Complementizer cliticization in Tagalog and English*

Norvin Richards
Kanda University of International Studies

This paper investigates the conditions on the allomorphy of the Tagalog "linker". When the linker is used as a declarative complementizer, the affixal version has the same distribution as the null complementizer in English, while the free-standing linker has the same distribution as the English complementizer that. *The facts support Pesetsky's (1991) suggestion that the English null complementizer is an affix. I offer a preliminary account of the conditions on this class of affixes.*

Pesetsky (1991) defends the hypothesis that the English null complementizer (which I will symbolize with Ø in this paper) is an affix, attaching to the higher verb in examples like (1b):

1. a. He didn't say **that** he ate the mackerel
   b. He didn't say**-Ø** he ate the mackerel

Pesetsky's theory is meant to account, among other things, for the fact that sentential subjects can only have overt complementizers:

2. a. [**That** the earth is flat] has been proven repeatedly
   b.* [**-Ø** the earth is flat] has been proven repeatedly

On Pesetsky's theory, the ill-formedness of (2b) could follow from a ban on movement out of subjects (Huang's 1982 CED).

In this paper I will try to provide Tagalog evidence to support Pesetsky's approach to the distribution of the null complementizer in English. Tagalog has a morpheme known in the literature as the "linker" (see Schachter and Otanes 1972, Kroeger 1993 for some discussion), which is used, among other things, as a

* Many thanks to Hedeliza Mercado, Raphael Mercado, and Nicole Lazo for their invaluable help with the Tagalog data; all the data which are not otherwise attributed are from them. Thanks, too, to audiences at AFLA VI, GLOW 1999, and MIT, especially Edith Aldridge, Jonathan Bobaljik, Peter Cole, Elizabeth Cowper, Jila Ghomeshi, Ken Hale, Alec Marantz, Diane Massam, Richard McGinn, Martha McGinnis, Miriam Meyerhoff, Juvenal Ndayiragije, Rolf Noyer, Ileana Paul, David Pesetsky, Andrea Rackowski, and Lisa Travis, for comments and discussion of this and related material.

declarative[1] complementizer. The linker has (at least) two allomorphs[2]: one is a free-standing syllable *na*, and the other is a suffix, *-ng*[3]:

3. a. Hindi niya sinabi **na** kinain niya ang tambakol
not he(A) said (TT) LI ate (TT) he (A) T mackerel
'He didn't say that he ate the mackerel'
b. Hindi niya sinabi**ng** kinain niya ang tambakol
not he(A) said (TT):LI ate (TT) he (A) T mackerel
'He didn't say that he ate the mackerel'

One condition on the distribution of the allomorphs of the linker seems straightforwardly phonotactic; the affixal linker *-ng* can only be used if the word to which it would attach ends in a vowel or in /n/. As we will see, however, there are a number of other conditions. The hypothesis to be pursued in this paper is that the Tagalog complementizer *na* and the English complementizer *that* are syntactically equivalent, as are the Tagalog complementizer *-ng* and the English complementizer -Ø. I will try to show that the conditions on the distribution of *-ng* in Tagalog parallel the conditions on the distribution of -Ø in English; to the extent that this can be convincingly shown, it provides evidence for Pesetsky's claim that the English null complementizer, like the Tagalog complementizer *-ng*, is an affix. The bulk of the paper will be fairly descriptive in nature; I will simply be drawing observations from the literature on the allomorphy between the English complementizers (e.g., Bresnan 1972, Stowell 1980, Kayne 1984, Baker 1989, McCawley 1989), showing that the same observations hold for Tagalog, and occasionally speculating about what kind of theory might yield the relevant results. We will see evidence suggesting that the conditions on the use of the affixal complementizer in both Tagalog and English are at least partly prosodic; apparently such complementizers

---

[1] The interrogative complementizer in Tagalog is *kung*; it is possible that this complementizer is polymorphemic, consisting of a morpheme *ku* or *kun* followed by an affixal linker *-ng*. I have no independent evidence for this analysis; the putative morpheme *ku/kun* is otherwise unattested. Tagalog does have several other complementizers which are fairly transparently decomposable in this way, including *noong* 'when (past tense)', which seems to consist of *noon* 'then (past tense)' followed by an affixal linker. See Schachter & Otanes (1972) for some discussion.

[2] The linker may also have a zero allomorph (discussed by Schachter & Otanes 1972, Kroeger 1993, among others). I will have nothing to say about this allomorph here, although the question is clearly important.

[3] Abbreviations used in this paper are:

A=actor AT=actor-topic T=topic TT=theme-topic
LI=linker L=locative G=goal

Topicalization plays no role in the phenomenon under discussion here, as far as I can tell; I have given glosses for it here purely in order to be informative. The Tagalog third person singular pronoun (*siya*, *niya*, *sa kanya*) is ambiguous with respect to gender; here I have randomly translated it as 'he' or 'she'.

cannot be used when they would be separated by a prosodic boundary from their hosts. I will be deliberately informal in my discussion both of theories of prosody generally and of the exact nature of the operation attaching the complementizer to its host; this work is too preliminary for more formal statements to be warranted, it seems to me.

1.0 Parallels between Tagalog and English

1.1 Sentential subjects

Both Tagalog and English ban affixal complementizers in preverbal sentential subjects ((5) is from Cena 1997)[4]:

4. a. [**That** John danced on the table] was denied by Mary
   b.* [**-Ø** John danced on the table] was denied by Mary
5. a. [**Na** sumayaw si Juan sa lamesa] ay itinatuwa ni Maria
      LI danced(AT) T Juan L table denied(TT) A Maria
      'That Juan danced on the table was denied by Maria'
   b.* [**-Ng** sumayaw si Juan sa lamesa] ay itinatuwa ni Maria
      LI danced(AT) T Juan L table denied(TT) A Maria

The ban on affixal complementizers in these cases might be attributed to a requirement that affixes have a host. On the other hand, the ill-formedness of examples like (4b) persists even if the whole example is further embedded, providing a potential host in a position preceding the affixal complementizer:

6.* Bill said [(**that**) [**-Ø** John danced on the table] was denied by Mary]]

I will return to this issue in the next section.

1.2. Intervening XPs

If phrasal material (such as a PP or an adverb) intervenes between the verb and the embedded clause, the affixal complementizer is blocked both in Tagalog and in English:

[4] I have not glossed the morpheme *ay* here, which appears when certain classes of XPs are preposed to the beginning of the sentence; see Schachter and Otanes (1972), Kroeger (1993), Cena (1997) for some discussion.

7. a. He didn't say [to Imelda] [**that** he ate the mackerel]
   b. He didn't say [happily] [**that** he ate the mackerel]
8. a.* He didn't say [to Imelda] [**-Ø** he ate the mackerel]
   b.* He didn't say [happily] [**-Ø** he ate the mackerel]
9. a. Hindi niya sinabi [kay Imelda][**na** kinain niya ang tambakol]
      not he(A) said(TT) L Imelda LI ate(TT) he(A) T mackerel
   b. Hindi niya sinabi [nang masaya][**na** kinain niya ang tambakol]
      not he(A) said(TT) happily LI ate(TT) he(A) T mackerel
10. a.* Hindi niya sinabi [kay Imelda][**-ng** kinain niya ang tambakol
      not he(A) said(TT) L Imelda LI ate(TT) he(A) T mackerel
   b. Hindi niya sinabi [nang masaya][**-ng** kinain niya ang tambakol]
      not he(A) said(TT) happily LI ate(TT) he(A) T mackerel

Tagalog data suggest that the relevant constraint might be prosodic in nature; interestingly, pronominal clitics do not appear to "intervene" in the relevant sense between the verb and the embedded clause, as the contrast in (11) shows. (11a) involves the pronominal clitic *niya* 'she(A)':

11. a. Sinabi *niya* [**-ng** kinain niya ang tambakol]
      said(TT) she(A) LI ate(TT) she(A) T mackerel
      'She said she ate the mackerel'
   b.* Sinabi ni Maria [**-ng** kinain niya ang tambakol]
      said(TT) A Maria LI ate(TT) she(A) T mackerel
      'Maria said she ate the mackerel'

One way of interpreting these facts would be to say that these complementizers must be adjacent to a head to which they can attach without crossing a prosodic boundary, of a kind that phrasal constituents introduce; the relevant difference between clitics and non-clitics, on this view, would be that clitics do not introduce prosodic boundaries. Such a requirement might also successfully rule out complementizer affixation out of sentential subjects; subjects appear to constitute a prosodic domain unto themselves in some languages (see Hale & Selkirk 1987, Truckenbrodt 1995, 1999, and references cited there for some discussion). The requirement seems consistent with a view of complementizer affixation which regards the relevant operation as occurring during the mapping between the syntax and PF; the complementizer is attached to a phonologically string-adjacent word that precedes it in its own prosodic domain. Other local PF movement operations which have been investigated in the literature include Embick & Noyer's (1998) operation of Local Dislocation, van Riemsdijk's (1998) discussion of incorporation of determiners into prepositions, and Bobaljik's (1995) Morphological Merger[5].

[5] Bobaljik's (1995) Morphological Merger does differ from the phenomenon studied here in that it is crucially not interrupted by adverbs.

Before continuing to the next section, it is probably worth mentioning one apparent counterexample from English to the claim being tentatively advanced here. Although AdvPs and PPs intervening between a main verb and an embedded clause seem to block complementizer affixation, NPs do not:

12. a. Mary told John [**that** she ate the mackerel]
    b. Mary told John [**-Ø** she ate the mackerel]

It is difficult to determine whether this phenomenon is found in Tagalog as well. The internal nominal arguments of Tagalog verbs which take clausal complements are invariably marked with *sa* 'L', as far as I can tell; that is, they always take the case marking which is appropriate to indirect objects and locatives. Thus, these nominals might in principle be either PPs or NPs (and see Harley 1995 for a theory which crucially claims that these nominals are PPs).

Confining ourselves to the English data, then, we are interested in the difference between (12) on the one hand and (7-8) on the other. Here is one interesting difference between these examples: if the complement clauses in the examples are replaced with complement NPs, the sentences in (12) remain well-formed, while the examples in (7-8) are only well-formed if the NP can have undergone Heavy NP Shift:

13. a. Mary told John [a story]
    b.* He didn't say to Imelda [a prayer]
    c.* He didn't say happily [a prayer]

The examples in (7-8), then, might be taken to involve rightward extraposition of the complement clause, while the examples in (12) need not have. If extraposition requires the clause to be a prosodic unit of its own (see Hale & Selkirk 1987, Truckenbrodt 1995, 1997 for evidence for this conclusion), then the contrast between (7-8) vs. (12) might be explained.

In this section I have suggested that the attaching complementizer in English and Tagalog is subject to a prosodic requirement; it must attach to a phonologically adjacent word to its left, without crossing a prosodic boundary. One wouuld like to see independent evidence from the phrasal phonology of both English and Tagalog for the conclusions drawn in this section; I will have to leave this project to future research. What I have tried to show here is that conclusions about prosodic structure drawn from observation about other languages (e.g., that the subject is typically a prosodic unit, as are extraposed XPs) are consistent with the belief that prosodic boundaries block attachment of the affixal complementizer.

1.3. Infinitives

In both Tagalog and English, control infinitives require the affixal complementizer:

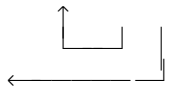
14. a. Mary wants [**-Ø** PRO to eat the mackerel]
    b.* Mary wants [**for** PRO to eat the mackerel]
15. a. Si Maria ang gusto [**-ng** PRO kumain ng tambakol]
       T Maria T want LI eat(AT) G mackerel
       'Maria's the one who wants to eat the mackerel'
    b.* Si Maria ang gusto [**na** PRO kumain ng tambakol]
       T Maria T want LI eat(AT) G mackerel
       'Maria's the one who wants to eat the mackerel'

Infinitives with overt subjects, on the other hand, allow either complementizer:

16. a. Mary wants [**-Ø** John to eat the mackerel]
    b. Mary wants [**for** John to eat the mackerel]
17. a. Si Maria ang gusto [**-ng** kumain si Juan ng tambakol]
       T Maria T want LI eat(AT) T Juan G mackerel
       'Maria's the one who wants Juan to eat the mackerel'
    b. Si Maria ang gusto [**na** kumain si Juan ng tambakol]
       T Maria T want LI eat(AT) T Juan G mackerel

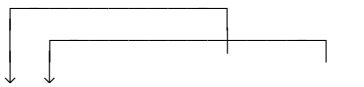
The special property of control infinitives might be made to look natural in light of theories of control like those of Martin (1996), Manzini & Roussou (1997), and Hornstein (1999), all of which posit movement of the controlled argument into the higher clause. If this kind of theory of control is on the right track, then the requirement exemplified in (14-15) is one that demands movement of the complementizer whenever there is a movement relation between the embedded clause and the higher clause:

18. Mary wants [**-Ø** PRO to eat the mackerel]



The requirement that the complementizer must move in order for PRO to be able to move out of the embedded clause looks formally similar to Holmberg's Generalization (Holmberg 1986), which says that object shift cannot take place unless the verb has moved (Icelandic, from Jonas & Bobaljik 1993:93):

19. a.* Jólasveinarnir hafa búðinginn ekki borðuðu ___
Christmas-trolls have pudding-the not eaten
'The Christmas trolls have not eaten the pudding'



b. Jólasveinarnir borðuðu búðinginn ekki ___ ___
Christmas-trolls ate pudding-the not
'The Christmas trolls did not eat the pudding'

Both of the examples in (19) involve object shift; in the well-formed example (19b), the verb has also moved out of the verb phrase, while in (19a) the presence of an auxiliary blocks raising of the verb. Whatever account we eventually develop of Holmberg's Generalization, then, might be extended to deal with the English and Tagalog facts with which this section began; if control involves movement out of the embedded clause, then this movement must apparently be licensed by movement of the complementizer, just as object shift must be licensed by movement of the verb.

We might attempt to generalize this account further to deal with raising infinitives. In English raising infinitives must lack an overt complementizer:

20. a. Mary seems [**-Ø** __ to like mackerel]
b.* Mary seems [**for** __ to like mackerel]

The contrast in (20) is often described as a requirement that raising infinitives be IPs, and thus lack a complementizer altogether. Pesetsky (1991) points out another possibility, made available by the theory sketched here; raising infinitives might be forced to use the affixal complementizer, for reasons possibly having to do with Holmberg's Generalization. That is, raising out of the embedded clause might be required to be licensed by movement of the complementizer. Since the affixal complementizer is null in English, obligatory use of the affixal complementizer means that the complementizer is never seen. Tagalog would be an ideal language in which to look for supporting evidence for this claim, since its affixal complementizer happens to be phonologically overt; sadly, it is very difficult to identify clear candidates for the title of raising infinitive in Tagalog. One candidate for a raising construction is given in (21) below (see Kroeger 1993 for arguments that (21) does involve a raising construction), and here the affixal linker is required, as we would hope:

21. a. Hindi ko siya inasaha **-ng** kumain ng tambakol
not I(A) she(T) expected(TT) LI eat(AT) G mackerel
'I did not expect her to eat the mackerel'
b.* Hindi ko siya inasahan **na** kumain ng tambakol
not I(A) she(T) expected(TT) LI eat(AT) G mackerel
'I did not expect her to eat the mackerel'

Much further research remains to be done on this topic, however.

1.4 *that*-trace effects

Another instance in which the affixal complementizer must be used in English, at least in some dialects, is when the subject following the complementizer has been wh-extracted:

22. a. Who do you think [**-Ø** left]?
b.* Who do you think [**that** left]?

Preliminary investigations suggest that the same may hold true in Tagalog. Wh-extraction effectively can only be of subjects (that is, of topics) in Tagalog; see Nakamura (1998) and references cited there for discussion. We might therefore expect to see *that*-trace effects in all cases of wh-extraction, in principle. The pair in (23) illustrates this; here extraction is of a relative operator from the subject (topic) position of the most deeply embedded clause[6]:

23. a. ang aklat na [alam ni Maria [**-ng** binabasa ni Juan]]
T book LI know A Maria LI TT-reads A Juan
'the book that Maria knows [__ is being read by Juan]'
b.* ang aklat na [alam ni Maria [**na** binabasa ni Juan]]
T book LI know A Maria LI TT-reads A Juan
'the book that Maria knows [that ___ is being read by Juan]'

I will not try to give an account of *that*-trace effects here, but the apparent correlation between Tagalog and English in this regard, if it stands up under further scrutiny, is additional evidence in favor of constructing the same analysis for both languages.

1.5. NP-internal linkers

In both English and Tagalog, clausal complements of nominals cannot use the affixal complementizer:

---

[6] Note that (23a) violates the rather weak preference discussed in section 1.2 above; the effect discussed here is apparently stronger.

24. a. the news [**that** John ate the mackerel]
    b.* the news [**-Ø** John ate the mackerel]
25. a. ang balita [**na** kinain ni Juan ang tambakol]
       T news LI ate(TT) A Juan T mackerel
       'the news that Juan ate the mackerel'
    b.* ang balita [**-ng** kinain ni Juan ang tambakol]
       T news LI ate(TT) A Juan T mackerel
       'the news that Juan ate the mackerel'

Restrictive relative clauses, on the other hand, can use either complementizer:

26. a. the news [**that** John brought]
    b. the news [**-Ø** John brought]
27. a. ang balita [**na** dinala ni Juan]
       T news LI brought(TT) A Juan
       'the news that Juan brought'
    b. ang balita [**-ng** dinala ni Juan
       T news LI brought (TT) A Juan
       'the news that Juan brought'

While I have no account of these data to offer, the parallelisms between Tagalog and English in this regard offer further support for the basic claim that the English null complementizer, like the Tagalog complementizer *-ng*, is an affix.[7]

1.6. Bridge verbs and non-bridge verbs

Finally, the distribution of complementizers in the two languages seems to be sensitive to the choice of higher verb; furthermore, very preliminary investigation suggests that a given verb will have the same behavior in both languages. A bridge verb like *say*, for instance, allows either complementizer to be chosen freely, in both languages:

---

[7] Guimarães (1999) notes a similar phenomenon in Brazilian Portuguese; a proclitic article can attach across the CP boundary of a restrictive relative clause, but not across a complement clause:

i. a. **o-** [que você me deu
       the that you me gave
       'the one that you gave me'
    b.* **o-** [de que minha namorada me abandonou]
       the of that my girlfriend me abandoned
       'the fact that my girlfriend left me alone'

This appears to be another case in which phonological cliticization treats complement clauses as opaque and relative clauses as transparent. See also Bresnan (1971) for an intriguing discussion of prosodic properties of restrictive relative clauses.

28. a. He didn't say [**that** he ate the mackerel]
    b. He didn't say [**-Ø** he ate the mackerel]
29. a. Hindi niya sinabi [**na** kinain niya ang tambakol]
       not he(A) said (TT) LI ate (TT) he (A) T mackerel
       'He didn't say that he ate the mackerel'
    b. Hindi niya sinabi [-**ng** kinain niya ang tambakol]
       not he(A) said (TT) LI ate (TT) he (A) T mackerel
       'He didn't say that he ate the mackerel'

A non-bridge verb like *sing*, on the other hand, bans the use of the affixal complementizer, again in both languages:

30. a. He didn't sing [**that** he ate the mackerel]
    b.* He didn't sing [**-Ø** he ate the mackerel]
31. a. Hindi siya kumanta [**na** kinain niya ang tambakol]
       not he(A) sang (AT) LI ate (TT) he (A) T mackerel
       'He didn't sing that he ate the mackerel'
    b.* Hindi siya kumanta [-**ng** kinain niya ang tambakol]
       not he(A) sang (AT) LI ate (TT) he (A) T mackerel
       'He didn't sing that he ate the mackerel'

Here we have another contrast which I have no way of explaining. Again, the force of these examples is simply to show that the allomorphy between the two complementizers in Tagalog and in English seems to be controlled by the same factors, and that the English null complementizer appears to correspond with the Tagalog affixal complementizer, a fact which lends support to Pesetsky's (1991) claim that the English null complementizer is affixal.

2. Conclusions and extensions

This paper has probably raised more problems than it has solved. We have seen that the allomorphy between the free-standing and affixal versions of the Tagalog complementizer seems to be subject to the same conditions as that between the overt and null complementizers in English. The exact nature of these conditions is still far from clear. I have suggested (in sections 1.1-1.2) that a number of these conditions appear to be amenable to an analysis in terms of movements that must respect prosodic boundaries; such an analysis would be consistent with movement of the relevant complementizers at a post-syntactic level, in the course of the derivation of PF (for arguments that movement of this type should be allowed, see Aoun & Benmamoun 1998, Sauerland to appear, and references cited there). I have also suggested (in section 1.3) that the requirement that the complementizer heading control clauses be affixal might be made to follow from Holmberg's Generalization,

on certain assumptions about the nature of control. Whether these suggestions are compatible depends partly on our beliefs about the nature of Holmberg's Generalization; theories assuming that this Generalization should be syntactic in nature include Chomsky (1993) and Richards (1997), while accounts of Holmberg's Generalization based on PF-imposed well-formedness conditions include Bobaljik (1995) and Holmberg (1997). Another question is how exactly the effects of apparently prosodic constraints should be captured in the theory. I have been informally assuming that these constraints diagnose a type of movement which occurs after prosodic structure has been formed; that is, movement which occurs fairly late in the derivation from syntax to PF. Another logical possibility is that the constraints in question are in fact purely syntactic; it might be that prosody is determined (partly) by syntactic factors, and that the same syntactic factors, whatever they are, have effects on the possible movement patterns of affixes like the complementizers discussed here. More work on this issue will have to await a firmer understanding of the syntax-phonology interface, and of the conditions on the allomorphy of these complementizers.

Assuming that an account can be constructed, the account would seem to have interesting implications in a number of domains outside the facts discussed here. The above discussion has centered primarily on the linker's use as a declarative complementizer in Tagalog. The linker does have a number of other uses, however, notably as a morpheme appearing between adjectives and the nouns they modify. In this use, the affixal form of the linker must be used whenever phonologically possible:

32. a. malaki **-ng** aso
big LI dog
'big dog'
b.* malaki **na** aso
big LI dog

I have no account of this fact either, but suppose that one could be constructed; whenever phonologically possible, a linker between an adjective and a noun must be affixal. Prenominal adjectives seem to be prosodically grouped with the nouns they modify in a number of languages; see Clements (1978) on Ewe, Selkirk & Tateishi (1991) on Japanese, and Truckenbrodt (1995) for a general discussion. The facts in (32) might be viewed as another argument for the sensitivity of the phenomena under discussion to prosodic factors. Some languages seem to treat postnominal adjectives differently from prenominal adjectives in this regard; thus, additional evidence for this conclusion might come from the contrast between (32) and (33):

33. a. aso **-ng** malaki
dog LI big
'big dog'
b.%aso **na** malaki
dog LI big

Speakers generally agree that (32b) is ill-formed, but some speakers will accept a non-affixal linker when the adjective follows the noun, as in (33b). Given that postnominal adjectives (unlike prenominal adjectives) appear to be treated as introducing prosodic boundaries in a number of languages, the facts in (33) might provide further evidence for a prosody-based account of the properties of the linker.

Suppose we were to entertain the possibility that English also has a linker in this position. We have seen that the English affixal linker is phonologically null, so whatever forces the linker to be affixal in the Tagalog examples in (32) might be expected to force it to be null in English (and a null linker will presumably never be blocked by phonotactic considerations, unlike the Tagalog overt affixal linker). Thus, we might consider looking for evidence that an NP like *big dog* in English, like its Tagalog counterpart, contains an affixal linker that attaches to the adjective. Less abstract instantiations of the same phenomenon might include the Ezafe construction in Persian (Ghomeshi 1997), and the morpheme *de* in Mandarin Chinese (see Rubin 1994 for some discussion of all of these).

Another interesting area for future research has to do with a question that arises immediately once we claim that English has a phonologically null affix: how do children know that it is an affix? Here the "poverty of the stimulus" problem is particularly acute; we presumably do not want to say that children perform the task of gathering the kind of evidence considered in this paper to argue that English null complementizers are affixal. One possible answer to the question, which it might be interesting to pursue, is that all phonologically null syntactic objects are affixal in the relevant sense. In a way, this would not be so surprising; affixes are typically phonologically "weak" in some way, often lacking metrical structure of their own and typically exhibiting a smaller range of possible phonological components than the rest of the vocabulary of the language. Phonologically contentless objects are presumably the limiting case of phonological "weakness", and thus the idea that they might always be affixes seems not entirely unnatural.

Making the claim that phonologically null objects are always affixes makes a number of interesting predictions, which I cannot explore fully here. If wh-traces are affixal in the sense described here, for instance, then a theory based on the data described here would prevent the leaving of a wh-trace on the left periphery of a subject, or the clausal complement of a noun or of a non-bridge verb. We might succeed in accounting for the islandhood of these kinds of constructions, then, with a theory of the facts described above, along with a theory of wh-movement that

would require extractions from these kinds of constituents to leave a trace on their left periphery[8].

Adopting a suggestion of Lamontagne & Travis (1987), we might also consider extending this theory to account for the distribution of the English Case affix, assuming this to be a syntactic head. English internal NP arguments are constrained in ways that look rather similar to the distribution of affixal complementizers; notably, they cannot be separated from the verb by other XPs, unless the intervening phrase is another NP:

34. a.* John said [happily] **[a prayer]**
    b.* John said [to Imelda] **[a prayer]**
    c. John told [Mary] **[a story]**

As noted above in section 1.2, the boldfaced NPs in (34) have the distribution of clauses with affixal complementizers. We might try to account for the facts in (34), then, by assuming that English has a phonologically null head Case in NPs, which is subject to the same constraints as the phonologically null complementizer; in particular, it cannot be at the left edge of a prosodic unit, since it must attach to a non-affix to its left within its prosodic domain[9].

In short, the potential theory described above promises to recapture a number of generalizations which were once captured in terms of the notion of government. In principle, a theory based on facts about prosody ought to be capable of making more predictions than a government-based theory would; cross-linguistic differences with respect to phenomena like those described above ought to be linkable to cross-linguistic differences in prosody. I have taken a few very preliminary steps towards constructing such a theory in this paper, but I will have to leave many problems to future research[10].

---

[8] Developing this theory fully would involve explaining why the effects shown in section 1.2, having to do with intervening XPs between the verb and the embedded clause, do not appear with wh-movement..

[9] Here, again, the theory is not without its problems; in this case, one problem is to explain why non-bridge verbs forbid complements with affixal complementizers (section 1.5 above) but allow direct objects:

i. John sang [Ø a song]

Another question is why NP subjects, which presumably also have morphologically null Case, can exist at all; we have seen that clauses in subject position cannot have affixal complementizers (section 1.1).

[10] One other problem with the claim that null morphemes are generally affixal arises when we consider the distribution of PRO and pro ((i) is Italian):

(i) pro piove
    rains
    ''It is raining'

ii. [PRO to leave now] would be insulting

Bibliography

Aoun, J., & E. Benmamoun (1998). Minimality, reconstruction, and PF movement. *Linguistic Inquiry* **29**, 569-597.

Baker, C. (1989). *English syntax*. Cambridge, Mass.: MIT Press.

Bobaljik, J. (1995). *The syntax of verbal inflection*. Doctoral dissertation, MIT.

Bresnan, J. (1971). Sentence stress and syntactic transformations. *Language* **47**, 257-281.

Bresnan, J. (1972). *Theory of complementation in English syntax*. Doctoral dissertation, MIT.

Chomsky, N. (1993). A minimalist program for linguistic theory. In *The view from Building 20*, edited by K. Hale and S. Keyser, 1-52. Cambridge, Mass.: MIT Press.

Cena, R. (1997). *Tagalog syntax: a first course.* Leduc, Canada: SWAMI.

Clements, G. (1978). Tone and syntax in Ewe. In *Elements of tone, stress, and intonation*, edited by D. Napoli, 21-99. Washington, D.C.: Georgetown University Press.

Ghomeshi, J. (1997). Non-projecting nouns and the *Ezafe* construction in Persian. *Natural Language and Linguistic Theory* **15**, 729-788.

Guimarães, M. (1998). *PF reflexes of phase boundaries*. Contribution to Minimalist Issues Chat Room, University of Maryland. http://www.inform.umd.edu/Linguistics/People/Faculty/JUriagereka/Chatroom/MG-1.html.

Hale, K., and E. Selkirk (1987). Government and tonal phrasing in Papago. *Phonology Yearbook* **4**, 151-183.

Harley, H. (1995). *Subjects, events, and licensing*. Doctoral dissertation, MIT.

Holmberg, A. (1986). *Word order and syntactic features in the Scandinavian languages and English*. Doctoral dissertation, University of Stockholm.

Holmberg, A. (1997). The true nature of Holmberg's Generalization. *Proceedings of NELS 27*.

Hornstein, N. (1999). Movement and control. *Linguistic Inquiry* **30**, 69-96.

Huang, C.-T. J. (1982). *Logical relations in Chinese and the theory of grammar*. Doctoral dissertation, MIT.

Jonas, D., & J. Bobaljik (1993). Specs for subjects: the role of TP in Icelandic. In *Papers on Case and Agreement I* [*MIT Working Papers in Linguistics **18***], edited by J. Bobaljik and C. Phillips, 59-98. Cambridge, Mass.: MIT Working Papers in Linguistics.

Kayne, R. (1984). *Connectedness and binary branching*. Dordrecht: Foris.

Kroeger, P. (1993). *Phrase structure and grammatical relations in Tagalog*. Stanford, Calif.: CSLI.

Neither of these empty categories should be possible, at least in the positions in which they are shown in (i-ii). I will not try to discuss these facts further here.

Lamontagne, G., & L. Travis (1987). The syntax of adjacency. *Proceedings of WCCFL 6.*

Manzini, R., & A. Roussou (1998). *A minimalist theory of A-movement and control.* Manuscript, Florence/Bangor.

Martin, R. (1996). *A minimalist theory of PRO and control.* Doctoral dissertation, University of Connecticut.

Nakamura, M. (1998). Reference set, Minimal Link Condition, and parameterization. In *Is the best good enough?*, edited by P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis, and D. Pesetsky, 291-314. Cambridge, Mass.: MIT Press and MIT Working Papers in Linguistics.

Noyer, R. & D. Embick (1998). *Morphological merger and locality.* Manuscript, University of Pennsylvania and MIT.

Pesetsky, D. (1991). *Zero Syntax II.* Manuscript, MIT.

Richards, N. (1997). *What moves where when in which language?* Doctoral dissertation, MIT.

Riemsdijk, H. van (1998). Head movement and adjacency. *Natural Language and Linguistic Theory* **16**, 633-678.

Rubin, E. (1994). *Modification: a syntactic analysis and its consequences.* Doctoral dissertation, Cornell University.

Sauerland, U. (to appear). Scope reconstruction without reconstruction. *Proceedings of WCCFL 17.*

Schachter, P., & F. Otanes (1972). *Tagalog reference grammar.* Berkeley: University of California Press.

Selkirk, E., & K. Tateishi (1991). Syntax and downstep in Japanese. In *Interdisciplinary approaches to language*, edited by C. Georgopoulos and R. Ishihara, 519-543. Dordrecht: Kluwer.

Stowell, T. (1980). Complementizers and the Empty Category Principle. *Proceedings of NELS 11.*

Truckenbrodt, H. (1995). *Phonological phrases: their relation to syntax, focus, and prominence.* Doctoral dissertation, MIT.

Truckenbrodt, H. (1999). Syntactic phrases and phonological phrases. *Linguistic Inquiry* **30**, 219-255.

Norvin Richards
Kanda University of International Studies
Center of Excellence
1-4-1 Wakaba, Mihama-ku
Chiba, Japan 261-0014
norvin@kanda.kuis.ac.jp
http://coe-sun.kuis.ac.jp/~norvin/home.html