

PREPOSITIONAL PHRASES IN MALISEET-PASSAMAQUODDY<sup>1</sup>

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This article provides an analysis of the prepositional phrases of Maliseet-Passamaquoddy, an Eastern Algonquian language of New Brunswick and Maine. It establishes that these phrases may function as constituents, even though they are frequently discontinuously expressed, demonstrates that they are headed by the particles that characterize them, and explores their internal structure. This structure is shown to be parallel to that of noun phrases in the language: phrases of both types include an optional determiner that is sister to a subconstituent consisting of the head and any complement it may take, together with any modifiers. These conclusions are of interest since Algonquian languages have been suspected of lacking hierarchical constituent structure.

[Keywords: Algonquian, Maliseet-Passamaquoddy, particles, phrase structure, prepositional phrases]

**1. Introduction.** The prepositional phrase (PP) has received relatively little attention in work on Algonquian languages, with the notable exception of useful discussions of the subject in two studies of Innu-aimun particles, as uninflected words in Algonquian languages are termed, by Oxford (2008, 2011).<sup>2</sup> The present article is intended to complement Oxford’s work by providing an account of the structure of the PP in Maliseet-Passamaquoddy (ISO code: pqm), an Eastern Algonquian language spoken in two dialects, Maliseet (Mal.) in New Brunswick and Passamaquoddy (Pass.) in Maine.<sup>3</sup> I focus on locative phrases like the bolded expression in (1a). Temporal expressions like the PP in (1b) are generally parallel in structure and will receive only brief mention. There are also PPs that are used to express comparisons, like the one in (1c). These differ in certain respects, however, and my remarks in this article are not intended to cover them.<sup>4</sup>

(1a) *Qotōpūt ōté* [PP *asit imiyew-ikūwám-ok*].

chair be.located-(3) in.back pray-building-LOC

‘The chair is at the rear of the church.’ (Pass., Francis and Leavitt 2008:82)<sup>5</sup>

(1b) *’Kac-ipt-uw-á-nĩ-ya* *’tús-ũwa-l* *pilèy*

(3)-hide-carry-TA-DIR-N (3)-daughter-3PL-OBV.SG new

*’t-atōmupil-om* [PP *tokkìw nekòm ’kisk-úm-ok*].

3-car-POSS to him/her (3)-day-POSS-LOC

‘They hid their daughter’s new car until her birthday.’ (Pass., Francis and

Leavitt 2008:145-46)

(1c) *N-témis l-ikápŭwu [PP ánsa pŏmawsuwìn].*

1-dog thus-stand-(3) like person

‘My dog stands up like a person (i.e., on his hind legs).’ (Pass., Francis and Leavitt 2008:238)

Emonds (1972:547-555) and Jackendoff (1973:345-348) have demonstrated that English (ISO code: eng) has intransitive prepositions, as in *walk up*, as well as prepositions taking complements, as in *walk up the stairs*. Many Maliseet-Passamaquoddy prepositions may likewise occur with or without a complement, as we can see by comparing pairs of sentences like (2) and (3). In (2a), *neqìw* ‘underneath’ appears without an accompanying NP. In (2b), the same particle is followed by *ŏqítŏn-uk* ‘canoe’, a noun with locative inflection.<sup>6</sup> Similarly, *lamìw* ‘in, under’ is used without a complement in (3a), but is accompanied by a locative NP in (3b).

(2a) *Pun-à-n walŏtí-yik [PP neqìw].*

put-DIR-2IMP dish-PROX.PL underneath

‘Put the dishes down below.’ (Pass., Francis and Leavitt 2008:326)

(2b) *Pom-ŏqoté-he áhkiq [PP neqìw ŏqítŏn-uk].*

along-underwater-go-(3) seal underneath canoe-LOC

‘The seal swims along under the canoe.’ (Pass., Francis and Leavitt 2008:440)

(3a) *Nekè nukcoktóh-o-k pǎnápsq, eci=mil-öcihte-k*  
 then.PAST smash-TH-3AN rock very=various-be.color-3IN

[PP *lamìw*].

inside

‘When he smashed the rock, it was all different colors inside.’ (Pass.,

Francis and Leavitt 2008:353)

(3b) *Ali=ksihkéhe [PP lamìw piskúwǎn-ok].*

around=be.lost-(3) inside fog-LOC

‘He is lost in the fog.’ (Pass., Francis and Leavitt 2008:424)

Jackendoff (1973:348-350) and Emonds (1985:32-33) have noted that English prepositions may take PPs as their complements, as in *John is from near St. Louis*. We find the same thing in Maliseet-Passamaquoddy, as we see in (4). Here *tokkiw* ‘to, toward’ takes as its complement a PP headed by *olǒqiw* ‘toward, near’. (Note that *tokkiw* appears as *tokki* in this Maliseet example: final *w* is often dropped in Maliseet in casual speech.)

(4) *Nit weci=mace=kskomhíke-t*  
 there from=begin=take.short.cut-3AN

[PP *tokki* [PP *tètt olǒqiw Sipayik*]]

toward that.way near Pleasant.Point.LOC

*psì nìt elòm-ahkǒmik-e-k sopayi supék-uk.*

all there away-land-II-3IN along sea-LOC

‘From there he set off across land toward over near Pleasant Point (Me.)

where the territory extends all along the sea.’ (Mal., LeSourd

2007:130)<sup>7</sup>

Maliseet-Passamaquoddy prepositions may follow their complements rather than preceding them, that is, they may function as postpositions rather than prepositions. The examples in (5) show this for the preposition *qihìw* ‘near, next to’ in cases involving NP complements: the object precedes the preposition in (5a) but follows it in (5b).

(5a) *Etǒl-askuwási-t psúwis [PP qihìw apiqsehsűw-álǒk-uk].*

location-wait-3AN cat near rat-hole-LOC

‘There is a cat waiting near the rat-hole.’ (Pass., Francis and Leavitt

2008:551)

(5b) [PP *Moshún-ok qihìw*] *tucéssu kcissúwan.*

(3)-heart-LOC near go.by-(3) bullet

‘The bullet passed close to his heart.’ (Pass., Francis and Leavitt 2008:470)

The particle *olǒqìw* ‘toward, near’ functions as a preposition with an NP complement in (4) above. In (6a), it takes a prepositional phrase with an intransitive preposition as its complement, which it follows. In (6b), a first occurrence of *olǒqìw*

serves as a preposition taking a prepositional phrase as its complement, in which a second occurrence of *olōqiw* functions as a postposition.

- (6a) *Nit=ōlu yèt           ōpì-n, [PP yèt           [PP asit] olōqiw],*  
 then=but there.DIST sit-2SG       there.DIST       in.back toward  
*naka kíl=ōte           k-pom-isúki-n.*  
 and you.sg=EMPH 2-along-paddle-N  
 ‘So sit over there, over there in the stern, and you yourself will paddle.’  
 (Mal., LeSourd 2007:70)

- (6b) *Elōm-iyá-hti-t           elōm-iyá-hti-t           [PP wàht olōqì*  
 away-go-PROX.PL-3AN away-go-PROX.PL-3AN       far       toward  
*[PP Mattènk       olōqiw]].*  
 Matane.LOC       near  
 ‘They traveled and traveled, out toward near Matane (Que.).’ (Mal.,  
 LeSourd 2007:90)

Prepositional phrases may also be discontinuously expressed, as shown in (7), where the two segments of the phrase in question are labeled “a” and “b.” This situation is not particularly surprising, since discontinuous constituents of other types (such as NPs) are commonplace in Maliseet-Passamaquoddy, as in other Algonquian languages (LeSourd 2004, Dahlstrom 1987). But taking note of examples like (7), Bruening (2001:52) has suggested that it may not be appropriate to analyze apparent PPs in

Passamaquoddy as constituents. Thus, the first goal of the present article is to justify the claim that continuously expressed prepositional phrases in Maliseet-Passamaquoddy are syntactic units. This issue is addressed in section 2.

(7) *Etuci- nit -l-éyi-k, [PPa qihìw]=oc kt-i*  
 at.point- that -thus-happen-3IN near=FUT 2-be.located  
 [PPb *k-sílhuss w-ík-ok*].  
 2-father.in.law 3-house-LOC

‘When that happens, you will be near your father-in-law’s house.’<sup>8</sup> (Pass., Mitchell 1976:12)

A second and more fundamental issue that requires comment is the question of the categorial status of prepositions and prepositional phrases. What I have been calling prepositions have generally been analyzed by Algonquianists as adverbial particles (Bloomfield 1962:439). Sherwood (1986:103) has in fact suggested that what I take to be locative PPs in Maliseet examples comparable to (1a) or (2b) actually involve adverbial modifiers of locative nouns in adverbial function, not prepositions taking locative NP complements. My second goal in this article, then, is to show that the locative expressions under discussion here are indeed headed by the particles that characterize them, that the accompanying nouns are the complements of these particles, and that these structures are thus best analyzed as prepositional phrases. This is the subject of section 3.



The third issue that I address is the internal structure of prepositional phrases. These frequently consist of more than a preposition and its complement. First, PPs may be introduced by a locative or temporal demonstrative drawn from the same paradigm as the forms used as determiners with nouns. Second, PPs may include adverbial modifiers.

The demonstratives that are used to introduce locative PPs are *yùt* ‘here’, *nìt* ‘there’, and *yèt* ‘there (distant)’. These locative forms, which also occur independently, are homophonous with the demonstratives ‘this’, ‘that’, and ‘that (distant)’ that are used with singular inanimate nouns. Compare *yùt* *'pìsun* ‘this medicine’, *nìt* *màn* ‘that money’, *yèt* *ahtulhawékon* ‘that rag over there’. Temporal PPs may be introduced by *yùt* ‘now’, *nìt* ‘then’, or *nekè* ~ *nekèt* ‘then (past)’, again forms drawn from the set used with nouns. Compare *nekè* *kmihqotakòn* ‘that knife you used to own’, with *k-* for second-person possessor and accentual marking of ‘knife’ as absentative, a category indicating former presence or (as here) former possession, reinforcing the sense suggested by the absentative demonstrative. A few of the possibilities are illustrated in (8). Note that the complement of the preposition *'cimacihìw* ‘from (then) on’ in (8c) is a clause.

(8a) *'Sanáqot*            [PP *yùt olòqìw*].

be.dangerous-(3)        here toward

‘It’s dangerous over this way.’ (Mal., LeSourd 2007:138)

(8b) ...*nìt=oc* [PP *nìt ewepì òpösi-k*] *wet-toqhuwaliht-o-k*.

then=FUT there up tree-LOC from-jump.on-TH-3AN

‘...it (animal) would jump on them (in.) from up in a tree.’ (Mal., LeSourd 2007:128)

(8c) [PP *Nekèt=te* ’*ci-macihìw kisi=nuhtoqa=nomihqósi-t*],

then.PAST=EMPH from-starting past=insufficient=be.born-3AN

*mace=ksinuhkew-ápìhi-t*.

start=be.sick-be.man-3AN

‘From the time he was born prematurely, he has been sickly.’ (Pass., Francis and Leavitt 2008:220)

Locative PPs may include one of the modifiers *wàht* ~ *wáhte* ‘far off’ or *tètt* ~ *tétta* ‘in this or that direction’, or a combination of these.<sup>9</sup> Examples are given in (9).

(9a) [PP *Wáhte ewepìw*] *nèmq=öte nomíy-a cihpöläkon*.

far up barely=EMPH (1)-see-DIR eagle

‘Way up above I can just barely see an eagle.’ (Pass., Francis and Leavitt 2008:136)<sup>10</sup>

(9b) *Am=öté, kìs=al tòn qǒnì pem-íya-k*

finally=EMPH already=UNCERTAIN such through along-go-3IN

*uckuwi=pömi=wöl-ìn-ö-m-on nìt él-komík-e-k*

(3)-come=along=good-see.as-TH-N there thus-land-II-3IN

[PP *nìt tèt olòqì* [PP *nipõn-áhki-k olòqìw*]].

there that.way toward summer-be.land-3IN near

‘In the end, all along the route he had traveled, he liked the way the land looked there, off there toward near the southern country.’ (Mal., LeSourd 2007:130)

(9c) *Nìt=te kisac-uhtí-hti-t, nìt=te*

then=EMPH ready-MPL-PROX.PL-3AN then=EMPH

*'t-olõm-iyá-wotí-nĩ-ya* [PP *yèt wàht tèt*

3-ahead-go-MPL-N-PROX.PL there.DIST far that.way

*olòqìw Utõqehkik*].

near Grand.Lake.Stream.LOC

‘When they were ready, they headed out there off toward Grand Lake Stream (Me.).’ (Pass.)<sup>11</sup>

In sections 4 and 5 I demonstrate that the material we find in such examples is organized in a hierarchical fashion that parallels the structure of noun phrases. Building a case for this conclusion is the third principal goal of this article. Section 6 summarizes the results of this study.

## 2. Prepositional phrases are constituents.

**2.1. Discontinuous PPs.** As we have noted, Maliseet-Passamaquoddy PPs may be discontinuously expressed. The examples in (10) provide additional illustrations of this

possibility. While the preposition *lamìw* ‘inside, under’ immediately precedes its object in (10a), the verb of the clause intervenes between this preposition and its object in (10b). In the conversational example in (10c), the demonstrative *yùt* ‘here’ is separated from the accompanying preposition *olòqìw* by the first segment of the discontinuous subject of the sentence, *olòmússok... nísűwok* ‘dogs... two’.

- (10a) *Ciqōl-atōk-éssu*            *sqasúntoq* [PP *lamìw l-iqahs-úti-k*].  
 tangle-string-move-(3) thread            inside thus-sew-tool-LOC  
 ‘The thread got tangled up inside the sewing machine.’ (Pass., Francis and  
 Leavitt 2008:107)

- (10b) *Wetó-ssis* [PPa *lamìw*] *íyu*            [PPb *piyeskómōn-ok*].  
 worm-DIM            inside be.located-(3)            corn-LOC  
 ‘There is a worm in the ear of corn.’ (Pass., Francis and Leavitt 2008:429)

- (10c) [PPa *Yùt*] *olòmúss-ok* [PPb *olòqìw*] *íy-w-ok*            *nísűw-ok*.  
 here dog-PROX.PL            near be.located-3-PROX.PL two-PROX.PL  
 ‘There were two dogs over this way.’ (Pass.)

It will be noted that the preposition immediately precedes the verb in both examples here in which a PP is discontinuously expressed. This situation is common, although consultants readily accept other word orders as well.



As an aside, it should be noted that locative PPs can be conjoined with locative expressions other than other PPs. In particular, locative PPs can be conjoined with locative-marked nouns, which I take to be NPs, as illustrated in (12).<sup>12</sup>

- (12) *Nt-uloméni-m moskuw-à elinaqsí-li-t*  
 1-husband-POSS (3)-find-DIR-(OBV.PL) be.many-OBV-3AN  
*apiqsehsìs [[NP lahkáp-ok] naka [PP lamìw tuhsán-ok]].*  
 mouse-(OBV.PL) cellar-LOC and inside shed-LOC  
 ‘My husband found a lot of mice in the cellar and inside the shed.’ (Pass.)

The reason for this is that what is required for conjunction is not identity of grammatical category but parallelism of function. The verb ‘find’ in (12) selects a locative complement. This complement may be expressed either as a PP or as a locative NP. Since phrases of both types are possible complements here, a conjunction of phrases of the two types is also a possible complement. In this respect, (12) is comparable to the English example (13), where the verb *worded* selects a complement expressing manner, which is then realized by the conjunction of a manner adverb and a manner PP.

- (13) *The lawyer worded the letter [[AdvP carefully] and [PP with great precision]].*

The fact that a PP can be conjoined with an Adverb Phrase does not show that PP and Adverb Phrase are the same category in English. Correspondingly, the fact that a PP can

be conjoined with a locative NP in Maliseet-Passamaquoddy is not informative about the grammatical status of categories of either type.<sup>13</sup>

**2.3. Pied piping.** A second argument for the constituency of PPs comes from pied-piping in questions, the construction in which an entire phrase is fronted when a question word contained within that phrase is targeted for extraction.<sup>14</sup> Bruening (2001:53) has expressed doubt that prepositions can be fronted along with their complements in Maliseet-Passamaquoddy questions, but in fact pied-piping is routinely available in question formation in the language, although it is also usually optional.

Extraction with pied piping is illustrated in (14). First, (14*a*) shows the fronting of *tehsahqìw kèq* ‘on what’. Here, however, dislocation has taken place only within a single clause, so it might be imagined that the preposition and its complement have been fronted independently. This possibility is excluded in (14*b*), where the phrase in question has been extracted across a clause boundary.

(14*a*) [PP *Tehsahqìw kèq*] *nòt tőké amucalù al-átűwe-t \_\_\_?*  
on what that.PROX now fly around-crawl-3AN  
‘On what is that fly crawling around now?’ (Pass.)

(14*b*) [CP [PP *Tehsahqìw kèq*] *yúh-usk Píyel*  
on what tell-3/2 Peter

[<sub>CP</sub> *nòt*            *tǒké amucalù al-átǔwe-t* \_\_\_\_ ]]?  
 that.PROX now fly            around-crawl-3AN

‘On what did Peter tell you that that fly is crawling around now?’ (Pass.)

The PP in (14*b*) can only have been dislocated as a unit, since there is no long-distance scrambling in Maliseet-Passamaquoddy that could license the extraction of the preposition independently of the fronting of its complement, a point to which I return.

Example (15*a*) is comparable to (14*b*). Here *qihìw tamà* ‘near where’ has undergone long-distance extraction. In (15*b*), on the other hand, *tamà* ‘where’ has been fronted by itself, stranding *qihìw* ‘near’ in the embedded clause.

(15*a*) [<sub>CP</sub> [<sub>PP</sub> ***Qihìw tamà***] *Píyel l-itahásu*      [<sub>CP</sub> *Súsehp wiku* \_\_\_\_]]]?  
 near    where    Peter    thus-think-(3)      Joseph dwell-(3)

‘Near where does Peter think that Joseph lives?’ (Pass.)

(15*b*) [<sub>CP</sub> [<sub>PPa</sub> ***Tamà***] *Píyel l-itahásu*  
 where    Peter    thus-think-(3)  
 [<sub>CP</sub> *Súsehp*    [<sub>PPb</sub> ***qihìw*** \_\_\_\_] *wiku*]]]?  
 Joseph            near            dwell-(3)

‘Where does Peter think that Joseph lives near?’ (Pass.)

In the case of prepositions that take PPs as their complements, the entire PP can be fronted under questioning, showing that it is a constituent, as illustrated in (16*a*).



Alternatively, just the complement PP can be fronted, stranding the higher preposition in the structure, as in (16*b*). Examples of this type show that the complement PP is a constituent in its own right. Finally, the NP complement of the lower preposition may be extracted, as in (16*c*), leaving both prepositions stranded.

(16*a*) [CP [PP *Olõqìw akǔwìw tòn yùt wikǔwám-ok*]

toward behind such this house-LOC

*wasís-ok kt-iy-úk-uk* [CP *eli- nòt skitàp*

child-PROX.PL 2-tell-INV-PROX.PL thus- that.AN man

*-olõk-úhse-t* \_\_\_ ])?

-toward-walk-3AN

‘Toward behind which house did the children tell you that that man walked?’ (Pass.)

= (16*b*) [CP [PPa *Akǔwìw tòn yùt wikǔwám-ok*]

behind such this house-LOC

*wasís-ok kt-iy-úk-uk* [CP *eli- nòt skitàp*

child-PROX.PL 2-tell-INV-PROX.PL thus- that.AN man

*-olõk-úhse-t* [PPb *olõqìw* \_\_\_ ])?

-toward-walk-3AN toward

= (16*c*) [CP [PPa *Tòn yùt wikǔwám-ok*]

such this house-LOC

*wasís-ok kt-iy-úk-uk [CP eli- nòt skitàp*  
 child-PROX.PL 2-tell-INV-PROX.PL thus that.AN man  
*-olòk-úhse-t [PPb olòqìw akǔwìw \_\_\_ ]]?*  
 toward-walk-3AN toward behind

Preposition stranding as seen here is not particularly surprising, of course, since prepositions and their complements are routinely separable in any case. In fact it is not clear that ‘where’ has been fronted from a position within PP in (15b) or that ‘which house’ has been fronted from within PP in (16c); these phrases could simply be separate constituents in the input to fronting. But as it happens, it is also possible for a preposition to be shifted into the matrix clause and to be separated there from its complement. This is the situation for *qihìw* ‘near’ and its questioned complement *tamà* ‘where’ in (17).

- (17) [CP [PPa *Tamà*] *Píyel* [PPb *qihìw* \_\_\_ ] *l-itahásu*  
 where Peter near thus-think-(3)  
 [CP *Súsehp wiku* \_\_\_ ]].  
 Joseph dwell-(3)

‘Where does Peter think that Joseph lives?’ (Pass.)

The occurrence of ‘near’ within the matrix clause in (17) is licensed only by the fact that the object of this preposition has been extracted. As I have already remarked, there is no general process of long-distance scrambling in Maliseet-Passamaquoddy that

would permit this preposition to occur outside the embedded clause in a structure without the extraction. To see that this is so, consider the examples in (18).<sup>15</sup>

- (18a) [<sub>CP</sub> *Píyel l-itahásu* [<sub>CP</sub> *Máli wíku* [<sub>PP</sub> *qihìw Kelisk*]]].  
 Peter thus-think-(3) Mary dwell-(3) near Calais.LOC  
 ‘Peter thinks that Mary lives near Calais (Me.).’ (Pass.)
- (18b) [<sub>CP</sub> *Píyel l-itahásu* [<sub>CP</sub> *Máli* [<sub>PPa</sub> *qihìw*] *wíku* [<sub>PPb</sub> *Kelisk*]]].  
 Peter thus-think-(3) Mary near dwell-(3) Calais.LOC  
 ‘Peter thinks that Mary lives near Calais (Me.).’ (Pass.)
- (18c) \* [<sub>CP</sub> *Píyel* [<sub>PPa</sub> *qihìw*] *l-itahásu* [<sub>CP</sub> *Máli wíku* [<sub>PPb</sub> *Kelisk*]]].  
 Peter near thus-think-(3) Mary dwell-(3) Calais.LOC

In (18a), *qihìw Kelisk* ‘near Calais’ is an ordinary continuously expressed PP. In (18b), the verb *wíku* ‘lives (there)’ stands between the preposition *qihìw* and its complement, but the two segments of the PP are still located within the same clause. This example is grammatical. In (18c), *qihìw* has been stationed in front of the matrix verb, thus outside of the clause in which it is interpreted. The result is ungrammatical. This situation is typical: prepositions need not be adjacent to their complements, but cannot be freely shifted away from them across clause boundaries.

I conclude, then, that the occurrence of *qihìw* within the matrix clause in (17) presupposes the extraction of the object of this preposition from the complement clause in this example. This effect suggests that the PP *qihìw tamà* is in some sense extracted as



I demonstrate here that three considerations weigh against Sherwood's proposal and in favor of the analysis that I have advanced, under which locative particles are prepositions that take NP complements. First, not all "locational and directional particles" of the kind that Sherwood analyzes as modifiers appear in construction with locative-marked nominals. Many locative particles are used optionally or regularly with a nonlocative NP. The choice is partly a function of the semantics of the particle, but seems to be at least in part lexically determined. Thus, locative particles govern the case marking of the NP that accompanies them. Government of the form of a dependent is commonly cited as a defining property of heads (Zwicky 1985:7-8). Particles with a locative meaning that head the phrases in which they occur and take NPs as complements are plausibly analyzed as prepositions. The phrases they head are thus revealed to be PPs.

Second, plural locatives have special properties in Maliseet-Passamaquoddy that show they are not simply plural counterparts of ordinary locative-marked nouns. Correspondingly, locative particles that ordinarily appear in construction with locative forms of singular nouns may be used with nonlocative plural nouns. In such cases, as for locative particles that govern nonlocative singular nouns, it is clearly the particle and not the accompanying NP that characterizes the entire phrase as a locative expression, thus determining its distribution. The element in a phrase that characterizes the phrase as a whole is generally taken to be the head (Zwicky 1985:2). Again, the heads of locative phrases with NP complements are plausibly analyzed as prepositions.

Third, there are in fact structures in which a locative particle (with or without an associated NP) stands as a modifier of a noun. But these structures are distinct from those

in which a locative particle takes a locative NP as its dependent. An account of the full range of structures in which locative particles may appear must recognize uses of such particles both as the heads of independent phrases and as the heads of modifying expressions. We obtain a simple account of the facts in this domain if we suppose that locative particles may head prepositional phrases, but that such phrases may in turn serve as NP modifiers.

A further consideration that is relevant to the categorical status of locative particles involves their morphology. The majority of these particles are derived by adding a suffix *-iʷ* to roots that also occur as the initial components of verbs, preverbs, or nouns. As a reviewer points out, the same suffix appears in a number of words that are clearly to be analyzed as adverbs, and one might argue on this basis that locative particles, too, are adverbs. As it happens, however, not only locative particles and a variety of adverbs, but certain quantifiers are formed with the suffix *-iʷ*. These may be used to modify nouns and are therefore presumably not adverbs. Thus, *-iʷ* apparently forms words of more than one category. The fact that locative particles and adverbs are morphologically similar accordingly does not imply that words of these two classes are syntactically alike.

A final point to be noted concerns locative particles that are derived from bases of the type that Bloomfield (1946:120) calls “relative roots.” These introduce a reference to a semantic domain such as source or direction without specifying a point in this domain. The relevant point in the domain must then be specified by a co-occurring expression. In the case of locative particles based on relative roots, an associated noun may serve as the

specifying expression. Thus, the noun that accompanies the particle is seen to be an argument of the particle, a status appropriate to a dependent.

**3.2. Case government.** Turning to the first point outlined above, the question of whether locative particles always occur with locative nouns, we find that many locative and directional particles, like Sherwood’s example *qihìw* ‘near’, do typically appear in construction with locative nominals, with a special proviso for plurals, as already noted.<sup>16</sup> Thus, only the alternative with a locative-marked noun is acceptable in (20).

- (20) *Súsehp wiku qihìw*  
 Joseph dwell-(3) near  
 { *malsan-ikūwám-ok* / \**malsan-ikūwam* }.  
 merchant-building-LOC merchant-building  
 ‘Joseph lives near the store.’ (Pass.)

Yet for other particles, such as *'cìw* ‘from, for, about’ and the etymologically related form *ùhc* ‘from, for’, the situation is more complex. When *'cìw* is used with a literal spatial sense, the accompanying NP is typically locative in form, as shown in (21a). When the sense is one of a nonspatial source, however, as it is in (21b), either a locative or a nonlocative NP may be used. (The noun *wapikpihil* ‘white ash wood’ in this example is marked as obviative, indicating that its referent is secondary to that of another third person in the current discourse context.) When the sense of *'cìw* is ‘for (a reason)’, a

usage more typical of Maliseet than of Passamaquoddy, the accompanying NP is again nonlocative in form, as shown in (21c).

(21a) *Kse=komútōne 'cìw nuhuwew-éya-k.*

in=steal-(3) from third-NF-LOC

‘He stole home from third base.’ (Pass., Francis and Leavitt 2008:200)

(21b) *Assélōma uci=kis-iht-ú-n-ol tomhikōn-átik-ul*

Samuel (3)-from=past-make-TH-N-IN.PL axe-stick-IN.PL

*'cìw { wap-íkpi-k / wap-íkpi-hil }.*

from white-ash-LOC white-ash-OBV.SG

‘Samuel made axe handles of white ash.’ (Pass.)

(21c) *Wolíwon 'cìw amsqocéhkan.*

thanks for doll

‘Thank you for the doll.’ (Mal., Francis and Leavitt 2008:109)

Particles of a third class that includes *wawikìw* ‘mixed with’, shown in (22), as well as *wicìw* ‘with’ and *mawìw* ‘with (in a group)’, regularly appear in construction with nonlocative nominals.

(22) *N-wik-aht-ōm-ón-ol nil pocetés-ol*

1-like-eat-TH-N-IN.PL I potato-IN.PL



*wawikìw* { *wíyuhš* / \**wiyúhs-ok* }.

mixed.with    meat            meat-LOC

‘I like (to eat) potatoes mixed together with meat.’ (Pass.)

There are clearly semantic regularities at work in determining the distribution of locative and nonlocative forms with different particles. In particular, NPs that actually denote places appear in locative form. But it is not obvious why the notion of source should (optionally) be expressed by locative case marking, while the notion of accompaniment should not. This would appear to be lexically determined. Overall, the form of the nominal that accompanies a locative particle is a function of the choice of the particle, which is to say that locative particles govern the case-marking of the NPs that appear in construction with them. As we have noted, the expression in a phrase that governs the form of another expression within the phrase is generally considered to be the head. Thus, locative particles head locative phrases and are appropriately analyzed as prepositions heading PPs.

**3.3. The particle characterizes the phrase.** The second point to consider involves the implications of examples where the NP that accompanies a locative particle is plural. The crucial observation here is that the plural locative formation does not simply stand as the plural of the singular locative. One indication of this fact is a difference in treatment of nouns according to their classification in the Maliseet-Passamaquoddy system of animacy gender. Many semantically inanimate nouns are

included in the animate class. These nouns, like inanimates, have both singular and plural locative forms: *'tomákõn-ok* ‘pipe (an., loc.)’, *'tomakõn-ihkuk* ‘pipes (loc.)’. Semantically animate nouns, on the other hand, do not in general have singular locative forms, but do occur with plural locative inflection: *\*skitápe-k* ‘man (loc.)’, *skitapew-ihkuk* ‘men (loc.)’. It is a further reflection of the distinct status of plural locatives that even particles that normally require locative marking on the complement when this is singular may take a plural complement in nonlocative form. Thus, *qihìw* ‘near’ may take a plural complement with or without locative inflection, as we see in (23).

- (23) *Pìyel wìku nìt=te qihìw níhtol*  
 Peter dwell-(3) there=EMPH near those.IN  
 { *wikūwam-ihkuk* / *wikūwám-ol* }.  
 house-PL.LOC house-IN.PL  
 ‘Peter lives near those houses.’ (Pass.)

It seems clear, then, that Sherwood’s analysis of particles like *qihìw* as modifiers solely of locative nouns with adverbial function cannot stand. The function of the bolded phrase in (23) is determined by the locative particle, not by the NP that follows it. Thus, the particle must be considered its head. I conclude again that such particles are prepositions heading PPs.

The same point can be made on the basis of cases like those illustrated in (21*b*) and (21*c*) where a locative particle takes a nonlocative singular noun as its complement.

Consider (24) in this connection. The preverb-verb complex *'ci=kisihtásũwol* ‘they are made of (it)’ requires an oblique argument indicating a source, which is expressed here by a phrase formed with *'cìw* ‘from’. (Constructions in which a verbal expression and its complement are based on the same root are common.)

- (24) *Nihtol tomhikõn-átk-ul 'ci=kisihtásũ-w-ol*  
 those.IN axe-stick-IN.PL from=be.made-3-IN.PL  
**\*('cìw) { wap-íkpi-k / wap-íkpi-hil }.**  
 from white-ash-LOC white-ash-OBV.SG  
 ‘Those axe-handles were made of white ash.’ (Pass.)

The NP that accompanies *'cìw* in (24) need not bear locative inflection. At the same time, *'cìw* cannot be omitted here, regardless of the inflection of the following noun. Thus, it is the presence of *'cìw*, not locative inflection on the following NP, that makes the bolded phrase appropriate as an expression of source. In other words, it is the particle that characterizes the phrase. As we have noted, the element within a phrase that serves to characterize the phrase as a whole is ordinarily considered the head. Once again, an analysis of the locative particle as a preposition heading a PP finds support.

**3.4. Two types of structures involving locative particles.** The third consideration outlined above that favors the PP analysis is the fact that we actually find two types of structures involving locative particles: structures in which such particles





The examples in (27) have the same structure as those in (26), except that now *ksokayìw* ‘across’ takes *áwti-k* ‘road (loc.)’ as its complement. Here, then, the modifying expression is complex. Again, the modifier may precede or follow the modified noun *wikǔwam* ‘house’.

- (27a) [NP [NP *Imiyew-ikǔwam*] *naka* [NP *nìt*  
 pray-building and that.IN  
 [PP *ksokayìw áwti-k*] *wikǔwam*] *cuwi=lilõmonhásǔ-w-ol*.  
 across road-LOC house should=be.painted-3-IN.PL  
 ‘The church and that house across the road need to be painted.’ (Pass.)

- (27b) [NP [NP *Imiyew-ikǔwam*] *naka* [NP *nìt* *wikǔwam*  
 pray-building and that.IN house  
 [PP *ksokayìw áwti-k*] *cuwi=lilõmonhásǔ-w-ol*.  
 across road-LOC should=be.painted-3-IN.PL  
 ‘The church and that house across the road need to be painted.’ (Pass.)

In both (26) and (27) we find structures analogous to those proposed by Sherwood, with a particle or a phrase headed by a particle serving as a modifier of a noun. But the meanings here are very different from those of the examples that Sherwood was seeking to analyze, which are of the type represented by (25a). In (25a) we have ‘across the road’, with ‘road’ playing the role of a semantic argument of ‘across’. In (26) we have ‘the house across (from something)’, where ‘across’ functions as an adjunct to

‘house’. This difference in interpretation finds a natural explanation under the proposal advanced here, in which ‘across’ is a transitive preposition in (25a) taking ‘road’ as its object, while ‘across’ is an intransitive preposition in the examples in (26), serving as a modifier. The argument of ‘across’ is left implicit in (26). In (27) this preposition is supplied with an explicit argument within the modifying phrase that it heads.

A final point worth noting is that a PP may serve as a modifier of a locative-marked noun, as shown in (28). Again, the modifying expression may either precede or follow the head of the NP.

(28a) *Skinúhsis* 'kisi=pún-ǒm-on mitsùt

boy (3)-past=put-TH-N fork

[<sub>NP</sub> *tuwihpúti-k* [<sub>PP</sub> *qihìw possiyantésk-ik*]].

table-LOC near window-LOC

‘The boy put the fork on the table by the window.’ (Pass.)

(28b) *Skinúhsis* 'kisi=pún-ǒm-on mitsùt

boy (3)-past=put-TH-N fork

[<sub>NP</sub> [<sub>PP</sub> *qihìw possiyantésk-ik*] *tuwihpúti-k*].

near window-LOC table-LOC

‘The boy put the fork on the table by the window.’ (Pass.)

Once again we see that the type of modification structure that Sherwood postulates for phrases with locative particles does occur, but is distinct from the structure of phrases in which locative particles take NPs as arguments.

**3.5. A morphological issue.** The final issue that we need to consider in deciding what grammatical category locative particles belong to, and thus determining the category of the phrases that they head, involves the morphology of the particles. There is in fact some diversity in the form of particles that take nominal complements. *Asìt* ‘behind, in back’, shown in (1a), is historically related to the root *asite-* seen in *'t-asité-m-a-l* ‘he answers him’ (with *-m-* ‘by mouth or speech’, plus inflections). *Páhka-k* ‘behind, in back’ is the locative form of the stem that occurs in the (otherwise) obligatorily possessed noun *'páhka-m* ‘his back’ (where *-m* is a possessive suffix). *Lam-iküwàm* ‘inside (a building)’ is formed on an old Algonquian pattern, well attested in Maliseet-Passamaquoddy but no longer productive, by which a root with a locative or directional sense is combined with a concrete element to form a particle (Bloomfield 1946:117). The last two items are illustrated in (29), where their occurrence in a coordinate structure makes it clear that each particle forms a constituent with an associated noun.

- (29) *Skinuhsís-ok* 'kisi=pun-ǒm-ón-ÿya-l                      'kan-éya-l qotǒpütĩ-yil  
 boy-PROX.PL (3)-past=put-TH-N-PROX.PL-IN.PL old-NF-IN.PL chair-IN.PL





particular, the quantifiers *psìw* ‘all’ and *toqìw* ‘both’ include the same suffix as the other items we have considered.<sup>18</sup> The former is based on the root *moss-* ~ *ps-* ‘much, many’ seen in *k-moss-ìht-u-n* (2-much-TI-TH-N) ‘you (sg.) have plenty of it’ and *ps-ìht-uw-àn* (much-TI-TH-1SG-(SUBJ)) ‘if I had plenty of it’. The latter quantifier is derived from *toq-* ‘two together’, found for example in *toq-òpú-w-ok* (two-be.located-3-PROX.PL) ‘they (two) are joined together, branch out from a common source’. But these quantifiers may occur as modifiers of nouns, as shown for in *toqìw* in (30), where the conjunction structure bears witness to the fact that the quantifier forms a constituent with the noun with which it is construed. Thus, they are not appropriately analyzed as adverbs.

- (30) [NP [NP **Toqìw** *pilsqehsís-ok*] *naka* [NP **toqìw** *skinuhsís-ok*]]  
 both girl-PROX.PL and both boy-PROX.PL  
*tol-otem-uhtú-w-ok*.  
 ongoing-cry-MPL-3-PROX.PL  
 ‘Both boys and both girls are crying.’ (Pass.)

Similarly, *peciw* ‘even’, a derivative of *pet-* ‘approach’, may function as a noun modifier. (Compare *pét-òlan* ‘rain approaches’, with *-òlan-* ‘rain’.) This is shown by (31), where the particle is construed with a noun in a left dislocation structure, showing that it forms a constituent with it. (This noun is preceded here by the inanimate plural form of the hesitation pronoun that we encountered in (25b).)

- (31) [<sub>NP</sub> *Pecìw ìhíl,*                    *wehkew-ákön-ol*], *nìt=ehta*  
 Even    HES.PRO.IN.PL use-NOM-IN.PL    then=EMPH  
*wetön-óm-ek    malihkīye-hsís-ok.*  
 get.from-TH-1PL barrel-DIM-LOC  
 ‘Even those—tools, we (inc.) got them in a small barrel then.’ (Pass.,  
 Francis and Leavitt 2008:250)

Here again we do not seem to be dealing with an adverb. It would appear, then, that *-ìw* forms words with diverse syntactic properties. I conclude that the fact that many locative particles are derived with this suffix is not a bar to analyzing such particles as prepositions.

**3.6. Particles based on relative roots.** Consider, finally, the fact that certain locative particles are based on relative roots, which require a co-occurring expression to specify a point in the semantic domain to which they refer. Two such particles are *'cìw* ‘from, about, for’ and *olǒqìw* ‘toward, near’; compare examples in (4), (6), and (21). These are based on the relative roots *'t-* and *olǒq-*, which appear as initial components of verb stems in the examples in (32).<sup>19</sup> The roots and the expressions that serve to specify them are given in bold. Note that the specifying phrase in (32*b*) includes a locative particle based on the same root as seen in the verb in this example.

- (32a) *Somsòq 't-apék-òpu nòt olõnahq-áp-is mehqéyi-t.*  
 upstairs from-be.located-(3) that.AN metal-string-DIM be.red-3AN  
 ‘That red wire comes from upstairs.’ (Pass., Francis and Leavitt 2008:537)
- (32b) *'T-olõq-áph-a-l olõqiw kuspém-ok.*  
 3-toward-track-DIR-OBV.SG toward lake-LOC  
 ‘He tracked him toward the lake.’ (Pass., Francis and Leavitt 2008:379)

For a locative particle based on a relative root, there are a number of ways to satisfy the requirement for a specifying expression. A phrase-initial demonstrative may be used deictically with this effect, as shown for *olõqiw* ‘toward, near’ in (33a). An adverbial modifier may fulfill the requirement, as seen in (33b). A locative nominal may also serve to specify the semantic import of the relative root, as in (33c).

- (33a) *Nít=te [PP yéta olõqì] ol-űwike.*  
 then=EMPH there.DIST toward thus-point-(3)  
 ‘Then he pointed off there in the distance.’<sup>20</sup> (Mal.)
- (33b) *[PP Wàht olõqìw] Ékõnis etõl-okehkím-a-t*  
 far toward Agnes onging-teach-DIR-3AN  
*Elíkk-ol el-ká-li-t.*  
 Alex-OBV.SG thus-dance-OBV-3AN  
 ‘Over there Agnes is teaching Alex how to dance.’ (Pass., Francis and Leavitt 2008:133)

- (33c) *N-kisi=pún-a nòt puhtày [PP olòqìw papskóte-k].*  
 1-past=put-DIR that.AN bottle near stove-LOC  
 ‘I put the bottle over by the stove.’ (Pass.)

Each of these specifying expressions is an argument of the particle, satisfying the semantic requirement induced by the relative root on which it is based. In particular, the nominal that accompanies the locative particle in a sentence like (33c) is its argument. This conclusion is consistent with the analysis of locative particles proposed here, which takes these expressions to be prepositions taking NP complements. It is not consistent with Sherwood’s analysis of locative particles as adverbial modifiers.

**3.7. Locative particles are prepositions.** I conclude that several lines of reasoning support the analysis of locative particles as prepositions heading prepositional phrases. Their characteristically locative and directional meanings are typical of prepositions. They are shown to be the heads of the phrases in which they occur by the fact that they govern the case of an associated nominal. Moreover, they are responsible for the locative character of the phrases in which they occur, since the associated nominal need not be a locative form. Structures in which locative particles function as modifiers do in fact occur, but are distinct from phrases headed by such particles. Finally, locative particles based on relative roots clearly take NPs as their complements.

#### 4. The internal structure of prepositional phrases.

**4.1. The basic structure.** As we noted in section 1, locative PPs may be introduced by one of the locative demonstratives *yùt* ‘here’, *nìt* ‘there’, or *yèt* ‘there (distant)’.<sup>21</sup> The preposition itself, together with its complement if it has one, forms a constituent separate from this demonstrative. Evidence for this assertion comes from conjunction.

Consider (34a) in this connection. If the preposition and its complement form a unit together, as indicated by the bracketing given here, then it should be possible to conjoin two such units so that they share a single demonstrative. And indeed this is possible, as we see in (34b). Note that the possibility of including *toqí=te* ‘both’ in this example guarantees that *yùt* is construed with both conjuncts here, not just the first. (I assume that the quantifier is adjoined here to P’.)

(34a) *Eci=wolináqah-k* [PP *yùt* [P’ *qihìw qospem-sís-ok*]].

very=be.beautiful-3IN here near lake-DIM-LOC

‘It’s very beautiful here by the lake.’ (Pass.)

(34b) *Eci=wolináqah-k* [PP *yùt (toqí=te)* [P’ [P’ *qihìw qospem-sís-ok*]

very=be.beautiful-3IN here both=EMPH near lake-DIM-LOC

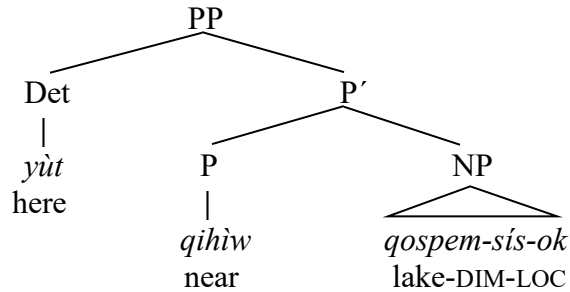
*naka* [P’ *qihìw kcihk-uk*]].

and near forest-LOC

‘It’s very beautiful here (both) by the lake and by the woods.’ (Pass.)

I conclude that the facts of conjunction indicate that the structure of the PP in (34a) is as shown in (35).

(35) *Structure of the PP* yùt qihìw qospemsìsok ‘here by the lake’.



It will be seen that I have represented the demonstrative in (35) as occupying a specifier position within PP and that I have labeled the constituent consisting of the preposition and its complement as P'. These decisions require comment.

**4.2. Initial demonstratives.** The demonstratives that introduce PPs in Maliseet-Passamaquoddy are appropriately regarded as determiners, since they serve to restrict the denotation of PPs in much the same way as nominal demonstratives serve to restrict the reference of NPs. PP determiners share another property with NP determiners as well: they are restricted to initial position in the phrases of which they form a part.

To see how the distribution of demonstratives in PPs parallels the distribution of demonstratives in NPs, consider first the PP examples in (36). In (36a), *yùt* ‘here’ is initial within PP, and the example is grammatical. In (36b), the same demonstrative appears in non-initial position, and the example is ungrammatical.

- (36a) *Skinuhsís-ok 'kisi=pun-ǒm-ónĭ-ya tuwihpùt*  
 boy-PROX.PL (3)-past=put-TH-N-PROX.PL table  
 [PP *yùt qihìw possĭyantésk-ik*].  
 here near window-LOC  
 ‘The boys put the table here by the window.’ (Pass.)
- (36b) \**Skinuhsís-ok 'kisi=pun-ǒm-ónĭ-ya tuwihpùt*  
 boy-PROX.PL (3)-past=put-TH-N-PROX.PL table  
 [PP *qihìw possĭyantésk-ik yùt*].  
 near window-LOC here  
 ‘The boys put the table here by the window.’ (Pass.)

The examples in (37) show that the same situation is found in NP. In (37a) the demonstrative *nòt* ‘that (an.)’ precedes the noun that it modifies, and the result is grammatical. Reversing the order of demonstrative and noun as in (37b) yields an ungrammatical result.

- (37a) *Sepáwǒnu* [NP *nòt skitàp*] *mace-he*.  
 Tomorrow that.AN man start-go-(3)  
 ‘That man is leaving tomorrow.’ (Pass.)
- (37b) \**Sepáwǒnu* [NP *skitàp nòt*] *mace-he*.  
 Tomorrow man that.AN start-go-(3)  
 ‘That man is leaving tomorrow.’ (Pass.)



The fact that demonstratives are restricted to initial position in locative expressions rules out a possible alternative to structures like (35) that a reviewer has suggested, one in which the initial demonstrative in such phrases is analyzed as the head of the expression as a whole, while the constituent that I have called a P' is analyzed instead as a PP modifier of this demonstrative. Since locative demonstratives can stand on their own as locative expressions, it is plausible enough that they might be able to head phrases. Moreover, locative expressions can be modified by PPs, as we observed in 3.4. As we also observed there, however, such PP modifiers can either precede or follow the expression that they modify; compare examples (28a) and (28b). By contrast, the P' (or PP) that is associated with a demonstrative in a locative phrase cannot follow this demonstrative, as we have just seen. Thus, the proposed modification structure can be ruled out. When we add to this observation the parallel distribution of demonstratives in NPs and PPs, the decision to treat demonstratives as specifiers in phrases of both types appears to be fully justified.

**4.3. Modifiers within PP.** Consider next how the modifiers *wàht* 'far off' and *tètt* 'in that direction' fit into the structure of PPs. These elements always follow an initial locative demonstrative, if one occurs, as illustrated in (38). They precede the preposition and its object, as shown in (39a), and are not permitted to follow this sequence; witness (39b). Two modifiers may occur together, however, and in either order, as we see in (39c).

(38) *N-kisi=pún-a-k tuwossömútĩ-yik*

1-past=put-DIR-PROX.PL cup-PROX.PL

{ *yèt wàht / \*wàht yèt* } *olõqìw walõtew-ìhkuk.*

there.DIST far far there.DIST near dish-PL.LOC

‘I put the cups over there by the dishes.’ (Pass.)

(39) *Nit=te kisac-uhtí-hti-t,*

then=EMPH ready-MPL-PROX.PL-3AN

*nìt=te ’t-olõm-ìya-wõtí-nĩ-ya...*

then=EMPH (3)-ahead-go-MPL-N-PROX.PL

‘When they were ready, then they headed...’

a. ... { *wàht / tètt* } *olõqìw Utõqehkik.*

far that.way toward G.L.S.LOC

‘...out / off toward Grand Lake Stream (Me.),’ (Pass.)

b. \*... *olõqìw Utõqehkik { wàht / tètt }*

toward G.L.S.LOC far that.way

c. ... { *wàht tètt / tètt wàht* } *olõqìw Utõqehkik.*

far that.way that.way far toward G.L.S.LOC

‘...off out toward Grand Lake Stream (Me.).’ (Pass.)

This distribution suggests that the modifiers are adjoined to P’, the constituent consisting of the preposition and its complement. It will follow that they cannot precede the initial determiner in such phrases, since this determiner is in specifier position, which

precedes all elements within P'. Since adjuncts are typically added to a constituent without constraints on their relative order, the free order of *wàht* and *tètt* is expected.<sup>22</sup> It is not uncommon for particular adjoined elements to be restricted to preceding or following the head that they modify.<sup>23</sup> Both *wàht* and *tètt* occur only as pre-head modifiers.

Once again we can test this proposal by considering conjunction structures. First, we want to see whether the modifier forms a constituent with the preposition and its complement to the exclusion of the demonstrative. That this is the case may be seen from (40).

- (40) *Nisŭw-ok mihkŭwi-hik olõmi=spiq-atŭwi-hik*  
 two-PROX.PL squirrel-PROX.PL away=up-climb-(3)-PROX.PL  
 [PP *yèt toqí=te* [P' *wàht* [P' *tehsahqìw tuhsán-ok*]]  
 there.DIST both=EMPH far on shed-LOC  
*naka* [P' *tètt* [P' *spiqìw kci=ópõsi-k*]].  
 and that.way up big=tree-LOC  
 'Two squirrels climbed up there both out onto the shed and off up a big tree.' (Pass.)

Of course if *wàht* and *tètt* are truly adjuncts to P', then we also expect that a single occurrence of one of these modifiers may be shared by conjoined expressions of this type. That this prediction is borne out in the case of *wàht* is shown in (41), where this

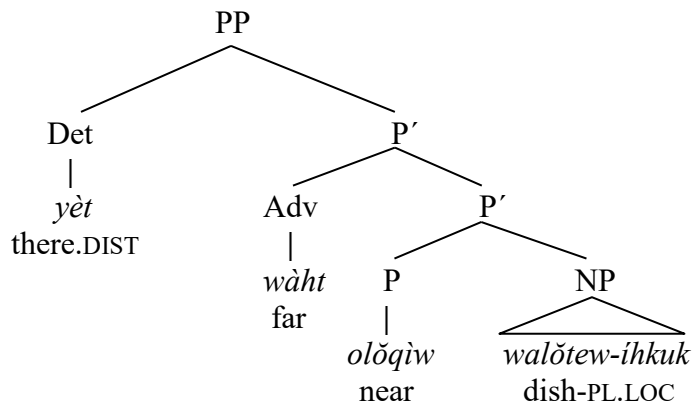
modifier is construed with the conjunction of ‘on top of the stove’ and ‘near the refrigerator’.

- (41) *Kceyawí-w-ok eníqs-ok al-atűw-ahtí-c-ik*  
 be.many-3-PROX.PL ant-PROX.PL around-crawl-MPL-3AN-PROX.PL
- [<sub>PP</sub> *yèt* [<sub>P'</sub> *wàht (toqí=te)* [<sub>P'</sub> *tehsahqìw papskóte-k*  
 there.DIST far both=EMPH on stove-LOC  
*naka* [<sub>P'</sub> *qihìw kolöcomut-íkön-ok*]]].  
 and near freeze-NOM-LOC

‘A lot of ants are crawling around over there (both) on the stove and near the refrigerator.’ (Pass.)

This evidence suggests that the structure of the grammatical version of the PP in (38) is as shown in (42).

- (42) *Structure of the PP yèt wàht olöqìw walötewihkuk* ‘over there by the dishes’.



Note that under this proposal a modifier like *wàht* will not form a constituent with the preposition that follows it when the latter takes a complement. It is worth pausing for a moment to consider the possible implications of this fact for sentences in which PPs are discontinuously expressed. Compare the examples in (43) in this connection. The PP that is expressed by contiguous material in (43*a*) is represented by two separate segments in (43*b*).

(43*a*) *Píyel wíku [PP wàht olǒqìw Utǒqehkìk].*

Peter dwell-(3) far near Grand.Lake.Stream.LOC

‘Peter lives out near Grand Lake Stream (Me.).’ (Pass.)

(43*b*) *Píyel [PP<sub>a</sub> wàht olǒqìw] wíku [PP<sub>b</sub> Utǒqehkìk].*

Peter far near dwell-(3) Grand.Lake.Stream.LOC

‘Peter lives out near Grand Lake Stream (Me.).’ (Pass.)

The fact that *wàht olǒqìw* is treated like a unit in (43*b*) might seem to suggest that this material should be analyzed as a constituent in (43*a*), against the proposal represented by (42). But in fact (43*b*) is misleading in this respect. It is also possible to include an initial demonstrative *nìt* ‘there’ in the discontinuous PP in (43*b*), as shown in (44). But this demonstrative, as we have seen, is in specifier position within PP. Thus, the first segment of the discontinuous PP in (44) has a complex internal structure, presumably as shown there. The complement of *olǒqìw* must have been extracted from within this structure, rather than being left behind when some unitary constituent was

shifted away from it. It is reasonable to assume that the analysis of (43*b*) is parallel in relevant respects.

(44) *Píyel* [PP<sub>a</sub> *nít* [P' *wàht* [P' *olòqì* \_\_\_\_ ]]] *wíku*

Peter            there        far            near            dwell-(3)

[PP<sub>b</sub> *Utòqehkìk*].

Grand.Lake.Stream.LOC

‘Peter lives out there near Grand Lake Stream (Me.).’ (Pass.)

The relationship between the two segments of the PPs in (43)-(44) would appear to indicate that the second segment in each of these examples has been extracted from within the first and shifted to the right. We need not suppose that actual rightward movement is involved in the derivation of such examples, however. Many contemporary syntactic frameworks, including Head-Driven Phrase Structure Grammar (HPSG), assume that the constituents of clauses are basically unordered, with order imposed by principles of linearization (Donohue and Sag 1999).<sup>24</sup> In HPSG, discontinuous constituents are analyzed by applying the mechanism of “liberation,” an operation on phrase structure that licenses a phrase to appear among the sisters of a constituent which would otherwise contain it. Kathol and Rhodes (2000) have proposed that liberation may provide an appropriate way to analyze discontinuous NPs in the Algonquian language Ojibwe. Suppose, then, that a subconstituent of a PP in Maliseet-Passamaquoddy may be liberated from that PP and appear among the sisters of the PP, and further suppose that

the order of these sisters is imposed by principles of linearization. Then we can achieve the effects of extraction and movement without actually applying operations of either of these formal types. It remains to be seen, of course, whether all of the issues that arise in the analysis of discontinuous PPs can be handled by an account along these lines.

**4.4. Implications.** I conclude that PPs in Maliseet-Passamaquoddy have a hierarchically organized internal structure of the kind that is familiar from X-bar theory (Chomsky 1970). This is a significant result, since Maliseet-Passamaquoddy is a classic “non-configurational” language (Hale 1983), in the sense that it has highly flexible word order, makes extensive use of null anaphora, and permits several types of discontinuous constituents. The existence of hierarchically organized phrase structure in such languages, including in particular languages of the Algonquian family, has been a matter of controversy. Kathol and Rhodes (2000) have argued that phrases in Ojibwe have little internal structure, and Dahlstrom (1995) has suggested that phrase structure is largely flat in Algonquian languages in general (although see LeSourd 2004, 2011 for discussion of these issues).

**5. Parallels with the structure of noun phrases.** The structure I have suggested for PPs in Maliseet-Passamaquoddy parallels the structure of noun phrases in the language. This becomes evident when we consider NPs that include one of the argument-taking nouns *tol-èy* or *'c-èy*, both ‘someone or something from (there)’. These are based on the relative roots *tol-*, introducing reference to a location, and *'t-* (palatalized here to

'c-), introducing reference to a source. (Both nouns are formed with the suffix -èy 'pertaining to X'.) These nouns take locative complements that spell out where 'there' is. The complement may take the form of a locative noun or a prepositional phrase, and may precede or follow the head, as we see in (45).

(45a) [NP *Wòt* [N' *tol-èy Kelisk*]] *mecimí=te mikáhke*.  
 this.PROX location-NF Calais.LOC always=EMPH fight-(3)

'This person from Calais (Me.) is always fighting.' (Pass.)

(45b) *Tamà=al nìt li=kis-akùtũ-w-ok*  
 somewhere=UNCERTAIN there thus=past-be.related-3-PROX.PL

*qihìw Muliyan, yùkt skicinúwok Múhaks*  
 near Montreal these.PROX Indian-PROX.PL Mohawks

*naka* [NP [PP *yùt olõqì*] *tol-éya-k*].

and here near location-NF-PROX.PL

'They formed an alliance somewhere there near Montreal, these  
 Mohawk Indians and the people from over this way.' (Mal.,  
 LeSourd 2007:80)

The head noun and its complement form an N' constituent to the exclusion of any preceding demonstrative. This can be demonstrated once again by conjunction. In (46), for example, the demonstrative *níktok* 'those' is construed with both conjuncts indicated by the bracketing. (Maliseet-Passamaquoddy, unlike English, permits a plural

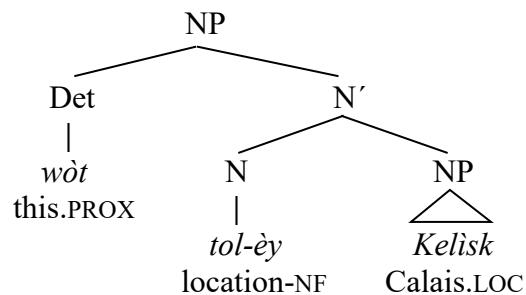


demonstrative to be employed with a conjunction of singular nominals.) I conclude that the tree for the NP in (45a) is as shown in (47). The parallel with the structure shown for the PP ‘here by the lake’ in (35) is evident.

- (46) [NP *Niktok* [N' *Kelisk tol-èy*] *naka* [N' *Wehqapiqèk 'c-èy*]]  
 those.PROX Calais.LOC location-NF and Perry.LOC from-NF  
*mecimí=te mikahkam-tú-w-ok.*  
 always=EMPH fight-RECIP-3-PROX.PL

‘That person from Calais (Me.) and that person from Perry (Me.) are always fighting each other.’ (Pass.)

- (47) *Structure of the NP wòt tolèy Kelisk ‘this person from Calais (Me.)’.*



NPs may also include modifiers at the N' level. In (48), for example, *kòtók* ‘other’ is a modifier of the N' *Motahkōmikùk 'cèy* ‘person from Peter Dana Point (Me.)’. We can tell that this must be the structure by comparing (48) with (49), where *kòtōkik* ‘others’ is construed with a conjunction of structures, each of which consists of a noun and its complement. Thus, the tree for the NP in (48) is that shown in (50).

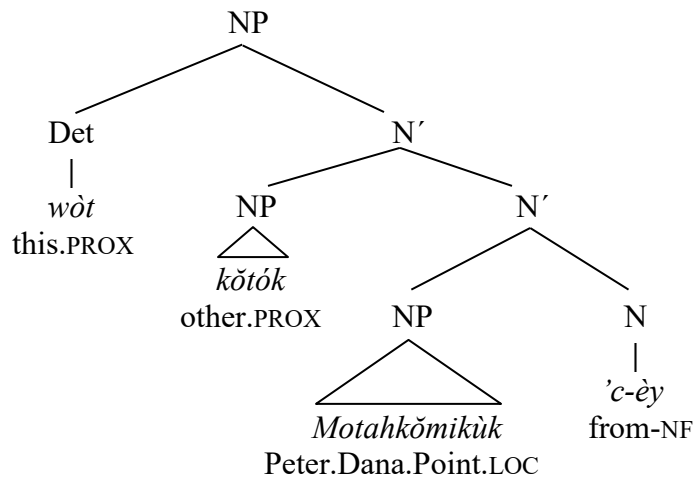
- (48) [NP *Wòt* [N' *kòtók* [N' *Motahkòmikùk* 'c-èy]]]  
 this.PROX other.PROX Peter.Dana.Point.LOC from-NF  
*mecimí=te páhpűwe.*  
 always=EMPH joke-(3)

‘This other person from Peter Dana Point (Me.) is always joking.’ (Pass.)

- (49) [NP *Yúktok* [N' *kótók-ik* [N' *Sipayik* *tol-éya-k*]  
 these.PROX other-PROX.PL Pl.Pt.LOC location-NF-PROX.PL  
*naka* [N' *Motahkòmikùk* 'c-éya-k]]]  
 and Peter.Dana.Point.LOC from-NF-PROX.PL  
*mecimí=te wicuhkem-t-ultú-w-ok.*  
 always=EMPH help-RECIP-MPL-3-PROX.PL

‘These other people from Pleasant Point and people from Peter Dana Point  
 always help one another.’ (Pass.)

- (50) *Structure of the NP wòt kótók Motahkòmikùk 'cèy 'this other person from  
 Peter Dana Point (Me.)'.*



There is a point-by-point match between the structure of the NP *wòt kǒtók Motahkǒmikùk 'cèy* ‘this other person from Peter Dana Point’ in (50) and that of the PP *yèt wàht olǒqìw walǒtewihkuk* ‘over there by the dishes’ in (42). The only difference is the relative order of the head of each construction and its complement: the head in the NP here follows the complement, while the head in the PP precedes. As we have noted, however, either order of head and complement is possible in phrases of either type, so no fundamental difference is involved. NPs and PPs are entirely parallel in structure in Maliseet-Passamaquoddy.<sup>25</sup>

**6. Conclusions.** I hope to have established three main points in this article. The first is that prepositional phrases in Maliseet-Passamaquoddy behave as constituents when they have occasion to do so, despite the fact that they are freely and frequently discontinuously expressed. The evidence I have presented for this conclusion comes from conjunction structures and from pied-piping in questions.

My second point is that locative prepositional phrases are truly worthy of this name: they are headed by the locative particles that characterize them, and the NPs (or PPs) that accompany these particles are their complements. My evidence here is that a locative particle governs the form of an associated (singular) NP, determining whether or not it is in the locative case. Moreover, cases where the accompanying NP is not locative make it clear that it is the particle that characterizes the phrase as a whole. I have also demonstrated that structures in which a locative particle (that is, a preposition) heads a

phrase must be distinguished from other structures in which such a particle actually does function as a nominal modifier.

Third, I have presented evidence, largely from conjunction, for a hierarchically organized model of the internal structure of the prepositional phrase that parallels the structure of NPs and conforms to the predictions of X-bar theory. This is a significant result, since Algonquian languages have been suspected of lacking hierarchical syntactic structure. The conclusions reached here present a challenge to such views.

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## NOTES

<sup>1</sup> I owe special thanks to Estelle Neptune and Wayne Newell, my principal Passamaquoddy consultants for the work reported here. I am also grateful to Farrell Ackerman and Paul Kroeber for helpful discussion and to the audience at WAIL 15, held at UC, Santa Barbara, in April 2012, for their comments on a talk based on an early version of this article. I am also grateful for comments from two IJAL reviewers and an associate editor that have helped me to sharpen my thinking and to improve my exposition. Naturally the usual disclaimers apply.

<sup>2</sup> Bloomfield (1962:470-471) takes note of prepositional phrases in Menominee (ISO code mez), but does not analyze them as such, taking them instead to involve adverbial expressions (a particle and the locative form of a noun) standing in a relation he terms “weak concord.”

<sup>3</sup> It should be noted that the present work employs a quite different analytical framework from that within which Oxford’s analysis is stated. Drawing on the work of Svenonius (2006, 2010), Oxford takes a cartographic approach to the structure of prepositional phrases, which involves postulating abstract representations that are to a large extent motivated by semantic considerations. I have sought instead to postulate no more structure in syntactic representations than can be justified on the basis of syntactic evidence.

<sup>4</sup> Examples are given in a modified version of a widely used standard orthography: *o* represents /ə/, *u* is /o/, *c* is /č/, and *q* is /k<sup>w</sup>/. Phonemic /h/ before a consonant at the beginning of a word is written as an apostrophe. The distinctively

stressed vowel in a word is written with an acute accent if it is associated with high pitch and with a grave accent if it is associated with low pitch. Phonologically “weak” vowels, ignored by the rules of stress assignment, are marked with a breve. A double hyphen is used to join an enclitic to its host and to mark the boundary between a preverb or prenoun—formally a prior member in a compound word—with the word or compound that it modifies.

The following abbreviations are used in glosses: 1 first person; 2 second person; 3 third person; 3/2, etc. third person subject with second person object, etc.; AN animate; DIM diminutive; DIR direct; DIST distant; EMPH emphasis; FUT future; HES.PRO hesitation pronoun; II inanimate intransitive; IMP imperative; IN inanimate; inc. inclusive; INV inverse; LOC locative; MPL multi-plural; N suffix *-(ǝ)n(e)-*, with several functions; NF noun final (noun-forming suffix); NOM nominalizer; OBV obviative; PL plural; POSS possessed; PROX proximate; RECIP reciprocal; REPORT reportative; SG singular; TA transitive animate; TH thematic suffix; UNSPEC unspecified subject. Glosses are given in parentheses for morphemes that have no surface segmental shape.

<sup>5</sup> Accent is not marked in Francis and Leavitt 2008 or Mitchell 1976. I have added accent marking and other indications of prosodic features to the examples cited from these sources, generally following Passamaquoddy norms. The translations given for these examples are also mine.

<sup>6</sup> The only case for which Maliseet-Passamaquoddy nouns are inflected is locative, as is typical for Algonquian languages. Nouns are also inflected for obviation (proximate vs. obviative, a matter of relative discourse prominence) and absentativity

(where absentative marking indicates that the referent of a noun was formerly present, formerly possessed, or formerly alive).

<sup>7</sup> Examples taken from LeSourd 2007 have been retranscribed and retranslated for this article and may therefore differ in various ways from the cited source.

<sup>8</sup> Even though preverb-verb complexes are compounds, they may be discontinuously expressed. This is true of *etuci-... -léyik* ‘when it happens thus’ in (7). In such cases, the first segment of the compound is written with a trailing hyphen and the remainder with a leading hyphen to indicate that the two constitute a unit together.

<sup>9</sup> Both *wàht* ‘far off’ and *tètt* ‘in this or that direction’ also occur on their own as adverbial particles: *wàht amõniye* ‘he went way around’, *tètt weckúwyak* ‘when it comes this way’.

<sup>10</sup> Francis and Leavitt (2008:136) give this example with *wahta*, rather than *wahte*, apparently employing an alternate form of the word. I have emended the published text to match the form given in the current version of the online *Passamaquoddy-Maliseet Language Portal* (<http://pmportal.org/>), accessed February 21, 2013.

<sup>11</sup> Examples given without an indication of a source are taken from my own field notes.

<sup>12</sup> Bloomfield (1962:439) analyzes Menominee nouns in “local form” as “adverbials.” Although this term suits many of the functions of locative-marked nouns, Maliseet-Passamaquoddy locatives are freely formed from bases that include all manner of nominal inflection: *kt-ahtulhawé-nnu-k* (2-shirt-1PL-LOC) ‘on our (inc.) shirt’. Thus, they would seem to be best analyzed as nouns, given that category-changing derivational

morphology is not typically added freely to inflected forms. Moreover, locative phrases may be used to modify nouns, not a typical adverbial function: *lamōkútiyil yùt kuhùtik* ‘the sheets on this bed’ (with *kuhùti-k*, locative of *kuhùt* ‘bed’).

<sup>13</sup> What category a conjunction of unlike categories should be assigned to remains a highly controversial question. See Pollard and Sag 1994:201-205 and Sag 2003 for useful discussion of the issue.

<sup>14</sup> Here and below I describe word order in Maliseet-Passamaquoddy questions in terms of movement. I adopt this formulation for expository convenience without intending a commitment to a movement analysis of the phenomena in question, as opposed to an analysis in a constraint-based framework like Head-Driven Phrase Structure Grammar or its successors (cf. Sag 2010).

<sup>15</sup> Bruening (2001:184-189) discusses a number of examples under the heading of “long distance scrambling.” However, many of these actually involve left-dislocated NPs, since the phrases in question are restricted to clause-peripheral position, as Bruening notes. His other examples that seem to attest “scrambled” NPs have matrix NPs instead, namely secondary objects, as shown by the fact that the matrix verb may agree with them, following the usual pattern of optional agreement with secondary objects.

<sup>16</sup> An exception is also made for nominals, such as pronouns or participles (relative clause forms), that do not take locative endings. For example, *tehsahqìw* ‘on’ is typically used with a locative-marked NP, but we find *tehsahqìw nil* ‘on me’, with a personal pronoun that does not take locative inflection. Compare also *tehsahqìw kèq* ‘on what?’ in (14), with a question word that lacks a locative form.

<sup>17</sup> That it is indeed the same suffix *-ìw* that appears in both locative particles and adverbs is shown by the fact that forms of both types have alternate forms in *-i*, used especially commonly in the Passamaquoddy dialect: *lamìw* ~ *lámi* ‘inside, underneath’, *sōlahkìw* ~ *sōláhki* ‘unexpectedly, suddenly’. Of course, as a reviewer points out, distinct suffixes may share a pattern of allomorphy, as do the English plural suffix *-s*, the possessive suffix *-s*, and the third-person singular *-s* of verbs, all of which alternate on the pattern *-s* ~ *-z* ~ *-əz*. But note that the parallel allomorphy of these English endings has a phonological explanation: the alternations result from general phonological rules. If there are two distinct particle-forming suffixes *-ìw* (and see note 18 for a third), the parallel treatment of these morphemes will be left unexplained.

<sup>18</sup> These quantifiers, like locative particles and adverbs in *-ìw*, have alternate forms in *-i* that show that they are formed with the same suffix: *psìw* ~ *psí* ‘all’.

<sup>19</sup> Perhaps surprisingly, no locative particles are formed from the common relative roots *(o)l-* ‘in (that) manner or direction’ or *tol-* ‘in (that) location’.

<sup>20</sup> The demonstrative *yéta* that appears in this example is an emphatic form of *yèt* ‘there (distant)’.

<sup>21</sup> A reviewer asks how we can be sure that the demonstrative that introduces a locative PP is truly a locative form, rather than a deictic associated with the complement NP. For example, how do we know that we are dealing with ‘here by the lake’ in (34a) rather than ‘by this lake’? This is shown by PPs with plural complements. In *nìt=te qihìw wikǐwám-ol* ‘right there by the houses’, for instance, *nìt=te* can only be the locative form

*nìt* ‘there’ (here bearing the emphatic enclitic). The demonstrative required as a modifier of ‘houses’ is *nìhtol* ‘those (in.)’: *qihìw nìhtol wikǎwám-ol* ‘near those houses’.

<sup>22</sup> The free ordering typical of adjuncts is found for PP modifiers of nouns in English: *students with long hair in physics classes* ~ *students in physics classes with long hair*. It is also possible, however, for a language to impose restrictions on the order of adjuncts. A reviewer notes, for example, that there are constraints on the order of adjectives in English: *a big black cat*, \**a black big cat*.

<sup>23</sup> Adjectives in English are a case in point. On the standard analysis (Radford 1988:208-15), APs are adjuncts to N’. Nonbranching APs are typically restricted to occurring before N’: *plentiful students (of physics)*, \**students (of physics) plentiful*. A few adjectives, however, are restricted instead to following N’: *students (of physics) aplenty/galore*, \**aplenty/galore students (of physics)*.

<sup>24</sup> See Fox and Pesetsky 2005 for a comparable proposal in the Minimalist framework, Culicover and Jackendoff 2005:143-148 for a proposal in the framework of Simpler Syntax.

<sup>25</sup> There are distributional differences, however, between modifiers in PPs and NPs. While *wàht* ‘far off’ and *tètt* ‘in that direction’ always precede P’ within PP, noun modifiers like *kòtók* (Pass.) ~ *kòtok* (Mal.) ‘other’ or *piléy* ‘new’ may either precede or follow the noun (actually an N’) with which they are construed: Mal. *yúhtol kòtòkil skitapíyol* ‘this other man (obv.)’, *yúhtol wasísol kòtòkil* ‘this other child (obv.)’; Pass. *piléyal wikhikõnol* ‘new books’, *nìhtol posõnütíyil piléyal* ‘those new baskets’.