarantee that the wh-phrase must be linearized after the complementizer.

More generally, a natural question to ask at this point would be how the facts in (12) should be represented in a tree. We might consider one extreme in which each of the elements involved occupies its own dedicated maximal projection[3]:

(13) a. Hindi ko alam [kung bakit si Maria ay hindi umalis]

  not UNM.I know C_OP why ANG Maria AY not NOM.left

 'I don't know why Maria didn't leave'

b.

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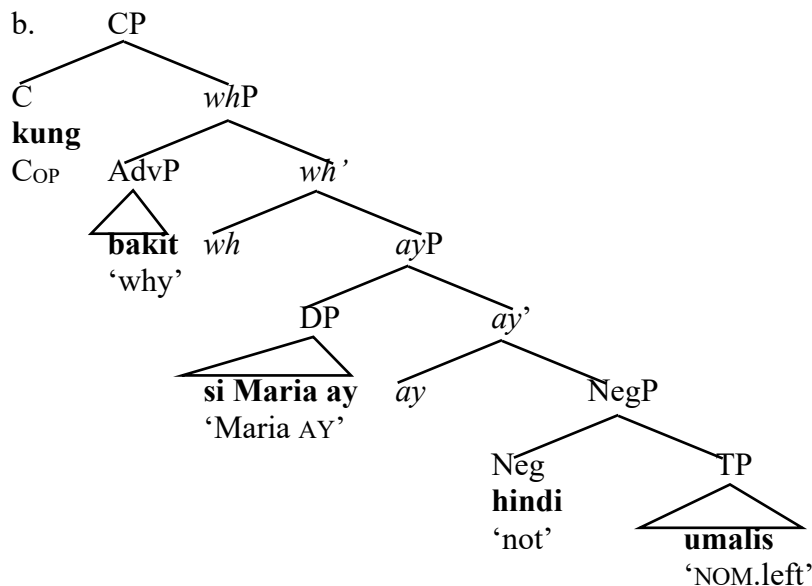
[3] There can be multiple *ay*-inverted phrases, each with its own *ay* (Schachter and Otanes 1972, 498):

(i) Bukas ay kami ay pupunta
  tomorrow AY ANG.we.EXCL AY NOM.will.go
  'We'll go tomorrow'

Thus, if we decide to posit *ay*P, it either cannot have *ay* as its head, or we would have to be willing to countenance multiple *ay*Ps.

A logically possible opposite extreme would posit a single projection hosting all of the material after C, perhaps with the predicate occupying the head of the projection, and the rest of the material in various adjunct and specifier positions:

(14)　a.　　Hindi　ko　　alam [kung　bakit　si　　Maria　ay　　　hindi　umalis]

　　　　　　not　　UNM.I　know　COP　why　　ANG　Maria　AY　　　not　　NOM.left

　　　　　　'I don't know why Maria didn't leave'

　　b.　CP
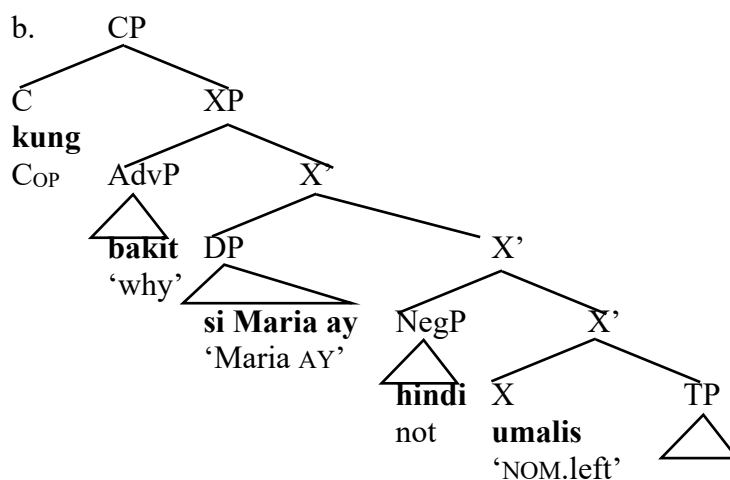
One argument against the radically impoverished structure in (14b) comes from the behavior of ellipsis in Tagalog. Tagalog has sluicing (and Sprouting):

(15)　a.　　May　dumating,　　pero　hindi　ko　　alam　kung　sino.

　　　　　　EXIST　NOM.came　　but　　not　　UNM.I　know　COP　　who

　　　　　　'Somebody came, but I don't know who'

　　b.　　Umalis　si　　Maria, pero hindi　ko　　alam　kung　bakit.

　　　　　　NOM.left　ANG　Maria　but　not　　UNM.I know　COP　　why

　　　　　　'Maria left, but I don't know why'

Sluicing may elide negation:

(16)   Hindi   umalis   si   Maria,

        not   NOM.left ANG Maria

        pero   hindi ko   alam   kung bakit ~~hindi umalis   si   Maria~~

        but   not   UNM.I know COP why not   NOM.left ANG Maria

        'Maria didn't leave, but I don't know why ~~Maria didn't leave~~'

Tagalog also allows ellipsis of the material following negation:

(17)   Hindi   ko   alam   kung nagbigay   ako   ng   pera   sa   simbahan,

        not   UNM.I   know   COP   NOM.gave   ANG.I UNM   money   DAT   church

        pero   sinabi   ni   Maria na   hindi   [—]

        but   ACC.said UNM   Maria C   not

        'I don't know whether I gave money to the church,

        but Mary said that I didn't ~~give money to the church~~'

On the other hand, an *ay*-inverted phrase may not precede an ellipsis site:

(18) *Si   Maria   ay   hindi   umalis,

       ANG   Maria   AY   not   NOM.left

        pero   si   Juan   ay   ~~umalis~~

        but   ANG   Juan   AY   NOM.left

        'Maria didn't leave, but Juan did ~~leave~~'

In a structure like the one in (13b), the facts in (15-18) are easy to describe: Tagalog can elide *ay*P and TP, but not NegP. In (14b), on the other hand, description is less straightforward. Whether we want to posit all the structure in (13b) is unclear, but at least with our current understanding of how ellipsis is licensed cross-linguistically, it is hard to see how the structurally impoverished structure in (14b) can be the right one.

We now seem to have found a kind of case in which the position of the predicate and the position of a fronted wh-phrase can be linearly (and, I have just argued, structurally) distinguished; material can intervene between these two positions. Where does a wh-predicate appear?

The fact is that wh-predicates are incompatible with *ay*-inversion in embedded questions:

(19)   a.   *Alamin   muna **kung ikaw ay na-saan   ngayon**

                 know.ACC first   C_{OP}   you   AY PRED-where now

                 'Figure out first where you are now'

      b.   * Alamin   muna **kung na-saan   ikaw ay ngayon**

                 know.ACC first   C_{OP}   PRED-where you   AY now

                 'Figure out first where you are now'

Neither of the orders in (19) is possible. We can relate the ill-formedness of (19a) to the contrast in (10-11), repeated here as (20):

(20)   a.   Alamin   muna bago ka   magsimula-ng tumaya

                 ACC.know first   before ANG.you   start-LI   NOM.bet

                            kung kailan ikaw   ay hihinto.

                            C_{OP}   when   ANG.you AY NOM.will.stop

                 'Figure out first before you start betting **when you will stop**'

      b.   * Alamin   muna **kung ikaw   ay kailan hihinto.**

                 ACC.know first   C_{OP}   ANG.you AY when   NOM.will.stop

                 'Figure out first **when you will stop**'

As (20) reminds us, we have already seen that wh-phrases cannot be separated from the complementizer by *ay*-inverted phrases. But in (19b), we can see that fronting the wh-predicate across the *ay*-inverted phrase is also unacceptable. The ill-formedness of (19b) is reminiscent of the facts in (5), repeated as (21):

(21) a. ***Na-saan** ninyo sinabi [-ng __ ang lola ninyo]?

   PRED-where UNM.you.PL ACC.said C ANG grandmother your.PL

   'Where did you say your grandmother was?'

   b. ***Gaano kabilis** sinabi ng dalubhasa [na __ ang butiki]?

   how fast ACC.said UNM expert C ANG house.lizard

   'How fast did the expert say the house lizard was?'

   c. ***Ano-ng klase-ng Pangulo** ang sinasabi ng mga diyaryo [na __ si D.]?

   what-LI kind-LI president ANG ACC.saying UNM PL newspaper C ANG D.

   'What kind of president are the newspapers saying Duterte is?'

   d. ***Aanh-in** sinabi ng guro [na __ ni Juan ang mga libro-ng ito]?

   FUT.what-ACC ACC.said UNM teacher C UNM Juan ANG PL book-LI this

   'What did the teacher say Juan would do with the books?'

Wh-predicates, like other wh-phrases, must be adjacent to the interrogative complementizer, but in every case in which fronting a wh-predicate would not be string-vacuous, fronting is blocked; they cannot front across clause boundaries, as (21) shows, but they also cannot front within their clause, as we see in (19).

The facts in matrix wh-questions are somewhat more complicated. Here it is possible for *ay*-inverted phrases to precede wh-predicates[4]:

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[4] Matrix non-predicate wh-phrases can also precede *ay*-inverted material, again in a particularly formal register:
(i)   Ngunit ang karunungan ay saan ba nagbubuhat?

(22)   Ang   Diyos   mo   ba   ay   na-saan?

       ANG   God   your   Q   AY   PRED-where

       'Where is your God?'   (Psalms 42:10, *Magandang Balita Bible*)

Speakers I consulted found examples like (22) old-fashioned and formal, but acceptable.

Perhaps *ay*-inversion can be to higher positions in matrix questions than in embedded questions,

or perhaps it is relevant that there is no overt interrogative complementizer in matrix questions,

corresponding to the complementizer *kung* which appears in embedded wh-questions.

      Putting matrix questions aside, then, let us review what the facts of embedded questions

seem to teach us.

(23)   a.   Hindi   ko   alam   kung   **saan**   inilagay   ni   Juan   ang   libro

           not   UNM.I   know   C_{OP}   where   OBL-put   UNM   Juan   ANG   book

           'I don't know where Juan put the book'

      b.   Hindi   ko   alam   kung   **nasaan**   ang   libro

           not   UNM.I   know   C_{OP}   PRED-where   ANG   book

           'I don't know where the book is'

We have now seen evidence that the boldfaced wh-phrases in (23) are in different syntactic

positions. *Saan* 'where' in (23a) is in a comparatively high structural position, preceding the

positions of negation and *ay*-inverted phrases. The predicate wh-phrase *nasaan* 'PRED-where' in

(23b), on the other hand, is in a comparatively low structural position, the predicate-initial

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but   ANG wisdom   AY   where   Q   NOM.come.from
'But where does wisdom come from?'   (Job 32:8, *Magandang Balita Bible*)

position typically occupied by predicates. In fact, we have seen that wh-predicates cannot move any higher than the positions that predicates occupy[5].

The description in (24) covers the data under discussion:

(24)   In Tagalog, wh-phrases must be linearly adjacent to C.

On this view, the wh-phrase in (23a) satisfies (24) via actual wh-movement, while the wh-phrase in (23b) satisfies (24) because of the general processes that typically make predicates initial in Tagalog. In fact, we have now seen that if a wh-predicate cannot satisfy (24) while staying in the ordinary position of predicates, then (24) is violated and the result is ill-formed; wh-predicates cannot undergo the kind of wh-movement that we see in (23a).

The condition in (24) would be a natural consequence of an approach to overt movement like that in Richards (2010, 2016). In that approach, overt movement takes place because of conditions that require Probes and Goals to share prosodic structures of certain kinds; in effect, overt movement is triggered by the need to make Probes and Goals linearly closer. On this kind of account, we should expect to find generalizations like (24).

Generalizations like (24) are not the mainstream way of understanding overt movement, however. On standard approaches, overt movement takes place because of features on a head which require that head to have a specifier (often, a Goal with which a Probe on the head has Agreed). Can some version of this kind of approach account for the Tagalog data?

It is always dangerous to bet against the ingenuity of future syntacticians, of course, but it is difficult to see how any account of this kind can succeed. This is particularly clear if we are

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[5] I will refer interested readers to Richards (2009) for some discussion of why this might be. Briefly, Richards proposes that Tagalog nonverbal predicates involve a null copula, which cannot be stranded by movement (he compares the Tagalog null copula to the AAVE one in (ib) (Labov 1969)):
(i)   a.   He Ø fast in everything he do.
       b.   *How beautiful you Ø !

justified in positing anything like the structurally rich approach represented in the tree in (13b); ordinary wh-movement in Tagalog lands in the specifier of one kind of functional projection, and predicate wh-phrases reside in a completely distinct functional projection, and the two are separated by some structural distance[6]. It is hard to see how a single structural condition could cover all the cases.

4. Conclusion

The best generalization about Tagalog wh-questions appears to be that the wh-phrase must immediately linearly follow the interrogative complementizer[7]. For most wh-phrases, this requirement is satisfied by wh-fronting, which lands in a position to the right of the complementizer and to the left of negation and *ay*-inverted phrases. Such wh-fronting is generally obligatory in Tagalog, as we have seen. But we have also learned that wh-predicates must satisfy the general condition on wh-questions in Tagalog in a different way; they must be linearly adjacent to the interrogative complementizer, but they cannot move in order to get there, even if the movement would only take them past an intervening *ay*-phrase. In other words, the requirement that wh-movement must be overt in Tagalog cannot be associated with a particular syntactic position; fronted wh-phrases and wh-predicates do not occupy the same syntactic position (the *ay*-inverted phrase intervenes between them), but both can (and must) satisfy the condition on wh-phrases in Tagalog. An account of the standard kind, which says that wh-

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[6] Even if we were to claim that phrases like *ay*P and NegP are only present when they are occupied by material, we would still be left with the central distinction; there is some host for wh-movement which is above the ordinary position of predicates (and above *ay*P and NegP, when they are present), and this host is the landing site for ordinary wh-movement but not for wh-predicates. The account would fall short of its goal of finding a single structural configuration for wh-phrases to occupy.

[7] We can think of the literature positing a ban on Vacuous Movement in English (George 1980, Chung and McCloskey 1983, Chomsky 1986) as arguing for a similar claim for English; English wh-phrases need only be linearly adjacent to C, and string-vacuous movement therefore does not take place. Other work has posited a more general condition of Anti-Locality (Abels 2003, Grohmann 2003, Erlewine 2016, Brillman and Hirsch 2016, Brillman 2017), banning movement which does not cross certain kinds of material. Whether this kind of proposal can be reduced to the idea defended here is another question I will have to leave for future research.

fronting is obligatory in some languages because a particular head demands that the wh-phrase land in its specifier, appears to fail for Tagalog. Overt wh-movement is obligatory in Tagalog, but there is no single structural landing site for wh-movement.

Bibliography

Abels, Klaus. 2003. *Successive cyclicity, anti-locality, and adposition stranding*. Doctoral dissertation, University of Connecticut.

Aldridge, Edith. 2004. *Ergativity and word order in Austronesian languages*. Doctoral dissertation, Cornell University.

Bhatt, Rajesh, and Roumyana Pancheva. 2006. Conditionals. In Martin Everaert and Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax, volume 1*, pp. 638-687. Blackwell.

Brillman, Ruth. 2017. *Tough constructions in the context of English infinitives*. Doctoral dissertation, MIT.

Brillman, Ruth, and Aron Hirsch. 2016. An anti-locality account of English subject/non-subject asymmetries. In *Proceedings of the 50th Chicago Linguistics Society*.

Chomsky, Noam. 1986. *Barriers*. MIT Press, Cambridge, Mass.

Chung, Sandra, and James McCloskey. 1983. On the interpretation of certain island facts in HPSG. *Linguistic Inquiry* 14.704-713.

Enç, Mürvet. 1987. Anchoring conditions for tense. *Linguistic Inquiry* 18.633-657.

Erlewine, Michael. 2016. Anti-locality and optimality in Kaqchikel Agent Focus. *Natural Language and Linguistic Theory* 34.429-479.

George, Leland. 1980. *Analogical generalization in natural language syntax*. Doctoral dissertation, MIT.

Grohmann, Kleanthes. 2003. *Prolific domains: on the anti-locality of movement*. Amsterdam: John Benjamins.

Hsieh, Henrison. 2018. Wh-relative clauses in Tagalog. Talk given at SEALS 28, Wenzao Ursuline University of Languages.

Kroeger, Paul. 1993. *Phrase structure and grammatical relations in Tagalog*. CSLI Publications, Stanford, Cal.

Labov, William. 1969. Contraction, deletion, and inherent variability of the English copula. *Language* 45:715-762.

Larson, Richard. 1985. On the syntax of disjunction scope. *Natural Language and Linguistic Theory* 3.217-264.

Law, Paul, and Hans-Martin Gärtner. 2005. Postverbal wh-phrases in Malagasy, Tagalog, and Tsou. In Jeffrey Heinz and Dimitris Ntelitheos (eds.), *UCLA Working Papers in Linguistics 12: Proceedings of AFLA XII*, pp. 211-226. Los Angeles: UCLA Working Papers in Linguistics.

Otsuka, Yuko, and Nozomi Tanaka. 2016. Tagalog oblique relative clauses. Paper presented at AFLA 23, Tokyo University of Foreign Studies.

Rackowski, Andrea. 2002. *The syntax and morphology of specificity*. Doctoral dissertation, MIT.

Richards, Norvin. 1993. Tagalog and the typology of scrambling. Undergraduate honors thesis, Cornell University.

Richards, Norvin. 2000. Another look at Tagalog subjects. *Formal Issues in Austronesian Linguistics*, Ileana Paul, Vivianne Phillips, and Lisa Travis, eds, pp. 105-116. Kluwer, Dordrecht.

Richards, Norvin. 2003. Tagalog ellipsis. *Cornell Working Papers in Linguistics 19*, Anastasia Riehl and Thess Savella, eds., pp. 228-251. Cornell University, Ithaca, NY.

Richards, Norvin. 2009. The Tagalog copula. *Proceedings of AFLA 16*, Sandy Chung, Daniel Finer, Ileana Paul, and Eric Potsdam, eds., pp 181-195. Theoretical and Applied Linguistics Laboratory, University of Western Ontario. http://ling.uwo.ca/afla/meetings/afla16/proceedings.htm.

Richards, Norvin. 2010. *Uttering Trees*. MIT Press, Cambridge, Mass.

Richards, Norvin. 2016. *Contiguity Theory*. MIT Press, Cambridge, Mass.

Sabbagh, Joseph. 2014. Word order and prosodic-structure constraints in Tagalog. *Syntax* 17.40-89.

Schachter, Paul, and Fe Otanes. 1972. *Tagalog reference grammar*. University of California Press, Berkeley.