

# ***Wh*-MOVEMENT IN MI'GMAQ\***

*Michael David Hamilton*

*McGill University*

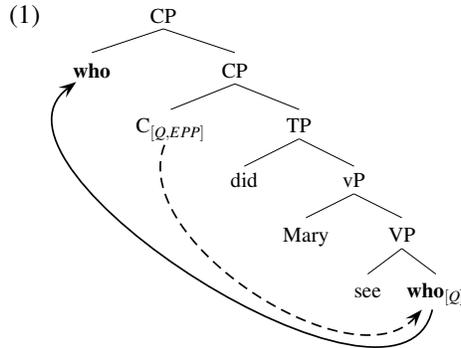
## **1 Introduction**

In this paper, I argue that Mi'gmaq, an Eastern Algonquian language, has *wh*-movement. I show that multiple *wh*-movement exists in Mi'gmaq and it is subject to superiority effects. While these effects are similar to those shown for Western Naskapi (Brittain, 2001), Mi'gmaq is unique in that it requires multiple *wh*-movement in multiple *wh*-questions, as *wh*-phrases cannot be left in-situ. These superiority effects support an analysis where *wh*-phrases are base generated in canonical argument positions and involve multiple instances *wh*-movement. This is important, since it provides an argument that *wh*-phrases are not adjuncts and presents support for a configurational analysis of the syntax of Mi'gmaq.

Algonquian languages have been argued to create *wh*-questions through either *wh*-movement, e.g., Passamaquoddy (Bruening, 2001), Western Naskapi (Brittain, 2001), and Algonquin (Lochbihler and Mathieu, 2008); or *wh*-clefting, e.g., Plains Cree (Wolfart, 1973) and (Blain, 1997), Rainy River Ojibwe (Johns, 1982), Swampy Cree (Russell and Reinholtz, 1995). A typical *wh*-movement analysis involves: a probe on C<sup>0</sup> with an uninterpretable Q feature, a *wh*-phrase goal with a Q feature, an AGREE relation between the probe and goal, and the movement of the goal to Spec-CP to satisfy the EPP feature on C<sup>0</sup>. For example, the utterance 'Who did Mary see?' can be analyzed as in (1).

---

\*I would like to thank: my consultants Janine Metallic, Mary Ann Metallic, Janice Vicair and Joe Wilmont, for sharing their language with me and for their never ending patience, the Listuguj Educational Directorate for their continued support, Alan Bale and Jessica Coon for their supervision, the participants of the first annual Montreal-Ottawa-Toronto-Hamilton Syntax Workshop in Syntax, the McGill Algonquian Reading Group, and the participants at the 2013 CLA for their helpful feedback. All errors are entirely my own responsibility. This ongoing research has been supported by: SSHRC doctoral grant, SSHRC Connection grant Alan Bale, Jessica Coon & Michael Wagner (Principle Investigators), McGill Arts Graduate Student Travel Awards, and Heritage Canada Aboriginal Languages Initiative grant, sub-contracted to McGill University by the Listuguj Mi'gmaq Education Directorate.



Standard diagnostics for *wh*-movement are subjacency, island effects, and weak crossover (WCO).

A *wh*-cleft analysis, on the other hand, has been presented by Blain (1997) for *wh*-questions in Plains Cree, a Central Algonquian language. For example, *wh*-questions, such as (2a) receive the analysis in (2b).<sup>1</sup>

(2) PLAINS CREE

- a. **awîna-wa** Mary kâ-wâpam-â-t (Blain, 1997, 1)  
**who-OBV** Mary REL-see-CNJT-DIR-3  
 ‘Who did Mary see?’

- b. **awîna-wa<sub>i</sub> t<sub>i</sub> [Op<sub>j</sub> [kâ-kî-wâpam-at t<sub>j</sub> ]]**

Blain argues that *awînawa* ‘who’ is base generated in a clefted nominal clause structure and undergoes movement to the left-edge of this clause. In the complement clause, a null operator is base generated in the argument position associated with the *wh*-word. The null operator undergoes movement to the Spec-CP of the complement clause in order to licence the *wh*-construction. Under this analysis, null operator movement causes similar effects as *wh*-movement, such as subjacency and island effects. However, since the actual *wh*-phrase undergoes vacuous movement in the nominal clause, WCO effects are predicted to not rise. In addition, given the nature of the cleft construction, multiple *wh*-questions are predicted to be impossible. While subjacency and island effects are shown to occur in Plains Cree, both WCO effects and multiple *wh*-questions are absent.

In sum, while both analyses predict the presence of subjacency and island effects, they differ on their predictions for multiple *wh*-questions and WCO. Both

<sup>1</sup>Abbreviations: 0 = inanimate third person singular, 1 = first person, 3 = animate third person singular proximate, 4 = animate third person singular obviative, textitan = animate, COMP = complementizer, CNJT = Conjunct order, CONJ = conjunction, INDIR = indirect evidentiality marker, DIR = direct, NEG = negation, OBJ = object, OBV = obviative, PL = plural, POSS = possessive, PRON = pronoun, *pst* = past, REL = relative marker, VAI = intransitive verb with an animate subject, VTA = transitive verb with an animate subject and animate object, VTI = transitive verb with an animate subject and inanimate object.

multiple *wh*-questions and WCO are crucially predicted to be absent under Blain's *wh*-cleft analysis. A *wh*-movement analysis allows for the possibility of multiple *wh*-questions and while WCO effects are typically present, they have been shown to be absent.

I argue that *wh*-questions in Mi'gmaq occur through *wh*-movement rather than a *wh*-cleft construction. In section 2, I show that Mi'gmaq displays both subjacency and island effects, which is consistent with a movement analysis. In section 3, I show that Mi'gmaq displays multiple *wh*-questions and superiority effects, which are only consistent with *wh*-movement analysis. In section 4, I show that while WCO effects are absent in Mi'gmaq, this is not damning counter-evidence since WCO is poorly understood and absent in other *wh*-movement languages. In section 5, I will present a *wh*-movement analysis for Mi'gmaq which is consistent with the data provided, and argue against an alternate account. I conclude in section 6.

## 2 Diagnostics for movement

In this section, I show that there is evidence to support a movement analysis of *wh*-questions in Mi'gmaq. First, Mi'gmaq has successive cyclic movement. In (3a),<sup>2</sup> *goqwei* 'what' is at the left edge of the matrix clause and associated with the object argument of the embedded verb. However a second *wh*-phrase associated with the embedded subject cannot occur at the left-edge of the embedded clause, as with *wen* 'who' in (3b). Nor can a second *wh*-phrase associated with the embedded clause appear in the matrix clause, as in (3c).

- (3) a. **goqwei** Mali telt-a'si-t [Lance pegwatel-g-p]?  
**what** Mary think-VTI-3 [Lance buy.VTI-3-PST]  
 'What does Mary think Lance bought?'  
 b. \***goqwei** Mali telt-a'si-t [**wen** pegwatel-g-p]?  
**what** Mary think-VTI-3 [**who** buy.VTI-3-PST]  
 intended: 'What does Mary think **who** bought?'  
 c. \***goqwei wen** Mali telta's-it [pegwatel-g-p]?  
**what who** Mary think-VTI-3 [buy.VTI-3-PST]  
 intended: 'What does Mary think **who** is buying?'

Another argument for subjacency is the Complex NP Constraint (Ross, 1967). *Wh*-movement from within a complex NP is ungrammatical in English since it occurs through 2 bounding nodes, i.e., DP and CP. A similar kind of restriction with *wh*-words in Mi'gmaq also seems to be present. The utterance in (4a) has a noun '*lpa'tuj* 'boy' that is modified by a CP complement, *ta'n nemiapn Lanceal* 'who saw Lance'. However a *wh*-phrase cannot associate with a verb in complement clause, as shown in (4b).

<sup>2</sup>Unless noted, all examples are primary data collected by the author in consultation with a group of native speakers of the Listuguj dialect of Mi'gmaq, located in Listuguj, Quebec, Canada.

- (4) a. ['lpa'tuj [ta'n nemi-a-p-n-n Lance-al]]  
 [boy [COMP see.VTA-3OBJ-PST-OBV-AN.PL Lance-OBV]]  
 al-a'si-t  
 walk.around-VAI-3  
 'The boy [who saw Lance] is walking around'
- b. \*wen-n ['lpa'tuj [ta'n nemi-a-p-n-n]]  
 who-OBV [boy [COMP see.VTA-3OBJ-PST-OBV-AN.PL]]  
 al-a'si-t?  
 walk.around-VAI-3  
 intended: 'Who did [the boy [that saw]] is walking around?'

*Wh*-questions in Mi'gmaq also obey typical island constraints. First, it is not possible to have *wh*-movement out of only one conjunct in a coordinate structure, i.e., Coordinate Structures Constraint (Ross, 1967). In Mi'gmaq, utterances with two NPs can be coordinated by *aq* 'and', as shown in (5a). Both (5b) and (5c) show that a *wh*-word cannot associate with one of these conjuncts independently.

- (5) a. maqu-tm-u'tp wenju'su'n aq pipnaqan  
 eat-VTI-2.PST apple CONJ bread  
 'You ate an/the apple and bread.'
- b. \*goqwei maqu-tm-u'sp aq pipnaqan?  
 what eat-VTI-2.INDIR.PST CONJ bread  
 intended: \*'What did you eat and bread?'
- c. \*goqwei maqu-tm-u'sp wenju'su'n aq?  
 what eat-VTI-2.INDIR.PST apple CONJ  
 intended: \*'What did you eat apple and ?'

Second, *wh*-movement is not allowed from the left-branch of a constituent, i.e., Left-branch Condition (Ross, 1967). A Mi'gmaq utterance with a possessed NP *Lance-ewei wi'gatign* 'Lance's book' is shown in (6a). A *wh*-word cannot associate with the NP *wi'gatign* from the left-edge of the matrix clause, as shown with *wen(-ewei)* 'who(se)' in (6b). However, a *wh*-word can associate with *wi'gatign* if it appears as a constituent together with it at the left-edge, as shown in (6c).

- (6) a. Sa'n pegwatal-g-p [Lance-ewei wi'gatign]  
 John buy.VTI-3-PST [Lance-POSS book]  
 'John bought Lance's book'
- b. \*Wen(-ewei) Sa'n pegwatal-g-'s [wi'gatign]?  
 who(-POSS) John buy.VTI-3-INDIR.PST [book]  
 intended: \*'Whose did John buy book?'

- c. [Wen-ewei wi'gatign] Sa'n pegwatel-g-'s?  
 [who-POSS book] John buy.VTI-3-INDIR.PST  
 '[Whose book] did John buy?'

Third, extraction of a *wh*-phrase is not possible from an adjunct clause, i.e., Adjunct Condition Ross (1967). The Mi'gmaq utterance in (7a) has the adjunct clause *ge's mu weltesguagupn Lancal* 'before I met Lance'. Association of a *wh*-word with the verb in the adjunct clause is not possible, as shown with *wenn* in (7b).

- (7) a. Sa'n maj-a'si-p [ge's mu  
 John leave.VAI-3.PST [while NEG  
 weltesgu-a-g-u-p-n Lance-al]  
 meet.VTA-3OBJ-3-NEG-PST-OBV Lance-OBV]  
 'John left [before he met Lance]'
- b. \*wen-n Sa'n maj-a'si-p [ge's mu  
 who-OBV John leave.VAI-3.PST [while NEG  
 weltesgu-a-g-u-p-n]  
 meet.VTA-3OBJ-3-NEG-PST-OBV]  
 intended: 'Who did John leave before he met?'

These grammaticality judgements can be accounted for by assuming that constraints on extraction domains and island constraints apply. This presents support for a movement analysis of *wh*-questions in Mi'gmaq. The question is whether it is *wh*- or null operator movement. The next section will present evidence that it is *wh*-movement.

### 3 Multiple *wh*-questions and superiority

In this section, I show that Mi'gmaq displays multiple *wh*-questions with superiority effects, which is consistent with a *wh*-movement analysis. Blain (1997) argues that multiple *wh*-questions are only possible in languages where *wh*-phrases are base generated in argument positions. Following Calabrese (1984), she argues that absence of multiple *wh*-questions is a diagnostic for a *wh*-clefting language. Plains Cree is shown to lack multiple *wh*-questions, as in (8), where a *wh*-phrase cannot be left in-situ.<sup>3</sup>

- (8) PLAINS CREE (Blain, 1997, 90)  
 a. \*awîna ê-itwê-t kîkwây?  
 who REL-say.so-CNJT.3 what  
 intended: 'Who said what?'

<sup>3</sup>(Blain, 1997, 90) rules out a construction where both arguments are clefted.

- b. \***awîna** ka-pîkiskwât-â-t **awîna-wa?**  
**who** COMP-speak.to.someone-DIR-CNJT.3 **who-OBV**  
 intended: ‘**Who** spoke to **whom**?’

Multiple *wh*-questions are acceptable in Mi’gmaq and obligatorily trigger a pair-list response. Importantly, both *wh*-words must precede the verb, as in (9a). When one *wh*-word precedes the verb, as in (9b), a multiple *wh*-question interpretation is not possible.<sup>4</sup>

(9) *Context: I tell you that I went to a pot luck yesterday. You ask me:*

- a. **wen goqwei** pegisi-toqoss?  
**who what** bring-VTI.3.INDIR.PST  
 ‘**Who** brought **what**?’ [triggers a pair-list response]
- b. **wen** pegisi-toqoss **goqwei?**  
**who** bring-VTI.3.INDIR.PST **what**  
 \*‘**Who** brought **what**?’; ‘**Who** brought **anything/something**?’

In addition, *wen* must precede *goqwei* as in (9a) above and in (10a) below. *Goqwei* preceding *wen* in (10b) is judged ungrammatical. This is not a special fact about these particular *wh*-words. It is always the case that the subject *wh*-phrase precedes the object *wh*-phrase. We know the argument structure is such here, because the verbal inflection specifies that the animate argument, *wen*, is the subject and the inanimate argument, *goqwei*, is the object. In fact, there are no transitive verbs cannot with an inanimate subject and an animate object, but if there were we expect that *goqwei* would precede *wen* in a multiple *wh*-question.

(10) *Context: Looking at the table of food at a pot luck party, you ask the organizer:*

- a. **wen goqwei** pegisi-toqoss  
**who what** bring-VTI.3.INDIR.PST  
 ‘**Who** brought **what**?’ [triggers a pair-list response]
- b. \***goqwei wen** pegisi-toqoss?  
**what who** bring-VTI.3.INDIR.PST  
 intended: ‘**Who** brought **what**?’ or ‘**What** did **who** buy?’

<sup>4</sup>Note that *wh*-words are interpreted as *wh*-interrogatives when pre-verbal and *wh*-indefinites when post-verbal. *Goqwei* in (1) can only be interpreted as a *wh*-phrase in (ia) and a *wh*-indefinite in (ib).

- (i) a. **goqwei** Lance pegwatel-g?  
**what** Lance buy.VTI-3  
 ‘**What** is Lance buying?’
- b. Lance pegwatel-g **goqwei?**  
 Lance buy.VTI-3 **thing**  
 ‘Is Lance buying **anything**?’

This strict word order can be explained as a superiority effect (Chomsky, 1973). The movement of potential targets is restricted to the one which is structurally highest, if two separate targets are available to undergo a movement operation. In languages which do not allow multiple *wh*-movement, only the structurally higher *wh*-phrase can undergo movement, and the other *wh*-phrase must stay in-situ. In English, only *who* can move, as in (11a), but not *what*, as in (11b).

- (11) SUPERIORITY IN ENGLISH
- a. **Who<sub>i</sub> t<sub>i</sub> bought what?**
  - b. \***What<sub>i</sub> who** bought t<sub>i</sub>?

In languages which allow multiple *wh*-movement, the *c*-command order of *wh*-phrases prior to movement is rigidly maintained after movement. In Bulgarian *koj* ‘who’ must precede *kogo* ‘who(m)’ as in (12a). The reverse ordering in (12b) is reported as being ungrammatical, analogous to the Mi’gmaq examples above.

- (12) SUPERIORITY IN BULGARIAN (Boskovic, 2002: 354; *traces added*)
- a. **koj<sub>i</sub> kogo<sub>j</sub> t<sub>i</sub> obica t<sub>j</sub>?**  
**who who(m) loves**  
‘Who loves who(m)?’
  - b. \***kogo<sub>j</sub> koj<sub>i</sub> t<sub>i</sub> obica t<sub>j</sub>?**  
**who(m) who loves**  
intended: **Who(m) does who love?**

The presence of multiple *wh*-questions provides evidence against a *wh*-cleft account. If we assume a *wh*-movement account, Mi’gmaq patterns with multiple *wh*-movement languages, such as Bulgarian.<sup>5</sup>

#### 4 Weak Crossover

In this section I argue that although Mi’gmaq appears to lack WCO effects, this does not discount a *wh*-movement analysis. WCO has been formulated in many ways, but the generalization is that traces of *wh*-phrases can only have anaphoric relations with pronouns they *c*-command. Co-reference between the *wh*-word and the possessor of the object NP is possible in English when the subject *wh*-phrase has undergone *wh*-movement, as shown in (13a). The co-reference possibilities are not affected by *wh*-movement as they are parallel to the corresponding declarative in (13b).

---

<sup>5</sup>The ambiguity of *wh*-words as *wh*-indefinites is another parallel with multiple *wh*-movement languages. This suggests a potential analysis where *wh*-words lack quantificational force and need to be licensed through movement (Cheng, 1991).

- (13) NON-WCO
- a. **Who**<sub>1*i*</sub> **t<sub>i</sub>** loves **his**<sub>1/2</sub> mother?
  - b. **John**<sub>7</sub> loves **his**<sub>7/8</sub> mother

But co-reference between the *wh*-phrase and the possessor of a subject NP is not possible when the object *wh*-phrase has undergone *wh*-movement over the subject, as shown in (14a). Crucially the co-reference possibilities are restricted by *wh*-movement, as the corresponding declarative in (14b) has no such co-reference restriction.

- (14) WCO
- a. **Who**<sub>1*i*</sub> does **his**<sub>\*1/2</sub> mother love **t<sub>i</sub>**?
  - b. **His**<sub>7/8</sub> mother loves **John**<sub>7</sub>

In similar configurations, Mi'gmaq does not show WCO effects, which is similar to many Algonquian languages. These effects do not arise when the verb is inflected with direct or inverse morphology. With respect to the WCO data here with a 3rd person proximate and a 3rd person obviative argument (4th person), direct morphology appears when the subject is the 3rd person and the object is the 4th person, while inverse morphology appears when the object is 4th person and the subject is 3rd person. The proximate argument is often referred to as being more discourse salient, and all other 3rd persons are marked as obviative.

In the direct non-WCO example when the subject is a *wh*-phrase in (15a), co-reference between the *wh*-word *wen* and the possessor of the object NP is possible. Note that the co-reference possibilities have not changed from the corresponding declarative (15b).

- (15) DIRECT, NON-WCO
- a. **wen**<sub>1</sub> ges-al-a-t-l                      **ug**<sub>1/2</sub>-gwij-l  
**who** love-VTA-3OBJ-3-OBV **3**-mother-OBV  
 'Who<sub>1</sub> loves her/his<sub>1/2</sub> mother?'
  - b. **Lance**<sub>7</sub> ges-al-a-t-l                      **ug**<sub>7/8</sub>-gwij-l  
**Lance** love-VTA-3OBJ-3-OBV **3**-mother-OBV  
 'Lance<sub>7</sub> loves his<sub>7/8</sub> mother?'

In the direct WCO example when the object NP is a *wh*-phrase in (16a), co-reference is not possible between the *wh*-word *wen* and the possessor of the subject NP. However, note that the co-reference possibilities have not changed from the corresponding declarative in (16b) either.

- (16) DIRECT, WCO
- a. **wen-n**<sub>1</sub> **ug**<sub>\*1/2</sub>-gwij-l ges-al-a-t-l  
**who-OBV 3**-mother-OBV love-VTA-3OBJ-3-OBV  
 'Who<sub>7</sub> does her/his<sub>\*7/8</sub> mother love?'

- b. **ug**<sub>\*7/8</sub>-**gwij**-l ges-al-a-t-l **Lance-al**<sub>7</sub>  
**3**-mother-OBV love-VTA-3OBJ-3-OBV **Lance-OBV**  
 ‘Her/his<sub>\*7/8</sub> mother loves **Lance**<sub>7</sub>?’

Note that there is obviative marking *-n* on the *wh*-word *wenn*, which forces disjoint reference from the 3rd person possessor (Grafstein, 1985). Obviative marking obligatorily forces disjoint reference with a proximate 3rd person. Thus the effect of disjoint reference cannot be attributed to the potential movement of a *wh*-word.

In the inverse, the only possible examples are ones with the possessive obviative NP as the subject and the proximate NP as the object. When the object NP is a *wh*-phrase as in (17a), co-reference between the *wh*-word and the possessor of the subject NP is obligatory. Again, note that the co-reference possibilities have not changed from the corresponding declarative (17b). Thus there is no potential effect attributable to the *wh*-word.

(17) INVERSE, WCO

- a. **wen**<sub>1</sub> **ug**<sub>1/\*2</sub>-**gwij**-l ges-al- $\emptyset$ -t-l  
**who 3**-mother-OBV love-VTA-INV-3-OBV  
 ‘**Who**<sub>1</sub> does **his**<sub>1/\*2</sub> mother love?’
- b. **Lance**<sub>7</sub> **ug**<sub>7/\*8</sub>-**gwij**-l ges-al- $\emptyset$ -t-l  
**Lance 3**-mother-OBV love-VTA-INV-3-OBV  
 ‘**His**<sub>7/\*8</sub> mother loves **Lance**<sub>7</sub>’ ; ‘**Lance**<sub>7</sub>’s mother loves **him**<sub>7/\*8</sub>’

There have been two approaches to explain the lack of WCO effects in Algonquian languages argued to have *wh*-movement: Bruening (2001) and Brittain (2001). Bruening (2001) argues that the direct-inverse system is the key. Under his analysis, arguments lower on the hierarchy are generated in the canonical object argument position and higher ones in the canonical subject position. In inverse forms, the lower argument undergoes A movement over the higher ranking argument. Since WCO only occurs from the result of A’ movement, such effects are not expected to be present. However, Bruening argues that WCO effects are present in direct forms in Passamaquoddy.

Brittain (2001), on the other hand, argues that the proximate-obviative marking is the key. She argues for a constraint which limits each clause as having only one proximate 3rd person. Thus, proximate 3rd persons are interpreted as co-referential by default in order to avoid violating this constraint.

Thus far, there is no evidence for WCO in direct forms in Mi’gmaq. Given the importance of obviative marking in co-reference patterns between 3rd and 4th persons, Brittain’s account has more appeal for Mi’gmaq. However, further research is necessary, especially with multi-causal data.

In addition, the ability to use WCO as a diagnostic for *wh*-questions is under some question. WCO is lacking some configurations in some languages with *wh*-movement, e.g., German (Grewendorf and Sabel, 1999) and English (Safir, 1986; Lasnik and Stowell, 1991; Postal, 1993). It is clear that WCO effects are

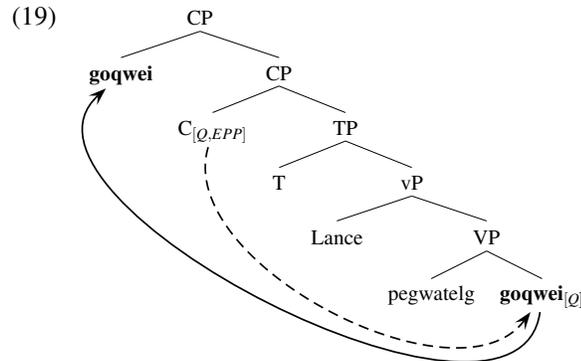
also poorly understood in general.<sup>6</sup> As such the fact that Mi'gmaq does not show WCO effects does not necessarily compromise a *wh*-movement analysis.

## 5 Analysis

### 5.1 Preliminary account

Mi'gmaq *wh*-questions with a single instance of *wh*-movement, such as (18), can be analyzed as in (19).

- (18) **goqwei** Lance pegwatel-g?  
**what** Lance buy.VTI-3  
 'What is Lance buying?'

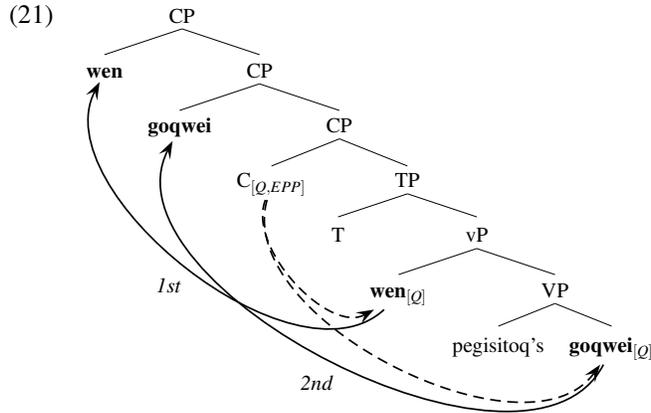


Here, *goqwei* is base generated as a complement to the verb in the canonical object position. The Q feature on  $C^0$  probes and finds the goal *goqwei*, and the EPP feature on  $C^0$  triggers movement of *goqwei* to Spec-CP. Long-distance *wh*-movement would proceed much the same, with an intermediate stop at the embedded Spec-CP.

In *wh*-questions with multiple instances of *wh*-movement, such as (20), can be analyzed as in (21) Richards (1997).

- (20) **wen goqwei** pegisi-toqoss?  
**who what** bring-VTI.3.INDIR.PST  
 'Who brought what?'

<sup>6</sup>Thanks to Eric Mathieu for discussion of this point.



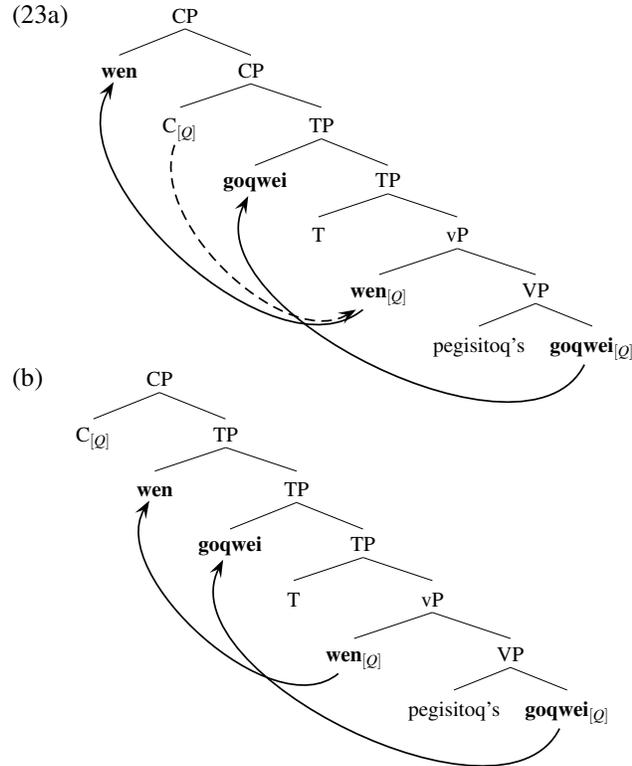
Both *wen* and *goqwei* are base generated in canonical subject and object argument positions, respectively. The Q feature on  $C^0$  probes downward and finds the goal *wen*, due to the principle of attract closest. The EPP feature attracts *wen* to Spec-CP since it is the structurally highest *wh*-phrase. Then *goqwei* is attracted second, by the same mechanism, and it “tucks in” to a second specifier position below where *wen* moves, due to the principle of Shortest Move. This accounts for superiority effects, as subject *wh*-phrases will always c-command the object *wh*-phrases in both base generated and post-*wh*-movement positions.

## 5.2 Issues and an alternate account

If Mi’gmaq were identical to Bulgarian, then we would make some incorrect predictions. The first is that there would be no *wh*-island violations, although we saw in section 2 that these violations exist. Since it is possible to have multiple specifiers in embedded CPs, multiple long-distance *wh*-movement is possible. However, embedded CPs are seemingly unable to have multiple specifiers in Mi’gmaq. The second is that there would be WCO effects. This is because, object *wh*-phrases will always  $A'$  move over non-interrogative subject NPs in the relevant constructions. However, we found that there were no WCO effects in section 4.

An alternate analysis of the multiple *wh*-question repeated in (22), would involve adjunction of one or both of the *wh*-phrases to IP, as in (23a) or (23b), i.e., Rudin (1988), Richards (1997) for Serbian-Croatian.

- (22) **wen goqwei** pegisi-toqoss?  
**who what** bring-VTI.3.INDIR.PST  
 ‘Who brought what?’



Here, adjunction to TP can be A movement, thus is not motivated by the probe on C. This analysis would predict both *wh*-island violations, since multiple CP specifiers are not possible, and no weak crossover effects, since *wh*-movement would be parallel to A-scrambling.

However this analysis would crucially not predict superiority effects, since any order of adjunction of *wh*-phrases would be possible. As such, superiority effects would need to be derived via another constraint, e.g., potentially from animacy hierarchy effects. In addition, we would need to assume that there was no EPP feature on  $C^0$ , thus the probe could find a goal and AGREE at a distance, but no movement need be triggered. While this seems like an advantage, it is unclear how to allow A' movement to Spec-CP to be optional in this way.

## 6 Conclusions

I have shown that a *wh*-movement analysis of *wh*-questions in Mi'gmaq is the most appropriate. Although Mi'gmaq lacks weak crossover effects, they display multiple *wh*-questions with superiority effects, in addition to exhibit subjacency, constraints on extraction domains and island effects. I have proposed a Richards (1997)-style analysis of multiple *wh*-questions, similar to Bulgarian.

Without additional assumptions, however, this analysis is unable to account for the presence of *wh*-island violations and lack of weak crossover effects. Further research is clearly needed to investigate the lack of weak crossover effects (particularly in multi-clausal utterances). As well, the examination of superiority effects in other contexts, e.g., embedded clauses, is needed. However, the argument presented here supports a configurational analysis of the syntax of Mi'gmaq. Further research is needed to find more support for such an analysis of Mi'gmaq and Algonquian languages in general.

### References

- Blain, E. M. (1997). *Wh-constructions in Nehiyawewin(Plains Cree)*. PhD thesis, University of British Columbia.
- Brittain, J. (2001). *The morphosyntax of the Algonquian conjunct verb: A minimalist approach*. Routledge.
- Bruening, B. (2001). *Syntax at the edge: Cross-clausal phenomena and the syntax of Passamaquoddy*. PhD thesis, Massachusetts Institute of Technology.
- Calabrese, A. (1984). Multiple questions and focus in Italian. *Sentential complementation*, pages 67–74.
- Cheng, L. L. S. (1991). *On the typology of wh-questions*. PhD thesis, Massachusetts Institute of Technology.
- Chomsky, N. (1973). Conditions on transformations. A festschrift for Morris Halle, edited by Stephen Anderson & Paul Kiparsky, 232–286.
- Grafstein, A. (1985). *Argument structure and the syntax of a non-configurational language*. PhD thesis, McGill University.
- Grewendorf, G. and Sabel, J. (1999). Scrambling in German and Japanese: Adjunction versus multiple specifiers. *Natural Language & Linguistic Theory*, 17(1):1–65.
- Johns, A. (1982). A unified analysis of relative clauses and questions in Rainy River Ojibway. In *Thirteenth Algonquian Conference*, pages 161–168.
- Lasnik, H. and Stowell, T. (1991). Weakest crossover. *Linguistic Inquiry*, 22(4):687–720.
- Lochbihler, B. and Mathieu, E. (2008). Wh-agreement in Ojibwe: consequences for feature inheritance and the categorial status of tense. In *13th Workshop on the Structure and Constituency in Languages of the Americas, Queen's University, March 28th–30th*.
- Postal, P. M. (1993). Remarks on weak crossover effects. *Linguistic Inquiry*, 24(3):539–556.
- Richards, N. (1997). *What moves where when in which language?* PhD thesis, Massachusetts Institute of Technology.
- Ross, J. (1967). R. 1967. constraints on variables in syntax. *Unpublished doctoral dissertation, Massachusetts Institute of Technology*.
- Rudin, C. (1988). On multiple questions and multiple wh fronting. *Natural Language & Linguistic Theory*, 6(4):445–501.
- Russell, K. and Reinholtz, C. (1995). Quantified NPs in pronominal argument languages: Evidence from Swampy Cree. In *Proceedings of NELS*, volume 25, pages 389–404. University of Massachusetts.
- Safir, K. (1986). Relative clauses in a theory of binding and levels. *Linguistic Inquiry*, pages 663–689.
- Wolfart, H. C. (1973). Plains Cree: A grammatical study. *Transactions of the American Philosophical Society*, 63(5):1–90.