On Locative Wh-Questions in Plains Cree

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INTRODUCTION

This paper investigates wh-questions in Plains Cree that involve locative particles as well as locative nouns. Locative nouns are nominal expressions accompanied by the locative suffix -ihk (Wolfart 1973), which surfaces as -ih for the speaker I consulted with. Locative particles are indeclinable constituents that convey a variety of locative (or directional) semantics and occur with locative nouns. The following examples illustrate these two categories:

(1) a. ê-nîpawît [pp cîki mistokoh].
ê-nîpawi-t cîki mistikw-ihk
CNJ-stand.VAI-3 near tree.NI-LOC
‘S/he is standing near the tree.’

b. ê-pimhât [pp tahkôc wâskêykanîh].
ê-pimihâ-t tahkohc wâskahikan-ihk
CNJ-fly.VAI-3 over house.NI-LOC
‘S/he is flying over the house.’

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2. Abbreviations used: 1, 2, 3 = first, second, third person; ACC = accusative case; AN = animate; CNJ = conjunct marker; DET = determiner; LCL = local (i.e., non-third) person; LOC = locative suffix; NA = animate noun; NI = inanimate noun; NOM = nominative case; REL = relative clause marker; Q = question particle; VAI = intransitive verb with animate subject; VTA = transitive verb with animate object; VTI = transitive verb with inanimate object; X>Y = X person “acting on” Y person.
The locative particles *cîki*, *tahkôc*, and *nâwêy* are prepositions and form PP constituents with the following locative nouns *mistokoh*, *wâskêykanih*, and *nipêwinih*, respectively. By locative *wh*-questions, I mean *wh*-questions which ask the identity of the object (i.e., locative noun) of a (prepositional) locative particle. This construction is exemplified by (2).

(2) a. tânma mistik *cîki* kâ-nipawai?
   tanîma mistikw *cîki* kâ-nipawî-t
   ‘Which tree.NI near REL-stand.VAI-3’
   ‘Which tree was s/he standing near?’

b. tânma wâskêykan *tahkôc* kâ-pimhât?
   tanîma wâskahikan *tahkohc* kâ-pimihâ-t
   ‘Which house.NI over REL-fly.VAI-3’
   ‘Which house was s/he flying over?’

c. tânma nipêwin *nâwêy* kâ-kâsôt?
   tanîma nipêwin *nâway* kâ-kâso-t
   ‘Which bed.NI behind REL-hide.VAI-3’
   ‘Which bed was s/he hiding behind?’

In each case, *tânma* and the following noun form a *wh*-phrase, e.g., *tânma mistik* ‘which tree’ in (2a).

In addition to the change of the conjunct marker of the verbal complex from *ê*- to *kâ*- , there are two features to note in the above locative *wh*-questions, compared with the non-*wh*, declarative sentences in (1). First, the nouns of the *wh*-phrases lack the locative suffix *-ih*, unlike the corresponding locative nouns. Second, the locative particles appear in front of the verbal complex, unlike those in (1), which follow the verbal complex. To characterize these properties of Plains Cree locative *wh*-questions is the main purpose of the present paper.

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This paper is organized as follows. The next section develops a mechanism that describes locative *wh*-questions, elaborating upon the biclausal analysis of *wh*-questions in Plains Cree proposed by Blain (1997), and argues that the absence of the locative suffix on the *wh*-phrase in locative *wh*-questions is a consequence of the mechanism involved. I then move on to present my hypothesis about the nature of the fronting of the locative particle in locative *wh*-questions. I describe this property as partly following from the assumption that PP is a PHASE (Chomsky 2000, 2001). The final section concludes the paper.

**BASE ANALYSIS**

This section provides an analysis of locative *wh*-questions in Plains Cree. First, I briefly present Blain’s (1997) analysis of *wh*-questions in the language. Then, I extend it to locative *wh*-questions. Finally, several consequences of the proposed analysis are presented, including the absence of the locative suffix on the *wh*-phrase.

**Blain’s (1997) Analysis of Wh-Questions**

According to Blain (1997), Plains Cree *wh*-questions are biclausal, consisting of a clause that represents NOMINAL PREDICATION (Déchaine 1997) and a clause that is introduced by a conjunct marker, either *kâ*- or *ê*-:4 To illustrate, consider the following *wh*-question:

(3) hawîna ana John kâ-ocêmât?
   awîna ana J. kâ-ocêmâ-t
   who that.NA J. REL-kiss.VTA-3
   ‘Who did John kiss?’

The *wh*-phrase *hawîna* and the demonstrative pronoun *ana* constitute a nominal predication clause that has the following structure, à la Déchaine (1997):

(4) $\left[\text{CP} \text{hawîna}, \left[\text{C} \text{C}_{IP} \text{ana} \left[\text{V NFL t} \right]\right]\right]$  

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4. Recognition of Algonquian *wh*-questions as comprising two clauses goes as far back as Truitner and Dunnigan’s (1972) analysis of Ojibwe *wh*-questions (see also Johns 1982).
The *wh*-phrase *hawîna* as the “predicate” is generated in the complement of *INFL* and undergoes movement or inversion across the demonstrative *ana* as the “subject” to [Spec,CP]. The remaining constituents in (3) form a kind of relative clause that takes the demonstrative *ana* as its head.\(^5\) Being a relative clause, the verbal complex beginning with the conjunct marker *kâ*- as C in (3) has the following structure (ignoring *John* for the sake of simplicity):

\[
(5) \ [_{cp} \ Op_i \ [_{c} \ kâ-oçêmât \ t_i ]] \]

The null operator has moved from its base-generated position to Spec,CP to form a relative clause. Adjoining the structure (5) to *ana* in the structure (4) gives rise to the structure of the *wh*-question (3) (again, ignoring *John* in the interests of simplicity):\(^6\)

\[
(6) \ [_{cp} \ hawîna, \ [_{c} \ C \ [_{dp} \ [_{dp} \ ana ] ] \ [_{cp} \ Op_i \ [_{c} \ kâ-oçêmât \ t_i ]] ] [_{r} \ INFL \ t_i ]] ]
\]

All the relevant constituents co-vary (or have the same index), as the demonstrative *ana* is simultaneously the subject of the predication and the head of the relative clause.

Having introduced Blain’s (1997) biclausal analysis of *wh*-questions in Plains Cree, I now extend her analysis to locative *wh*-questions.

**P-to-F Movement**

One peculiar feature of Plains Cree locative *wh*-questions is the occurrence of the locative particle to the left of the verbal complex. Assuming that locative particles are prepositions (i.e., \(X^0\)-heads), and that conjunct mark-

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5. Blain (1997) argues that the clause introduced by the *ê*- conjunct marker constitutes one conjunct of CP coordination, with the nominal predication clause as the other conjunct.

6. Blain (1997) originally adjoins the relative clause CP to the IP, not to the DP subject, of a nominal predication clause. Here following Cook (2008), I adopt DP-adjunction instead. See Cole and Hermon 2000 for a similar analysis of Malay *wh*-questions.
ers are complementizers (i.e., the head of CP), the occurrence of a locative particle to the left of the verbal complex implies the presence of a functional projection above CP whose head position is occupied by locative particles as Ps. I call this functional head, which takes CP as a complement, F, and propose that it is the locus of locative particles in \textit{wh}-questions. Granting the existence of FP, the locative \textit{wh}-question (7a), for example, can be analyzed as (7b).

(7) a. tânma mistik \textit{ci\textsc{ki}} kâ-nîpawit?
   tânima mistikw \textit{ci\textsc{ki}} kâ-nîpawi-t
   which tree nisi near REL-stand.VAI-3
   Which tree was s/he standing near?

b. \[\begin{array}{c}
   \text{[CP tânma mistik, [C [DP pro], [FP Op, [F \textit{ci\textsc{ki}-F [CP kâ-nîpawit [PP t\textsc{i} t\textsc{j}]]}]] [F INFL t\textsc{j}]]]}
\end{array}\]

The subject of the nominal clause is \textit{pro}, which plays the role of the head for the relative clause FP. As with non-locative \textit{wh}-questions, the biclausal structure (7b) is obtained by adjoining the relative clause FP (8b) to the \textit{pro} subject in the nominal predication clause (8a).

(8) a. \[\begin{array}{c}
   \text{[CP tânma mistik, [C [DP pro, [F INFL t\textsc{j}]]]}
\end{array}\]

b. \[\begin{array}{c}
   \text{[FP Op, [F \textit{ci\textsc{ki}-F [CP kâ-nîpawit [PP t\textsc{i} t\textsc{j}]]}]]}
\end{array}\]

In (8b), the locative PP is base-generated at the right periphery of CP. The locative particle \textit{ci\textsc{ki}} undergoes movement to F, and the null operator undergoes movement to Spec,FP, in effect vacating the PP altogether.\footnote{I assume that PP is adjoined to CP. This allows P-to-F movement to be strictly local in that there is no intervening head in between (Travis 1984).}

The P-to-F movement postulated in (8b) is independently attested, given the availability of discontinuous constituency involving locative particles and nouns:
(9) a. cîki ê-nîpawit mistokoh.
   cîki ê-nîpawi-t mistikw-ihk
   near CNJ-stand.VAI-3 tree.NI-LOC
   ‘S/he is standing near the tree.’

b. tahkôc ê-pimhât wâskêykanih.
   tahkohc ê-pimihâ-t wâskahikan-ihk
   over CNJ-fly.VAI-3 house.NI-LOC
   ‘S/he is flying over the house.’

c. nâwêy ê-kâsô-t nipêwinih.
   nâway ê-kâso-t nipêwin-ihk
   behind CNJ-hide.VAI-3 bed.NI-LOC
   ‘S/he is hiding behind the bed.’

The discontinuous constituency in question is arguably the outcome of movement of a preposition to F:

(10) \[ [ cp \ cîki:F \ [ cp \ ê-nîpawit [ pp \ t, mistokoh ] ] ] \]

Although the motive for P-to-F movement remains obscure, I will argue in the following section that such P-to-F movement is a prerequisite for successful null operator movement in locative wh-questions.

In sum, I have adapted Blain’s (1997) biclausal analysis of Plains Cree wh-questions by introducing a functional layer above the CP of the relative clause portion, so as to provide a landing site for the locative particle, i.e., F, and (concomitantly) one for the null operator, i.e., Spec,FP. I next discuss some consequences of the proposed analysis.

Some Consequences

The biclausal analysis of locative wh-questions in the spirit of Blain (1997) has important consequences for phenomena observed with locative wh-

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8. P-to-F movement is conceivably an instance of complex predicate formation in a broad sense of the term (Rose-Marie Déchaine, personal communication). If true, the clause-boundedness of locative particle fronting, to be discussed in the next section, may be attributable to this nature of P-to-F movement.
questions and beyond. Three of them are discussed here: (i) the absence of the locative suffix on the wh-phrase, (ii) island effects, and (iii) the second position yes-no question particle cî.

First, as observed with the examples in (2), the wh-phrase in locative wh-questions lacks the locative suffix -ih. In fact, its addition leads to ill-formedness:

(11) a. tânma mistik cîki kâ-nîpawit?
    tânima mistikw cîki kâ-nîpawi-t
    which tree.NI near REL-stand.VAI-3
    ‘Which tree was s/he standing near?’

    b. *tânma mistoko h cîki kâ-nîpawit?
    tânima mistikw-ihk cîki kâ-nîpawi-t
    which tree.NI-LOC near REL-stand.VAI-3

The absence of the locative suffix on the wh-phrase is predicted by the biclausal analysis of locative wh-questions, whereby the wh-phrase itself never occupies the complement position of a preposition; what occupies that position instead is the null operator. The present state of affairs is readily comparable to the case discrepancy observed in the German LEFT DISLOCATION construction:

    DET.NOM H. of him.ACC remember I myself not
    ‘John, I don’t remember him.’

    DET.ACC H. of him.ACC remember I myself not
    (van Riemsdijk 1978:167–8)

The left-dislocated DP in (12a), being base-generated clause-initially, takes the “default” nominative case (i.e., Der Hans); it cannot take the accusative case (i.e., Den Hans), as in (12b), which instead is assigned to the pronoun den sitting in the complement of the preposition an. The morphology licensed by a preposition—the locative suffix -ih in Plains Cree or the accusative case in German—fails to appear on the wh-phrase in Plains Cree or the left-dislocated DP in German because neither clause-initial phrase ever occurs in the complement of the preposition in question.
Second, while movement of the predicate within the nominal clause can, by definition, never be long-distance, movement of the null operator within the relative clause can, in principle, be long-distance (see (24a) and (25a) below). Accordingly, the null operator movement, though invisible, is expected to fall into the confines of syntactic islands. This prediction is what the following pairs demonstrate:

(13) a. ni-pâhpin [\textit{ayis} ěkotē ě-nîpawit cîki mistokoh].
    ni-pâhpi-n \textit{ayis} ěkotē ě-nîpawi-t cîki mistikw-ihk
    1-laugh.VAI-LCL because over.there CNJ-stand.VAI-3 near tree.NI-LOC
    ‘I smiled because s/he was standing near the tree.’

    b. *tânma mistik ě-pâhpiyin [\textit{ayis} cîki kâ-nîpawit]?
    tânima mistikw ě-pâhpi-yan \textit{ayis} cîki kâ-nîpawi-t
    which tree.NI CNJ-laugh.VAI-2 because near REL-stand.VAI-3
    ‘Which tree did you smile because s/he was standing near?’

(14) a. ni-kwêcimâw [\textit{tânîhki} cîki kâ-nîpawit mistokoh].
    ni-kakwêcimâ-w \textit{tânêhki} cîki kâ-nîpawi-t mistikw-ihk
    1-ask.VTA-3 why near REL-stand.VAI-3 tree.NI-LOC
    ‘I asked her/him why s/he was standing near the tree.’

    b. *tânma mistik kâ-kwêcimat [\textit{tânîhki} cîki kâ-nîpawit]?
    tânima mistikw kâ-kakwêcimat \textit{tânêhki} cîki kâ-nîpawi-t
    which tree.NI REL-ask.VTA.2>3 why near REL-stand.VAI-3
    ‘Which tree did you ask her/him why s/he was standing near?’

The adjunct clause headed by \textit{ayis} ‘because’ in (13) constitutes an island for extraction of a constituent, e.g., a \textit{wh}-phrase, out of it, i.e., an ADJUNCT ISLAND. Similarly, the embedded interrogative clause headed by \textit{tânîhki} ‘why’ in (14) constitutes another island for \textit{wh}-extraction, i.e., a WH-ISLAND. These islands are labeled by \textit{α} (whose categorial status is immaterial) in (13) and (14). In both (b) examples, the null operator has infelicitously moved out of \textit{α} into the matrix Spec,CP. The following schematically depicts the null operator movement in question:

(15) *[\textit{cp} tânma mistik}_{\textit{\alpha}} ... [\textit{cp} Op}_{\textit{\alpha}} ... [\textit{\alpha} \textit{ayis/tânîhki} [\textit{fp} t}_{\textit{\alpha}} cîki; [\textit{cp} ... [\textit{pp} t; t}_{\textit{\alpha}} ]]]]]}
As island sensitivity is an established diagnostic of movement, the ungrammaticality of (13b) and (14b) confirms that locative wh-questions in Plains Cree involve null operator movement.

Finally, the postulation of F as a functional head that takes a CP complement and hosts the fronted locative particle in locative wh-questions leads naturally to treating the second position yes-no question particle cî in Plains Cree (see Ahenakew 1987; Wolfart 1996) as representing F, too:

(16) a. piyēsīs ē-kî-pimhât tahkōc wāskēykanih.
    piyēsīs ē-kî-pimihā-t tahkohe wāskahikan-ihk.
    bird.NA CNJ-PRV-fly.VAI-3 over house.NI-LOC
    ‘The bird was flying over the house.’

b. piyēsīs cî ē-kî-pimhât tahkōc wāskēykanih?
    piyēsīs cî ē-kî-pimihā-t tahkohe wāskahikan-ihk
    bird.NA Q CNJ-PRV-fly.VAI-3 over house.NI-LOC
    ‘Was the bird flying over the house?’

Since the conjunct marker ē- as a complementizer heads CP, and the yes-no question particle cî precedes ē-, I propose that cî is the syntactic head F in (16b). For the sake of explicitness, (16b) can be represented in the following way:

(17) \[ [[F_p \text{piyēsīs}} \rightarrow [[F_p \text{ci}} \rightarrow [[CP ē-kî-pimhât [[PP tahkōc wāskēykanih ]]]]]

The DP piyēsīs is first generated as an adjunct to CP, and then undergoes movement around cî into Spec,Fp. Considering the interrogative force of

9. The yes-no question particle cî can also take a CP complement representing nominal predication. For example, nāpēw cî ana ‘Is that a man?’ is analyzed as follows, cf. (4):

(i) \[ [[F_p nāpēw} \rightarrow [[F_p ci} \rightarrow [[CP ci] \rightarrow [[c.C ci ana [[F_p ana [F INFЛ t] ]]]]]

I thank a reviewer for bringing my attention to this type of Plains Cree yes-no question.

10. Reinholtz (2002) analyzes the second-position question particle nâ in Swampy Cree as cliticizing on the constituent in the specifier of FocusP.
ci here, F is likened to “Force” and CP to “FinP” in Rizzi’s (1997) split CP hypothesis.

This section has discussed three consequences of the biclausal analysis of Plains Cree locative wh-questions: (i) the absence of the locative suffix on the wh-phrase, (ii) island effects, and (iii) the second position yes-no question particle ci. Of the three, the first is most important in that it strongly supports the thesis originally put forth by Blain (1997) that there is no direct derivational relation between the wh-phrase and its thematic position in Plains Cree.11

The next section tackles the conundrum left unresolved up to this point: obligatory fronting of the locative particle in locative wh-questions.

**WHY DOES THE LOCATIVE PARTICLE GET FRONTED?**

In locative wh-questions, the locative particle is obligatorily fronted in Plains Cree, as in (2), here repeated as (18).

(18) a. tânma mistik ci ki kâ-nipawî?
   tânima mistikw ci ki kâ-nipawî-t
   which tree.NI near REL-stand.VAI-3
   ‘Which tree was s/he standing near?’

   b. tânma wâskêykan tahkôc kâ-pimhât?
   tânima wâskahïkan tahkoč kâ-pimihâ-t
   which house.NI over REL-fly.VAI-3
   ‘Which house was s/he flying over?’

   c. tânma nipêwin nâwêy kâ-kâsoî?
   tânima nipêwin nâway kâ-kâso-t
   which bed.NI behind REL-hide.VAI-3
   ‘Which bed was s/he hiding behind?’

11. A reviewer wonders what the proposed analysis of locative wh-questions—or a biclausal analysis of wh-questions in general—predicts about obviative referents. In this respect, Blain (1997) observes that Plains Cree wh-phrases may take a proximate form even when an obviative form is expected, cf. (3). It seems that optionality in the choice of alternative forms is characteristic of dislocation per se, whether biclausal or not; e.g., *I know the woman *who(m)* you were talking to.*
Indeed, the locative particle cannot stay in the right periphery of the clause or its “neutral” position, cf. (1):

(19) a. *tânma mistik kâ-nîpawit cîki?
     tânima mistikw kâ-nîpawi-t cîki
     which tree.NI REL-stand.VAL-3 near

b. *tânma wâskêykan kâ-pimhât tahkôc?
     tânima wâskahikan kâ-pimihâ-t tahkohc
     which house.NI REL-fly.VAL-3 over

c. *tânma nipêwin kâ-kâsôt nâwêy?
     tânima nipêwin kâ-kâso-t nâway?
     which bed.NI REL-hide.VAL-3 behind

In the present terms, the ill-formedness of these examples amounts to the claim that the P-to-F movement is obligatory. But why? The obligatory status of null operator movement, also involved in (locative) wh-questions, stands to reason: it moves to the left periphery of a clause to form a relative clause. By contrast, there seems to be no obvious reason for locative particles to move to the clausal left periphery in locative wh-questions—obligatorily, that is.

This section strives for an answer to the obligatoriness of locative particle fronting in locative wh-questions by turning to van Riemsdijk’s (1978) insight about a way to nullify islandhood, or equivalently phasehood in minimalist terminology, of PP, resulting in a particular analysis of long-distance locative wh-questions.

P-to-F Movement Nullifies the Phasehood of PP

The Dutch wh-question with a stranded preposition (20a) is ungrammatical, in contrast to its pied-piped counterpart (20b).

(20) a. *Welk huis, woont hij [pp in t]?
     which house lives he in

b. [pp in welk huis] woont hij?
     in which house lives he
     ‘In which house does he live?’
Van Riemsdijk (1978) argues that the ungrammaticality of (20a) is attributable to the status of PP as a BINDING CATEGORY or island, a domain out of which extraction is impossible in principle. This effect is also observable when *in* is used as a postposition with a directional meaning, as in (21a).

(21) a. *Welke boom is hij [*pp t, in*] gisteren geklommen?
which tree has he into yesterday climbed

b. Welke boom is hij gisteren [*pp t, t*] ingeklommen?
which tree has he yesterday into.climbed

‘Which tree did he climb into yesterday?’

c. Hij is [*pp die boom in*] geklommen.
he has that tree into climbed

‘He has climbed into that tree.’

However, when *in* has incorporated into the verb *geklommen*, the sentence becomes grammatical, as (21b) shows. In van Riemsdijk’s (1978) terms, (21b) is well-formed because P-incorporation has deprived the PP in question of its islandhood, enabling extraction of *welke boom* out of it.\(^{12}\) Stipulative though it may sound, the idea certainly has intuitive appeal: a category is no longer an island once its head is gone.

A PP island can be interpreted to be a PP phase in current, minimalist terms (Bošković 2004a,b). And Chomsky’s (2000, 2001) PHASE IMPENETRABILITY CONDITION dictates that only the phase head and its specifier are accessible to an operation across the phase boundary, while its complement is inaccessible to such an operation. In light of this minimalist perspective, the grammaticality of the *wh*-extraction in (21b) suggests that movement of the postpositional head *in* out of its own projection makes its complement accessible to an operation across the PP phase boundary; in other words, the phasehood of PP is nullified.\(^{13}\)

\(^{12}\) For a different interpretation of the data and counterexamples, see Law 2006.

\(^{13}\) See Bošković 2011 for a relevant discussion in terms of the DP phase. Stepanov (2012) attempts a principled account of why movement of a phase head *X* out of *X* cancels *X*’s phasehood.
Returning to Plains Cree, the illicitness of the examples in (19) follows from the assumption that locative PPs are phases in the language. The relevant portion of the structure of (19a) is the following:

\[(22) \quad \star_{FP} \text{Op}_i \quad \flat_{F} \quad [\text{CP kâ-nîpawit } \star_{PP} \text{cîki } t_i]]\]

The null operator moves across the phase boundary on its way to Spec,FP, an illegitimate operation. By contrast, the examples in (18) are well-formed, because the derivation of the relative clause portion proceeds as follows:

\[
\begin{align*}
\text{(23) a. } & \quad [\star_{PP} \ F \ [\text{CP kâ-nîpawit } \star_{PP} \text{cîki } Op ]] \\
\text{b. } & \quad \star_{PP} \text{cîki} \cdot F \quad [\text{CP kâ-nîpawit } \star_{PP} \ t_i \ Op ]] \\
\text{c. } & \quad \star_{FP} \text{Op}_k \ [\ F \ \star_{PP} \text{cîki} \cdot F \ [\text{CP kâ-nîpawit } \star_{PP} \ t_i \ t_k ]] \\
\end{align*}
\]

When F merges with CP, the PP in (23a) is a phase, with cîki remaining in situ. Then, cîki undergoes P-to-F movement in (23b), and consequently,

\[\ldots\]

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14. Another assumption needed is that Spec,PP as an “escape hatch” is unavailable, which may not apply to “postpositional” PPs of the language. See the concluding section for a related remark.

Incidentally, suggestive evidence is available that locative PPs in Plains Cree are indeed phases:

\[
\text{(ii) a. } \star \text{mistokoh } \text{ê-kî-nîpawit cîki.} \\
\text{mistikw-ikh } \text{ê-kî-nîpawi-t} \quad \text{cîki} \\
\text{tree.NI-LOC} \quad \text{CNJ-PRV-stand.VAI-3} \quad \text{near}
\]

\[\star_{FP} \text{mistokoh}_i \quad [\ F \ [\text{CP } \text{ê-kî-nîpawit } \star_{PP} \text{cîki } t_i ]]\]

One way to explain the illicit discontinuous constituency in (iia) is to regard PP as a phase and attribute the extraction failure to the phase status of PP, as in (iib).

The pair of ill-formed (iia) and well-formed (9a) is reminiscent of, for example, that of ill-formed *awâsisak pâhpiwak kahkiyaw and well-formed kahkiyaw pâhpiwak awâsisak ‘Every child laughed’, as a reviewer points out (see Reinholtz 1999; Wolvengrey 2003). Unification of these phenomena seems possible, given a particular set of theoretical assumptions, but it is beyond the scope of the present paper to work it out.
the PP ceases to be a phase along the lines of van Riemsdijk. Now that the null operator in the complement of PP is accessible from outside the PP, it undergoes movement into Spec,FP, as in (23c).\textsuperscript{15}

To summarize, to the extent that locative PPs in Plains Cree are phases, and a PP phase can be nullified when the P head leaves it behind, the obligatory fronting of the locative particle in Cree locative \textit{wh}-questions is readily explicable; without P-to-F movement, movement of the null operator from within PP will remain impossible. Locative particles, therefore, must be fronted in locative \textit{wh}-questions.

\textit{Locative Particle Fronting Is Clause-Bound}

The derivational steps in (23) describe the derivation of the relative clause portion of locative \textit{wh}-questions that involve no embedding. What if there is embedding, then? That is, for the Plains Cree equivalent of the long-distance \textit{wh}-question \textit{Which tree do you think s/he was standing near?}, how does the derivation continue after (23c)? The null operator must move on to the specifier position of CP (or FP) of the higher clause for scope reasons. But what about the locative particle? Recall that the locative particle has no reason to move on its own, but it nevertheless has moved to F in (23b), so that the null operator can later be extracted out of the PP, which would otherwise remain a phase. At the derivational stage of (23c), having reached Spec,FP, the null operator is free to move on and will do so, if necessary. On the other hand, there seems to be no reason for the locative particle to accompany the null operator into the higher clause. Now, if movement is possible only if there is a driving force (Chomsky 1995), it is predicted that in long-distance locative \textit{wh}-questions, the locative particle will not move into the higher clause, but remain in the lower clause. This prediction is indeed borne out:

\begin{verbatim}
(24) a. tânma mistik ê-têyihtamin cîki kâ-ki-nîpawit?
    tânima mistîkw ê-itêyihtam-an cîki kâ-ki-nîpawi-t
    which tree.NI CNJ-think.VTI-2 near REL-PRV-stand.VAI-3
    ‘Which tree do you think s/he was standing near?’
\end{verbatim}

\textsuperscript{15} For similar, but distinct ideas, see Baker 1988, den Dikken 2007, and Gallego 2010.
(25) a. tâнима wâskêykan ki-têyihtên piyêsîs tahkôc kâ-pimhât?
    which house.NI 2-think.VTI-LCL bird.NA over REL-fly.VAI-3
    ‘Which house do you think the bird was flying over?’

b. *tâнима wâskêykan tahkôc ki-têyihtên piyêsîs kâ-pimhât?
    which house.NI over 2-think.VTI-LCL bird.NA REL-fly.VAI-3

The (b) sentences are unacceptable because the locative particle cîki or tahkôc appears in the higher clause. The occurrence of the locative particle is disallowed in the higher clause, as its movement from the lower clause into the higher clause has no motive. For the sake of completeness, the relative clause portion of the structure of (24a) is given below:

(26) [\text{CP} \quad \text{Op}_t \quad [\text{CP} \quad \text{ê-têyihtæmin} \quad [\text{PP} \quad t_i \quad [\text{CP} \quad \text{cîki} \quad [\text{CP} \quad \text{kâ-ki-nîpawit} \quad [\text{PP} \quad t_i \quad t_k \quad ]]]]]]

Only the null operator continues to move into the higher clause to Spec,CP; the locative particle stays in the lower clause in F.

CONCLUSION

I have examined locative \textit{Wh}-questions in Plains Cree in terms of a biclausal analysis of Plains Cree \textit{Wh}-questions of the kind originally advanced by Blain (1997). The biclausal analysis developed here departs from Blain’s in that an additional functional layer is introduced above CP to provide landing sites for the fronted locative particle (i.e., F) and for the null operator (i.e., Spec,FP). I have also argued that (i) the lack of the locative suffix on \textit{Wh}-phrases, (ii) the occurrence of locative particles to the left of the verbal complex, and (iii) the clause-boundedness of locative particles are explained by the proposed biclausal analysis, in addition to a few ancillary mechanisms.
The study of Plains Cree locative \textit{wh}-questions is in its infancy. There are a number of issues yet to address and questions yet to ask.\textsuperscript{16} The domain of inquiry ought to be expanded to include other locative particles than those examined here, in particular \textit{isi} ‘thus, there’ and \textit{ohci} ‘thence, with’, which, being postpositional, may behave differently from prepositional locative particles, e.g., in regard to the fronting possibility. A quick text search indicates that \textit{ohci} may optionally stay in situ (i.e., at the right periphery) in the context that arguably involves null operator movement, much in line with the present proposal. Further work on locative \textit{wh}-questions is surely needed.

REFERENCES


\textsuperscript{16} Manner and reason \textit{wh}-questions in Plains Cree obligatorily involve the preverbs \textit{isi} ‘thus, there’ and \textit{ôh}, a variant of \textit{ohci} ‘thence, with’, respectively:

(iii) a. tânisi ë-si-nimihitot Misti?

\begin{verbatim}
tânisi ë-isinimihi-t M.
\end{verbatim}

‘How does Misti dance?’

b. tânêhki k-ôh-nikamot Wâpastim?

\begin{verbatim}
tânêhki k-ôh-nikamot W.
\end{verbatim}

‘Why did Wâpastim sing?/Why is Wâpastim singing?’ (Cook 2005:4)

I join a reviewer in suspecting that the obligatory “preverbal” occurrence of locative prepositions in locative \textit{wh}-questions might be related to the obligatory “preverbs” in such adjunct \textit{wh}-questions as in (iii). Another question raised by the same reviewer regarding the obligatory fronting of locative prepositions is what happens if other particles (e.g., modifiers) are involved in locative \textit{wh}-questions. I have no pertinent data, nor can I make any predictions about the grammaticality of such sentences.


