Truncation and Morphosyntactic Structure in Ojicree[*]

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SUMMARY

Piggott and Newell (2006) observe that vowel hiatus in Ojibwe is consistently resolved within the verb stem but is always preserved on the modifier stem boundary. They offer a syntactic explanation of these facts, launching it within the framework of Phase Theory. In this paper I introduce some novel data from Ojicree (a dialect of Ojibwe) showing that hiatus tolerance level varies on different modifier-stem boundaries: while in some cases hiatus has to be preserved, as predicted by Piggott and Newell (2006), in other cases the hiatus *can* optionally be resolved by truncation. A preliminary investigation conducted here suggests that the height of the modifier on the hierarchy of adverbials is the deciding factor in determining hiatus tolerance. The conclusion poses new questions both for the Phase Theory and for the structure of the Ojibwe verbal complex.

1   INTRODUCTION

Piggott and Newell (2006) (hence P&N) notice that in Ojibwe, an Algonquian language, vowel hiatus is consistently resolved within the verb stem (1b), but is consistently tolerated on the boundary between a modifier[1] and a stem[2] (1a):

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[1] In the Algonquian literature, these modifiers preceding the verb stem are referred to as 'preverbs'. In this paper, I use the terms 'modifier', 'preverbal modifier', and 'preverb' interchangeably.

[2] Abbreviations: AI - intransitive verb with animate subject, COMP - complementizer, CONJ - conjunct mode, IMPER - imperative, INTR - intransitive verb, PL - plural, POSS - possessive, TA - transitive verb with animate object, TR - transitive verb, PASS - passive.

(1)   a.   kihci-anohkii[3] / *kihcanohkii

          [kihci$_{modifier}$]- [anohkii$_{stem}$]
          hard-   work.INTR

          'S/he works hard.'

      b.   caak-ancike / *caaki-ancike

          [caaki-   anicke$_{stem}$]
          exhaust- eat.things.INTR

          'eat everything'

To account for the different treatment of hiatus within the stem and on the modifier-stem boundary, P&N adopt Phase Theory (Chomsky, 1999, 2005), arguing that the distribution of hiatus is sensitive to phase boundaries. The central tenet of the Phase Theory is that syntax creates chunks of structure and sends them for the interpretation (Spell Out) to the phonological component (PF) and to the semantic component (LF). The component of the Phase Theory that plays a crucial role in P&N's analysis is the Phase Impenetrability Condition (PIC) that states that once a phase is sent to Spell Out (that is, is interpreted phonologically and semantically), the elements within that phase are no longer accessible to further modification (Chomsky, 1999). P&N propose that in Ojibwe both the verb stem and each of the preverbal modifiers constitutes separate phases, which allows them to elegantly account for hiatus distribution. Within the stem, the hiatus is always resolved because it appears within a single phase, and so the two vowels are interpreted in the same cycle. In cases when hiatus is on the modifier-stem boundary, the two vowels appear in different phases, and thus, due to the PIC they cannot "see" each other, and so the sequence is never evaluated for well-formedness. This predicts that hiatus on the boundary between a modifier and a verb stem will always be preserved.

The paper is organized as follows. In section 2 I provide some necessary background on the Ojicree verbal morphology. In section 3 I present the new data that pose a challenge for P&N. In section 4 I argue that the syntactic position of the modifier is the determining factor for the availability of truncation. Section 5 presents the structures, and section 6 concludes the paper.

2   BACKGROUND

The template for the Ojibwe verbal complex is given in (2). As shown in this template, preverbal modifiers appear between the tense marker (if any) and the verb stem:

(2)   pers.prefix – tense – preverbal modifier(s) – stem – inflection

The preverbal modifiers preceding the verb stem can be adverbial elements, quantifiers, modal elements, and so on. The verbal complex in (1a) contains one modifier (*kihci-* 'hard, a lot, big') but there is no limit on the number of modifiers within a single verbal complex. For instance, in (3), the stem is preceded by three modifiers (*kwenawii-* 'no place', *ishi-* 'there, certain place' and *kiimooci-* 'secretly'). This example also shows the two inflectional elements on the left edge of the verbal

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[3] Unless otherwise indicated, all the examples in this paper are from Ojicree (a dialect of Ojibwe spoken in Northern Ontario and Manitoba), and come from my own fieldwork.

complex: the person prefix *ni-* 'first person' and the past tense marker *kii-*.

(3)   ni- kii-   kwenawii- ishi- kiimooco- shiipawiipahike
        1   PAST no.place   there secretly   take.a.nap.INTR
        'I could not find a place to take a nap secretly.'

The stem is the minimal constituent to which the person prefix can be added. This is how we know that the element *anohkii* in (1a) above is a full stem: the first person prefix *ni-* can be added to it, as shown in (4a). In (1b), *caakancike* is the verb stem, but the element *-ancike* is less than a full stem: the personal prefix *ni-* cannot be added to *-ancike* (4b) but only to *caakancike* (4c).

(4)   a.   ni- anohkii
              1   work.INTR
              'I am working.'
        b.   ni- ancike   / *nit-ancike
              1   eat.things.INTR
              intended: 'I am eating things.'
        c.   ni- caaki-   ancike
              1   exhaust eat.things.INTR
              'I ate everything.'

As stated in the previous section, P&N consider the verb stem and each of the preverbal modifiers to be separate phases. Thus, due to the PIC, we expect that hiatus resolution may never take place on the boundary between a modifier and a stem. However, in the following section I show that this claim cannot hold for Ojicree.

3   TRUNCATION ON THE MODIFIER-STEM BOUNDARY

Each of the following Ojicree examples involves a verb stem preceded by a preverbal modifier. In all of these, the hiatus on the boundary between a modifier and a stem can optionally be resolved by truncating the last vowel of the modifier:

(5)   a.   kishaahtapi- ahkiiwin   / kishaahtap-ahkiiwin
              fast   be.year.INTR
              'The year goes by fast.'
        b.   wani- otihkwemi   / wanootihkwemi
              wrong have.wife.INTR
              'He got married to a wrong woman.'
        c.   Kaawin ci-   mihkawi- aahsamaahtepic   / mihkawaahsamaahtepic
              not   COMP find   sit.in.the.sun.INTR-3CONJ
              'S/he can't find a place to sit in the sun.'

The optionality of hiatus resolution is not predicted by P&N's approach. According to them, there are only two hiatus tolerance situations: the hiatus is always resolved within a stem (phase) but is always preserved on the modifier-stem boundary (phase boundary). These cases do not fit into

either category. Although these are modifier-stem boundaries, the hiatus here does not have to be preserved. This is problematic for P&N because according to the Phase Impenentrability Condition (see above), elements across a phase boundary cannot see each other and therefore the boundary cannot be evaluated for well-formedness condition. In other words, PIC does not allow the optionality illustrated above.

If the hiatus facts presented in (5) were consistent across the board, we would be faced with a purely theoretical question: How do we maintain the view that the verb stem and the modifier are separate phases and allow for the optionality of hiatus resolution? Do we need to say something about the PIC (and possibly weaken it) or do we need to re-examine the claim that the two constituents involved are separate phases? The problem, however, is that the optionality in (5) does not hold for all modifier-stem boundaries. For instance, the following set of examples shows that in some cases truncation is blocked. These examples perfectly comply with P&N's prediction: hiatus here is obligatorily preserved on the modifier-stem boundary.

(6)   a.   Nikii- wani- aancinaakwihitis   / *Nikii-wanaancinaakwihitis
             1.PAST wrong change.form.INTR
             'I changed my form by mistake.'
       b.   Caaki- oshihcikewak   / *Caakooshihcikewak
             all   clean.fish.INTR-3PL
             'They are all cleaning fish.'
       c.   Ontami- aahsamahtepi   / *ontamaahsamahtepi
             busy   sit.in.the.sun.INTR
             'S/he is busy sitting in the sun.'

Thus, there are two separate questions raised by the new data presented here. First, how do we reconcile the optionality of hiatus resolution in (5) with the PIC? Second, what accounts for the variable behaviour of truncation on the same type of boundary ((5) vs. (6))? In the remainder of this paper I focus on the second question. I will propose, in line with P&N, that hiatus tolerance/truncation is sensitive to syntactic structure, but that the structure is more fine-grained than is proposed in P&N.

4   SYNTACTIC FACTORS RESTRICTING TRUNCATION

First notice that the difference between (5) and (6) cannot be due entirely to the type of vowels involved: the same pair of vowels is involved in (5b) vs. (6b), and in (5c) vs. (6c). However, it is also important to note that truncation is not entirely oblivious of phonological factors. Specifically, vowel length is the primary deciding factor of whether truncation will be able to take place at all. As shown in the vowel inventory in (7), Ojicree vowels show length contrast for all vowels except for [eː]. The vowel [eː] does not have a short counterpart for historical reasons.

(7)   Vowel inventory in Ojicree:

$$\begin{array}{ccc} \text{i, iː} & & \\ \text{eː} & & \text{o, oː} \\ & \text{a, aː} & \end{array}$$

Vowel length is important because when a modifier ends in a long vowel, truncation never takes place, regardless of the syntactic environment discussed below. Below are two examples with modifiers that end in long vowels:

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(8)   a.   nihtaa- oshihcike   / *niht-oshihcike
              good.at clean.fish.INTR
              'S/he is good at cleaning fish.'
       b.   kiiwe- oshihcike   / *kiiw-oshihcike
              again   clean.fish.INTR
              'S/he is cleaning fish again.'

For this reason, in the following sections I will only discuss modifiers that end in short [i]. To my knowledge, there are few if any *o*-final modifiers, and none that I know that end in short a[4].

4.1   RELATIVE HEIGHT OF ADVERBIALS

According to Cinque (1999)'s hierarchy of adverbial elements, some adverbs appear higher in the structure (e.g. sentence-level, speaker-oriented, event-related, agent-oriented) than others (e.g. manner, direction, rate). In what follows, I bring evidence that the relative height of a modifier on the syntactic hierarchy of adverbial elements makes a difference in the application of truncation.

Consider the preverb *mohci-* that is most appropriately translated as 'just' and can be considered a speaker-oriented element, since it conveys the attitude of a speaker, as illustrated below:

(9)   a.   nihtaa- mohci- nehpici-   saakaswe
              always just   constantly smoke.INTR
              'She just smokes all the time.'
       b.   e-   wii- ayamih- aak-   pan   nahshine tahsh e-   mohci- niimi-
              COMP VOL talk.TR 1>3.CONJ PRET constantly but   COMP just   dance.INTR
              c
              3CONJ
              'I wanted to talk to him but he just danced all the time.'

When *mohci-* appears in front of a vowel-initial verb stem, truncation never takes place:

(10) a. Mohci- oshihcikemekwaac /   *mohc-ooshihcike
          just   clean.fish   right.now
          'S/he is just cleaning fish right now.'
      b. Mohci- aahsamaahtepi   ihimaa / *mohc-aahsamahtepi
          just   sit.in.the.sun.INTR there
          'S/he is just sitting in the sun over there.'

I propose that the unavailability of truncation is due to the fact that *mohci-*, as a speaker-oriented element is located relatively high in the structure.

Another modifier that is located high in the structure is the linker *ishi-* 'in a certain time/place' in its certain uses where it relates the event described by the verb to specification of time or location. In such cases (illustrated in (11)) it can be considered an event-related modifier[5].

(11) a. Mekwaac e-   kisiihsipaso-   yaan   ni- nihtaa- ishi- nikam.
          while   COMP take.shower.INTR 1CONJ 1   always ishi sing
          'I often sing in the shower.'
      b. Ni- wii- ishaa   kaa- ishi- niiminaanowan- k.
          1   VOL go.INTR where ishi be.dancing.INTR CONJ
          'I am going to a dance party.'

When *ishi-* attaches to a vowel-initial verb, truncation never takes place.

(12) a. Ni- wii- ishaa kaa- ishi- atawaakenaanowan- k   / *kaa-ish-atawaakenaanowank
          1   want go   that there people.are.selling   CONJ
          'I want to go to a yard sale.'
      b. Mohci- ishi- aahsamaahtepi   ihimaa / *ishaahsamahtepi
          just   thus sit.in.the.sun.INTR there
          'S/he is just sitting in the sun over there.'

Thus, the cases of *mohci-* 'just' and *ishi-* 'in a certain place/time' suggest that when a modifier is located higher in the structure, vowel hiatus has to be preserved and no truncation is allowed to take place. If that is indeed the case, we would expect the same restriction to apply to all higher-level preverbs. At the moment, there is no data about other preverbs that are high in the structure. There is however, evidence, that truncation behaves very differently with lower-level adverbials. With these, truncation is always possible, which strengthens the hypothesis that the syntactic height of adverbial is the determining factor.

(13) shows some examples with lower-level adverbials. As these illustrate, truncation is always possible with rate adverbials (13a), (13b), manner (13c), (13f), direction (13d), (13g), and degree (13e).

(13) a. kishahtapi- ompikiwak awaashihshak / kishaahtapompiikiwak
          fast   grow.INTR kids
          'Kids grow fast.'

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[5] See Slavin (2011) for evidence that different uses of *ishi-* occupy different structural positions, and Slavin (2007) specifically for the discussion of the event-related use of this modifier.

    b.   Kishahtapi- onaakohshin   /kishaahtaponaakohshin
            fast   evening.INTR
            'Evening comes fast.'

    c.   Ni- kii-   wani- oshihtoon e-   makootehkeyaan   / wanooshihtoon
            1   PAST wrong make.TR COMP make.dress.INTR.1CONJ
            'I made a mistake while making a dress.'

    d.   Kii-   wani- ishkoonowe   / wanishkoonowe
            PAST wrong go.to.school.INTR
            'S/he went to the wrong classroom.'

    e.   Onsaami- akaahshenshiiwak waapiikoshihshak / onsaamakaahshenshiiwak
            too   small.INTR-PL   mice
            'Mice are very/too small.'

    f.   nihtaa- pwaahtawi- anohkii   / pwaahtawanohkii
            always late   work.INTR
            'S/he always works late.'

    g.   Nihtaa- papaam- anohkii   / papaamanohkii
            always around   work.INTR
            'S/he works everywhere around.'

To sum up so far, the data discussed here suggests that truncation is more likely to take place with lower-level adverbials and to be blocked with modifiers that are relatively high on the syntactic hierarchy. In the following section I discuss a dual behaviour of a particular modifier that strengthens this point.

4.2 QUANTIFIER SCOPE

There is one preverb in Ojicree that can appear in different structural positions, and that brings further evidence for the point made in the preceding section, that the syntactic position is the determining factor in truncation. The preverb in question is the modifier *caaki-* 'all, exhaustive, completely'. This preverb can be used as a quantifier referring to either the subject or the object, and when the context allows it, the verbal complex with *caaki-* is ambiguous[6]. For instance, when *caaki-* combines with an intransitive verb, as in (14), it is interpreted as referring to the only argument of the verb, the external argument. If, on the other hand, the verb that *caaki-* combines with has two arguments, as in (15)[7], the verbal complex is ambiguous: *caaki-* can be referring either to the subject or to the object.

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[6] For a more extensive discussion of this modifier and for more evidence for its two structural positions see Slavin (2011).

[7] Although the verb *oshihcike* 'clean fish' is morphologically intransitive, it has an implicit argument 'fish' that can also be stated as an overt noun phrase, as in this example.

(14)   mekwaac caaki- nipaa- wak awaashihsh- ak
         meanwhile all sleep.INTR-3PL child PL
         'All the children are sleeping right now.'

(15)   ni- kii- caaki- oshihcike- min kinooshe- k
         1 PAST all clean.fish.INTR 1PL fish PL
         'We have cleaned all the fish.'
         'We have all cleaned fish.'

As with many other preverbs reviewed earlier in this paper, *caaki-* can undergo truncation when combined with a vowel-initial verb, but sometimes truncation is blocked. The following data shows that the availability of truncation completely depends on the scope of *caaki-*. When *caaki-* refers to the internal argument, truncation may optionally take place (16), but when it refers to the external one, no truncation is possible (17).

(16)   a.   Aasha kii-   caaki- ataawaake shiiwyahii- n   / caak-ataawaake
               already PAST all   sell   candy   PL
               'S/he has already sold all the candies.'
         b.   Aasha ni- kii-   caaki- oshihcike kinooshe- k   / caak-ooshihcike
               already 1   PAST all   clean.fish fish   PL
               'I have already cleaned all the fish.'
         c.   Aasha ni- kii-   caaki- aapacihtoon ohowe moohkoman / -caakaapacihtoon
               already 1   PAST all   use.TR   this   knife
               'I've worn out this knife already.'

(17)   a.   Mekwaac caaki- atawaake- wak pankii shiiwyahii- n   /   *caak-atawaake-wak
               right.now all   sell.V   AI PL   some   candy PL
               'They are all selling (some) fish right now.'
         b.   Mekwaac caaki- oshihcike- wak pankii kinooshe- k   / *caak-ooshihcike-wak
               right.now all   clean.fish 3PL some fish   PL
               'They are all cleaning (some) fish right now.'
         c.   Aasha ni- kii-   caaki- aapacihtoo- min ohowe moohkoman / *-caakaapacihtoomin
               already 1   PAST all   use.TR   1PL this   knife
               'We've all used this knife already.'

Assuming that the internal argument is introduced lower than the external one, (Marantz, 1984; Kratzer, 1996), and that subject-oriented elements appear higher in the structure than object-oriented elements (see also discussion in the following section), we can conclude that it is the syntactic position of *caaki-* that determines whether truncation is possible or not. This further strengthens the point that the syntactic height of the adverbial is the determining factor in truncation/hiatus tolerance.

5 STRUCTURES

The evidence from the different treatment of hiatus tolerance reviewed above suggests that preverbs can appear in different structural positions. Let us examine the two structural positions for the quantifier *caaki-* 'all' as an illustration.

Before we get to the structures themselves, a couple of assumptions about the structure are in order. First, I assume that the verb stem in Ojibwe, as in other Algonquian languages, corresponds to a *v*P (e.g. Brittain (2001, 2003); Hirose (2003); Piggott and Newell (2006)). Second, I adopt the position of Distributed Morphology and other constructionalist theories that only functional heads can introduce arguments (Borer (2005); Hale and Keyser (1993, 2002); Pylkkänen (2008) among others)[8]. The internal argument is introduced by *v*. Crucially, the external argument is introduced by a higher head outside the *v*P (stem), which I label Voice, following Kratzer (1996). In the structures in (18), both arguments are designated as *pro*, following the Pronominal Argument Hypothesis, according to which in pronominal argument languages the actual arguments of the verb are null *pro*'s, while lexical nominals are syntactic adjuncts (Hale and Keyser, 1993; Baker, 1996; Jelinek, 1984). I also assume that *caaki-* can only refer to an argument if it takes scope over it and c-commands it.
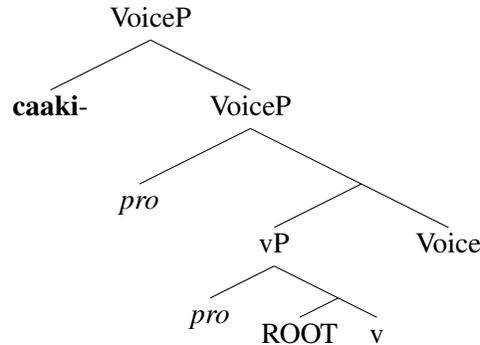
Based on these assumptions, I propose that there are two positions for the stem-external *caaki-*, structurally illustrated in (18) and (19). In (18) it adjoins to the *v*P, before the external argument is introduced, and can refer only to the internal argument. In (19), where *caaki-* adjoins to the VoiceP and has the external argument in its scope, it is interpreted as subject-oriented.

(18)   Object-oriented *caaki* 'all':

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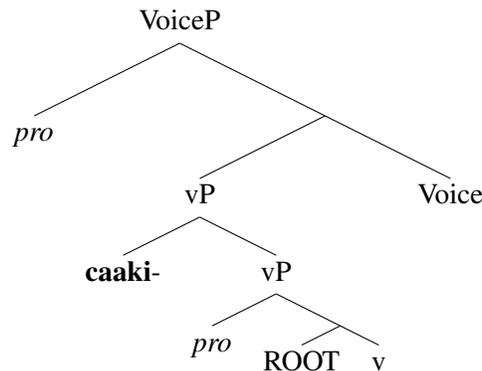
[8] This particular assumption is not crucial to the argument at hand. The argument would work just as well if the internal argument were introduced by the root. The important thing is that the internal argument is introduced within the *v*P (the stem), while the external argument outside the *v*P.

(19)   Subject-oriented *caaki* 'all':

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                        VoiceP
                       /      \
                 caaki-      VoiceP
                            /      \
                         pro        \
                                    /    \
                                  vP      Voice
                                 /  \
                              pro    \
                                  ROOT   v
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To account for the difference in the hiatus tolerance/truncation in these two cases, we have to say that the boundary associated with *v*P is not as strong as the boundary associated with the VoiceP. Truncation is possible on the boundary between *caaki-* and the *v*P but is disallowed on the boundary between *caaki-* and the VoiceP. I assume that the same logic would apply to other lower- vs. higher-level preverbs, although there might be different attachment sites for higher-level ones above the VoiceP.

6   CONCLUSIONS AND FURTHER QUESTIONS

In this paper I investigated the factors that restrict hiatus resolution on the modifier-stem boundary in Ojicree. Building on P&N, I have argued that hiatus/truncation facts are sensitive to syntactic structure, but P&N's observation that hiatus must be obligatorily preserved on this boundary cannot hold for this dialect of Ojibwe. I have shown that truncation is optionally possible on the modifier-stem boundary but its availability crucially depends on the syntactic position of the modifier: truncation is possible with lower-level adverbials but is blocked with those that are higher in the hierarchy.

The new data brought here suggests that there is complex syntactic structure within the verbal complex, and that there are different attachment sites for different preverbs, and some boundaries within the verbal complex (e.g. *v*P boundary) appear to be not as strong as other boundaries (e.g. VoiceP).

While the discussion in this paper sheds some light on the varying hiatus tolerance situations on the modifier-stem boundary, there are questions that it raises both for the understanding of the structure of the Ojicree (and Ojibwe) verbal complex and for Phase Theory. To summarize the findings in the present paper and those in P&N, there appear to be three hiatus tolerance situations in the Ojicree verbal complex that indicate three different kinds of boundaries.

The lowest boundary is the stem-internal boundary exemplified in (1b) above and repeated below. As determined by P&N, hiatus within a stem must obligatorily be resolved.

(20)   Boundary A: stem-internally/within a phase $\longrightarrow$ truncation obligatory

    a.   caakant / *caaki-ant

       [caaki- ant$_{stem}$]
       exhaust- eat.TR
       'eat everything'

    The second boundary is the boundary between the modifier and the stem where hiatus can be optionally resolved by truncation. As discussed in section 4, these modifiers are located low on the hierarchy of adverbial elements, and the boundary in question is probably the *v*P boundary.

(21)   Boundary B: modifier-stem/phase boundary? $\longrightarrow$ truncation optional

    a.   kishaahtapi- ahkiiwin   / kishaahtap-ahkiiwin
       fast   be.year.INTR
       'The year goes by fast.'

    b.   Aasha kii-   caaki- ataawaake shiiwyahii- n   / caak-ataawaake
       already PAST all   sell   candy   PL
       'S/he has already sold all the candies.'

(22)   Boundary C: modifier-stem/phase boundary? $\longrightarrow$ no truncation

    a.   Mekwaac caaki- oshihcike- wak pankii kinooshe- k   / *caak-ooshihcike-wak
       right.now all   clean.fish 3PL some fish   PL
       'They are all cleaning (some) fish right now.'

    b.   Mohci- oshihcike mekwaac / *mohc-ooshihcike
       just   clean.fish right.now
       'S/he is just cleaning fish right now.'

The next question is what do these different boundaries mean for a phase-theoretic approach. Particularly, is the difference between (21) and (22) the difference between phasal and non-phasal boundary (i.e. does it mean that VoiceP is a phase in Ojicree but *v*P is not)? Finally, what accounts for the optionality of truncation in (21)?

REFERENCES

Baker, M. (1996). *The Polysynthesis Parameter*. Oxford University Press.

Borer, H. (2005). *Structuring Sense: an exo-skeletal trilogy*. Oxford University Press.

Brittain, J. (2001). *The Morphosyntax of the Algonquian Conjunct Verb: a minimalist approach*. Garland.

Brittain, J. (2003). A Distributed Morphology Account of the Syntax of the Algonquian Verb. In *Proceedings of the 2003 Annual Conference of the Canadian Linguistic Association*. Université du Québec à Montréal.

Chomsky, N. (1999). Derivation by Phase. *MIT Working Papers in Linguistics*, 18.

Chomsky, N. (2005). On Phases. Ms., MIT, Cambridge, Mass.

Cinque, G. (1999). *Adverbs and functional heads: a cross linguistic perspective*. Oxford University Press.

Hale, K. and Keyser, S. J. (1993). On Argument Structure and Lexical Expression of Syntactic Relations. In Hale, K. and Keyser, S. J., editors, *The View from Building 20: Essays in Honor of Sylvain Bromberger*. MIT Press.

Hale, K. and Keyser, S. J. (2002). *Prolegomenon to a theory of argument structure*. MIT Press.

Hirose, T. (2003). Origins of Predicates: evidence from Plains Cree. In *Outstanding Dissertations in Linguistics*. Routledge.

Jelinek, E. (1984). Empty Categories, Case and Configurationality. *Natural Language & Linguistics Theory*, 2.

Kratzer, A. (1996). Severing the External Argument from its Verb. In Rooryck, J. and Zaring, L., editors, *Phrase Structure and the Lexicon*. Kluwer.

Marantz, A. (1984). *On the Nature of Grammatical Relations*. MIT Press.

Piggott, G. and Newell, H. (2006). Syllabification, Stress and Derivation by Phase in Ojibwa. *McGill Working Papers in Linguistics*, 20.

Pylkkänen, L. (2008). *Introducing Arguments*. MIT Press.

Slavin, T. (2007). In search of the event argument: a semantic analysis of the preverb *ishi-* in Oji-Cree. In Deal, A. R., editor, *Proceedings of the 4th Conference on the Semantics of Underrepresented Languages in the Americas*. University of Massachusetts, Amherst: GLSA Publications.

Slavin, T. (2011). *The Syntax and Semantics of Stem Composition in Ojicree*. PhD thesis, University of Toronto.