ECM in Passamaquoddy: Implications for the inverse

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Abstract

Oxford (2022) argues that the Algonquian 3>3 inverse is a voice construction much like Austronesian object voice, unlike the 3>SAP inverse, which is just a surface morphological phenomenon. I provide novel evidence from Passamaquoddy (Eastern Algonquian) for this conclusion, involving an ECM-like construction in which the highest argument in an embedded subordinative clause shows certain properties associated with being a matrix object (agreement and obviation). The locality of ECM allows us to diagnose which argument occupies the highest A position—generally always the external argument, except in the 3>3 inverse, in which case it's the internal argument. Thus, the internal argument A-moves over the external argument in the 3>3 inverse but not the 3>SAP inverse.

1 Introduction

Algonquian languages are famed for their system of direct-inverse marking. The standard way this is presented is as follows: whenever the agent outranks the patient on some hierarchy, we get "direct" marking, and whenever the patient outranks the agent on the same hierarchy, we get "inverse" marking. Across Algonquian, the hierarchy relevant for direct-inverse marking is SAP>3prox>3obv>3in. Here I exemplify with the Eastern Algonquian language Passamaquoddy-Wolastoqey (also known as Passamaquoddy-Maliseet or Maliseet-Passamaquoddy; henceforth I will refer to it as just Passamaquoddy):¹

(1)	a.	n-koselom -a -nnu-k	1>3, dir.	(2)	a.	'-koselom -a -wa-l	рrox>овv, dir.
		1-love _{ta} -dir-1pl-prox.pl				3-love _{TA} -dir-pl-obv.sg	
		'we love them _{PROX} '				'they $_{PROX}$ love her_{OBV} '	
	b.	n-koselom -oku -nnu-k	3>1, inv.		b.	'-koselom -oku -wa-l	OBV>PROX, inv.
		1-love _{TA} -inv -1pl-prox.pl				3-love _{TA} -inv-pl-obv.sg	
		'they _{PROX} love us'				'they _{PROX} are loved by h	er _{obv} '

The agreement markers outside of the direct and inverse markers are exactly the same in both forms; the only indication of syntactic roles is the presence of the direct marker -a (which I'll analyze as third person object agreement) or the inverse marker -oku. I will translate 3>3 inverse with passives in English when possible, foreshadowing the eventual conclusion.

The core "inverse question" is how this morphological marking links up to the syntax. In particular, a central point of controversy is whether or not inverse marking reflects a kind of voice operation, promoting the patient to some more prominent, subject-like syntactic position and/or

 $^{^1}$ Abbreviations: 1 = first person, 2 = second person, 3 = third person, AI = animate intransitive, an = animate, appl = applicative, cj = Conjunct, dir = direct, fut = future, II = inanimate intransitive, in = inanimate, inv = inverse, N = N formative, obj = object, obv = obviative, pfv = perfective, pl = plural, ppl = plural possessor, prog = progressive, prox = proximate, SAP = speech act participant, sg = singular, TA = transitive animate, TI = transitive inanimate.

demoting the agent (much like Austronesian object voice; see Oxford 2018 for discussion). Some core proponents of this kind of view include (among others) Rhodes (1976, 1994) and Bruening (2001, 2005, 2009). An opposing camp holds that inversion is purely a morphological fact that is not associated with a voice-like syntactic operation; a core proponent of this view (among others) is Dahlstrom (1991).

To streamline the discussion, let's call the morphological realization of inversion (i.e. the inverse marker -oku) MORPHOLOGICAL INVERSION, and the kind of syntactic voice operation proposed to be associated with the morphological inverse syntactic inversion. The inverse question can thus be phrased as follows:

(3) The Inverse Question:

To what extent does morphological inversion correlate with syntactic inversion?

Rhodes and Bruening's answer to the inverse question is that morphological inversion does correlate with syntactic inversion. Dahlstrom's answer is that it doesn't.

Of course, there are various kinds of intermediate positions one can stake out between these two extremes. One intermediate camp proposes that different Algonquian languages vary in terms of their answer to the inverse question: in some, morphological inversion goes along with syntactic inversion, but in others it doesn't (Dahlstrom 2013, Fry and Hamilton 2016). Another kind of intermediate camp proposes that it differs by construction: some instances of morphological inversion go along with syntactic inversion, but others do not (Oxford 2022). In this last case, the idea is that morphological inversion with two third-person arguments (i.e. an obviative acting on a proximate, or an inanimate acting on an animate) involves syntactic inversion, but morphological inversion with a third person agent and a SAP patient does not.

Here, I'll present a novel argument for that last intermediate position, 3>3 ONLY:

(4) 3>3 Only:

In the 3>3 morphological inverse, you have syntactic inversion; in the 3>SAP morphological inverse, you don't have syntactic inversion.

The empirical domain is a (to my knowledge) undescribed kind of cross-clausal A-dependency (to use a term from Wurmbrand 2019) found with the Passamaquoddy subordinative mode, which bears a close similarity to Exceptional Case Marking (ECM) in languages like English: the ECM pattern in Passamaquoddy involves an argument in the embedded subordinative clause behaving like a matrix object for the purposes of obviation marking and matrix (object) agreement (if the embedding verb is of the right type to show object agreement). Though there is no morphological case in Passamaquoddy (or across Algonquian in general), I'll still use the term ECM to refer to this phenomenon.

The core observation is that it's generally only the external argument of the embedded subordinative clause that can can participate in ECM—this holds even in 3>SAP configurations that involve morphological inversion. However, when we get 3>3 morphological inversion in the embedded subordinative clause, then and only then the *internal argument* participates in ECM. The conclusion I'll draw is the following:

- 1. Only the highest A-position in the embedded subordinative clause can participate in ECM.
- 2. It's only in the 3>3 inverse that we get syntactic inversion—the object A-moving over the subject—which puts the object in the highest A-position, feeding ECM.

Thus, we find striking support for 3>3 Only. I end by considering another difference between the 3>SAP inverse and 3>3 inverse we find on the embedding verb, as well as providing some speculation about the difference between the ECM pattern and the pattern of long-distance agreement (LDA) we find with larger embedded clauses (Bruening 2001, LeSourd 2019).

2 Background

But before we jump into the data, I need to provide some relevant background to the uninitiated on Passamaquoddy and Algonquian languages in general. First we'll situate the subordinative within the broader Passamaquoddy/Algonquian system of clause types, then I'll introduce the different verb types (as we will be looking at three different ways of inflecting 'pawatomon' want': one for inanimate objects, one for animate objects, and a ditransitive 'want'), and then I'll introduce some syntactic facts about obviation that will be crucial to the discussion later.

2.1 Algonquian clause types

Algonquian languages feature an interesting system of clause typing: there are different kinds of inflectional paradigms for verbs that appear in different kinds of syntactic contexts. One core divide found in the majority of languages in the family (and which can be reconstructed for Proto-Algonquian) are the independent vs. conjunct paradigms. Roughly speaking, independent verbs are found in matrix declaratives (and also occasionally clauses embedded under verbs that crosslinguistically allow main clause phenomena), and conjunct verbs are found in embedded clauses and (most) $\it wh$ questions. The independent and conjunct inflectional paradigms largely feature entirely distinct agreement markers:

(5) a. '-koselom-a-wa-l Independent
3-love_{TA}-3<u>OBJ</u>-PL-OBV.sG
'they_{PROX} love him_{OBV}'

b. *kselom-a-hti-t* love_{TA}-3<u>OBJ-PL-3</u> 'they_{PROX} love him_{OBV}' Conjunct

With the exception of the direct marker -*a* (here analyzed as third person object agreement, following Rhodes 1976, 1994, Brittain 1999, Goddard 2007, Oxford 2014, a.m.o.), the agreement markers in these two forms are entirely different.²

Eastern Algonquian innovated a third inflectional paradigm: the SUBORDINATIVE, which is found mainly in the complements of certain clause-embedding verbs, like 'pawatomon' want', 'tolokimal' order', 'tahsimal' persuade', etc., that typically take infinitival or subjunctive complements in other languages.³ The subordinative is inflected more-or-less identically to the independent, except for two crucial differences:

- 1. The agreement affix found in C (the PERIPHERAL SUFFIX) is obligatorily absent;
- 2. If there is an animate argument in the clause, you must have the so-called "N formative"—in Passamaquoddy, it's -(o)n(e).

To illustrate, let's compare the following verb forms:

²The conjunct can be internally reconstructed as the original verbal paradigm in Pre-Proto-Algonquian; the independent historically derives from nominalizations, and the agreement markers that are distinct from the conjunct paradigm derive from possessor agreement and nominal inflection (Goddard 2007).

³It's also found in a kind of clause-chaining construction not examined here (see Quinn 2004, 2007 for discussion).

⁴This suffix goes back to Proto-Algonquian *-ene·, which can be internally reconstructed as a nominalizer in Pre-Proto-Algonquian (Goddard 2007). Outside of the innovative subordinative, the distribution of -(o)n(e) in Passamaquoddy largely mirrors its distribution in Proto-Algonquian (the only exception is the intransitive unspecified subject form in Passamaquoddy, which contains an -(o)n(e) that is lacking in Proto-Algonquian).

(6) a. *n-sekpawol-a-nnu-k* 1-scare_{TA}-3obj-1pL-**prox.pL** 'We scare them_{PROX}.' Independent

Subordinative

b. *n-sekpawol-a-ne-n* 1-scare_{TA}-Зовј-**N**-1PL

'We scare them_{PROX}.'

In both cases we have an independent form of the verb 'sekpawolal' scare', inflected for a first person plural subject and a proximate plural object. In (6a), we have an independent verb form, which lacks -(o)n(e) and features C agreement—here, it's agreeing with the proximate plural object, -k. In (6b), we have a subordinative verb form, and it features -(o)n(e) and lacks C agreement.

2.2 Verb types

There's a slot in the verbal template right next to the verb root for a kind of derivational morphology Algonquianists call finals. Finals mark the transitivity of the verb and index the animacy of the intransitive subject and transitive object. To get a feel for the basic pattern, consider the Menominee verbs in (7). All of these verbs share the same root, *panāt-* 'be spoiled, spoil', and they differ in terms of which finals they involve (there are many more finals than just these four, and finals rather idiosyncratically select for different roots, as well as often bear more concrete, lexical meaning, behaviors characteristic of derivational rather than inflectional morphology).

- (7) a. panāt-at(-w) be.spoiled-II-3 'it is spoiled'
 - c. panāc-eht-a-w spoil-TI-IN.OBJ-3 'she spoils it'

- b. panāt-ese-w be.spoiled-AI-3 'she is spoiled'
- d. *panāc-eh-æ-w* spoil**-TA**-3овј-3 'she spoils her'

Menominee (Bloomfield 1962:330)

For this particular root, Bloomfield provides forms with four distinct finals:

- panātat-, with the final -at, indicating an intransitive verb with an inanimate subject (inanimate intransitive, II);
- panātese-, with the final -ese, indicating an intransitive verb with an animate subject (animate intransitive, AI);
- *panāceht-*, with the final *-eht* (which palatalizes the preceding /t/), indicating a transitive verb with an inanimate object (TRANSITIVE INANIMATE, TI);
- *panāceh*-, with the final *-eh* (which palatalizes the preceding /t/), indicating a transitive verbs with an animate object (TRANSITIVE ANIMATE, TA).

As should be evident, finals appear to be sensitive to the animacy features of what would essentially be the "absolutive" argument if Algonquian languages featured ergative case marking, to echo the way Rhodes (1976:80) puts it.

There are also ditransitive verbs, which are often called TA+O verbs. In Passamaquoddy, these all feature an applicative morpheme -uw or -ew (except for the verb milan 'give'). The verb classes that will be relevant here are TI, TA, and TA+O.

2.3 Obviation

In Algonquian languages, there is a distinction between two kinds of third person referents: proximate and obviative third person. Generally, proximate DPs are described as more "central" to the discourse than obviative ones, and there can be at most one proximate referent within a given domain (e.g. a noun phrase, a clause, a sentence, or even a stretch of discourse/narrative)—the rest must be obviative. In Passamaquoddy, like in many (but not all) Algonquian languages, only animate third persons participate in the obviation system. Thus, within a given domain, you can have (at most) one proximate third person animate DP, and any other third person animate DPs must be obviative. The relevant domains in Passamaquoddy are the noun phrase and the clause.⁵

Within the noun phrase, an animate third person possessed by another animate third person must be obviative:

And in a basic transitive, one argument must be obviative, and the other can be (and usually is) proximate:

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    (9) a. Mali-Ø '-kisi-tokom-a-l Piyel-ol.
        Mary-prox.sg 3-pfv-hit<sub>TA</sub>-3obj-obv.sg Peter-obv.sg
        'Mary<sub>prox</sub> hit Peter<sub>obv</sub>.'
    b. Piyel-Ø '-kisi-tokom-oku-l Maliw-ol.
        Peter-prox.sg 3-pfv-hit<sub>TA</sub>-inv-obv.sg Mary-obv.sg
        'Peter<sub>prox</sub> was hit by Mary<sub>obv</sub>.'
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And generally, clause boundaries "reset" the obviation domain; for instance, if you have an embedded independent or an embedded conjunct clause, the embedded subject can be proximate, even if the matrix subject is also proximate:

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(10) a. Piyel-Ø litahasu-Ø [IND Tihtiyas-Ø totol-intu-Ø].

Peter-Prox.sg think<sub>AI</sub>-3 Tihtiyas-Prox.sg prog-sing<sub>AI</sub>-3

'Peter<sub>Prox</sub> thinks that Tihtiyas<sub>Prox</sub> is singing.' (GP)

b. Laca-Ø '-kocicihtu-n [CJ eli Tihtiyas-Ø kselom-a-t Piyel-ol].

Roger-Prox.sg 3-know<sub>TI</sub>-N that Tihtiyas-Prox.sg love<sub>TA</sub>-30BJ-3.CJ Peter-Obv.sg

'Roger<sub>Prox</sub> knows that Tihtiyas<sub>Prox</sub> loves Peter<sub>Obv</sub>.' (EM)
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Note that in (10b), *Laca* and *Tihtiyas* can both be proximate, as there is a clause boundary separating them, but *Piyelol* must be obviative, as there is already a clausemate proximate (*Tihtiyas*).

3 Basic data: obviation, agreement, locality

The data we'll be examining here involves the subordinative embedded under the verb 'pawatomon' want' (which can also be pronounced 'puwatomon). All uncited data presented here comes from elicitation and discussion with four speakers of Passamaquoddy-Wolastoqey—Edwina Mitchell

⁵Obviation in Passamaquoddy seems to be much more tied to syntax than information/discourse structure, compared to obviation in other Algonquian languages like Plains Cree (Dahlstrom 1986, 1991) or Blackfoot (Bliss 2017), as Bruening (2001) and Conor Quinn (p.c.) note. The obviation status of an animate third person referent in Passamaquoddy can and does often rapidly shift within a discourse, narrative, or even sentence.

(EM), Grace Paul (GP), Margaret Apt (MA), and Roger Paul (RP)—carried out virtually over the course of 2020-2022. I thank them greatly for their kindness and insights—*kci woliwon*.

The verb 'pawatomon, when it embedds a clause, can appear in one of three forms: it can be TI 'pawatomon, TA 'pawalal, or TA+O 'pawatomuwan:

- (11) a. Roger '-pawa-tom-on Asawis-ol 't-olintu-li-n.

 Roger 3-want-TI-N John-obv.sg 3-sing_{AI}-obv-N

 'Roger wants John to sing.' (EM)
 - b. *Tihtiyas '-pawa-I-a-l oposiy-il yut 't-otoliki-li-n*. TA Tihtiyas 3-want-**TA**-Зовј-овv.sc tree-овv.sc here 3-grow.there_{AI}-овv-N 'Tihtiyas wants a tree to grow here.' (ЕМ, RР)
 - c. Roger '-pawa-tom-uw-a-n Asawis-ol 't-olintu-li-n. TA+O
 Roger 3-want-TI-APPL-30BJ-N John-obv.sg 3-sing_{AI}-obv-N
 'Roger wants John to sing.' (EM)

(11a) features the transitive inanimate (TI) final *-tom*, which indicates that the verb is transitive and has an inanimate object. (11b) features the transitive animate (TA) final *-l*, which indicates that the verb is transitive and has an animate object. (11c) features the TI final *-tom* plus the applicative marker -uw, indicating that the verb is ditransitive (TA+O).

These are the same verb forms we get when 'pawatomon takes nominal complements:

- (12) a. Luhsi '-pawa-tom-on piley atomupil.

 Lucy 3-want-TI-N new car.' https://pmportal.org/dictionary/pawatomon-puwatomon-1
 - b. Piyel '-pawa-l-a-l <u>sukolopan-ol.</u> TA
 Peter 3-want-TA-3obj-obv.sg <u>cake-obv.sg</u>
 'Peter wants cake.' (EM, RP)
 - c. Piyel '-pawa-tom-uw-a-n <u>Laca-wol</u> <u>atomupil</u>. TA+O
 Peter 3-want-TI-APPL-30BJ-N <u>Roger-obv.sc</u> <u>car</u>

 'Peter wants Roger's car.' (constructed)

In (12a), we have an inanimate object (*piley atomupil* 'new car'), and the verb is accordingly TI '*pawatomon*. In (12b), we have an animate object (*sukolopanol* 'cake', which is grammatically animate), and the verb is accordingly TA. In (12c), we have an instance of possessor raising with TA+O '*pawatomuwan*, featuring agreement with the raised possessor *Lacawol* 'Roger'. Note the parallelism between clause-embedding '*pawatomon* in (11) and nominal-complement '*pawatomon* in (12). Roughly, in the TI structure it appears like the matrix verb is agreeing with the embedded clause or showing default agreement (inanimate singular), in the TA structure the matrix verb is agreeing with the embedded subject, and in the TA+O structure the embedded subject is agreed-with as if it was a goal and the embedded clause is agreed-with as if it was the theme (or it's showing default agreement).

To get a sense for the ECM pattern, let's first consider some basic examples with an intransitive embedded clause. The key observation is that the embedded subject shows two properties associated with being a matrix object: (i) being in the same obviation domain as the subject (a property shared across all three forms of 'want'); and (ii) being accessible to the matrix verb for object agreement (a property of the TA and TA+O structures—in the TI structure we get agreement with the embedded clause).

3.1 Obviation

Note that the embedded subject is marked obviative in all the examples in (11). If we get rid of this obviative marking on the embedded subject and get rid of obviative agreement on the embedded verb, the examples become ungrammatical (I do not have the relevant negative judgment with TA 'pawalal):

(13) a. *Roger '-pawa-tom-on Asawis 't-olintu-n.

Roger 3-want-TI-N John 3-sing_{AI}-N

Intended: 'Roger wants John to sing.' (EM)

b. *Roger '-pawa-tom-uw-a-n Asawis 't-olintu-n.

Roger 3-want-TI-APPL-30BJ-N John 3-sing_{AI}-N

Intended: 'Roger wants John to sing.' (EM)

Recall that you cannot have two proximate arguments in the same clause—thus, the embedded subject in these examples is behaving as if it were in the matrix clause for the purposes of obviation. Additionally, we know that this obviative really is triggered by the matrix clause, because when we make the matrix subject an SAP, embedded obviative disappears:

(14) a. N-puwa-tom-on Asawis 't-olintu-n.
1-want-TI-N John 3-sing_{AI}-N
'I want John to sing.' (ЕМ)

b. N-pawa-l-a opos yut 't-otoliki-n.
1-want-TA-Зовј tree here 3-grow.there_{AI}-N
'I want a tree to grow here.' (ЕМ, RР)

c. N-puwa-tom-uw-a-n Asawis 't-olintu-n.
1-want-TI-APPL-Зовј-N John 3-sing_{AI}-N
'I want John to sing.' (ЕМ)

Recall that obviative is triggered if there's another third person animate within the domain. Thus, the embedded subjects in (14) don't need to be obviative, in contrast to (13).

3.2 Agreement with embedded subjects

The other way in which embedded subjects behave like matrix objects in Passamaquoddy ECM is that they can control object agreement on the matrix verb.

(15) a. **K-**pawa-tom-u**-l**-on k-macaha-n. TA+O2-want-TI-APPL-20BJ-N 2-leave AI-N 'I want you to leave.' (EM, RP) b. K-pawa-tom-uw-i-on TA+On-macaha-n. 2-want-TI-appl-10bj-N 1-leave_{AI}-N 'You want me to leave.' (EM, RP) Tihtiyas **n-**pawa-tom-a-ku-n TA+OTihtiyas 1-want-TI-APPL-INV-N 1-sing_{AI}-N 'Tihtiyas wants me to sing.' (EM, RP) yut 't-otoliki-li-n. TA d. Tihtiyas '-pawa-l-a-l oposiy-il Tihtiyas 3-want-TA-30BJ-0BV.SG tree-0BV.SG here 3-grow.thereAI-0BV-N 'Tihtiyas wants a tree to grow here.' (EM, RP)

As might be expected, this only occurs with the TA and TA+O versions of 'want'. With TI 'want', we don't have any agreement with the embedded subject—instead, the verb just looks like it has an inanimate singular object:

(16) a. N-pawa-tom-on k-macaha-n.

1-want-TI-N 2-leave_{AI}-N

'I want you to leave.' (EM, RP)

b. K-pawa-tom-on n-macaha-n.

2-want-TI-N 1-leave_{AI}-N

'You want me to leave.' (EM, RP)

c. Roger '-pawa-tom-on Asawis-ol 't-olintu-li-n.

Roger 3-want-TI-N John-obv.sg 3-sing_{AI}-obv-N

'Roger wants John to sing.' (EM)

This is reasonably because TI 'pawatomon is agreeing with the embedded clause as a whole, which would be inanimate singular.

Thus, there are two respects in which embedded subjects look like matrix objects in Passamaquoddy ECM: obviation and agreement. In the next section, we'll tackle the question of the *locality* of ECM in Passamaquoddy, and we'll see that ECM can only happen with the argument in the highest Apposition in the subordinative clause.

3.3 Locality of ECM

In the direct (SAP>3, PROX>OBV, AN>IN), everyone agrees that the agent occupies the "subject" position (highest A position). When we embed direct transitives under 'pawatomuwan, we find that it's this subject, and not the object, that participates in ECM.

- (17) a. Roger n-puwa-tom-a-ku-n nt-olintu-wew-a-n Asawis. TA+O Roger 1-want-TI-appl-inv-N 1-sing_{AI}-appl-3obj-N John
 'Roger wants me to sing to John.' (EM, RP)
 - b. Roger '-puwa-tom-uw-a-n <u>Asawis-ol</u> 't-olintu-wew-a-n '-temis-ol. TA+O Roger 3-want-TI-appl-3obj-N <u>John-obv.sg</u> 3-sing_{AI}-appl-3obj-N 3-dog-obv.sg 'Roger wants John to sing to his dog.' (EM)

In (17a), we see clearly that the matrix verb agrees with the embedded subject: we get the first person prefix n-, and the inverse marker -ku because the "object" of 'pawatomuwan 'want' outranks the subject. In (17b), we see that the embedded subject Asawisol 'John.obv' is obviative due to the matrix proximate Roger, and we get third person object agreement with it.

Additionally, these direct transitives show us that ECM is subject to locality. Note that in (17a), both *Roger* and *Asawis* are proximate. This suggests to us that the embedded object is not in the same obviation domain as the matrix subject—else *Asawis* should have been obviative, as we can't have two proximates in the same domain. If we make *Asawis* in (17a) obviative, then we get ungrammaticality:

(18) *Roger n-puwa-tom-a-ku-n nt-olintu-wew-a-n Asawis-ol. TA+O
Roger 1-want-TI-appl-inv-N 1-sing_{AI}-appl-3obj-N John-obv.sg
Intended: 'Roger wants me to sing to John.' (EM, RP)

Thus, direct transitives tells us something very important about Passamaquoddy ECM, which echoes similar facts about ECM in better-studied languages: it's restricted to the highest A position in the embedded subordinative clause.

We find similar facts in SAP>SAP configurations, which aren't obviously direct or inverse (Hockett 1992, Macaulay 2009, Oxford 2017, a.m.o.). When we embed SAP>SAP configurations under 'pawatomuwan, we discover that it's the external argument that participates in ECM, not the internal argument:

- (19) a. Sapet **n-**puwa-tom-a**-ku**-n '-kinolu-l-oni-ya. TA+O Elizabeth **1-**want-TI-аррц-**INv**-N 2-praise_{TA}-2овј-N-рц 'Elizabeth wants <u>me</u> to praise y'all.' (RP)
 - b. *Sapet k-puwa-tom-a-ku-ni-ya '-kinolu-l-oni-ya. TA+O
 Elizabeth 2-want-TI-APPL-INV-N-PL 2-praise_{TA}-20BJ-N-PL
 Intended: 'Elizabeth wants me to praise y'all.' (RP)

The grammatical option is for the matrix verb to show first person agreement (19a), agreeing with the external argument of the embedded clause as if it were the object of the matrix clause. If we try to get the matrix verb to agree with the internal argument of the embedded clause, the result is not accepted (even though that's the only argument indexed by the embedded verb 'kinoluloniya here, and some have described 1>2 configurations as "inverse"). SAP>SAP configurations thus further demonstrate the locality of ECM in Passamaquoddy: it can only target the highest A-position.

4 ECM and the inverse

Question: what happens when we have an embedded inverse verb? The different answers to the inverse question make different predictions:

- 1. If there is no A-movement of the internal argument over the external argument (Dahlstrom 1991), then we predict that it's still the external argument that participates in ECM.
- 2. If there is A-movement of the internal argument over the external argument in all inverse configurations (Bruening 2001), then we predict that the *internal* argument should now participate in ECM.
- 3. If there is A-movement of the internal argument only in the 3>3 inverse (Hamilton 2018, Oxford 2022), then we expect the external argument to participate in ECM in the 3>SAP inverse, but the internal argument to participate in ECM in the 3>3 inverse.

As we'll see, the predictions of the intermediate camp are verified. The 3>SAP inverse is just morphology, and the 3>3 inverse is a kind of voice construction.

4.1 3>SAP inverse

If you have a 3>SAP configuration in the embedded clause, it's still the third person external argument that shows matrix object properties, even though there is morphological inversion:

- - b. Roger '-pawa-tom-uw-a-n <u>Asawis-ol</u> nt-olintuw-ew-ku-n. TA+O Roger 3-want-TI-APPL-30BJ-N <u>John-obv.sc</u> 1-sing_{AI}-APPL-INV-N 'Roger wants John to sing to me.' (EM)

Here, we see that we get matrix clause interaction with the embedded third person subject *Asawisol*, and not the first person object: obviative marking on the embedded subject in both cases, and matrix object agreement with the embedded subject in the ditransitive structure.

If we try to do ECM with the embedded first person object, ungrammaticality ensues:

- (21) a. *Roger n-puwa-tom-a-ku-n Asawis-ol nt-olintuw-ew-ku-n.

 Roger 1-want-TI-APPL-INV-N John-obv.sg 1-sing_{AI}-APPL-INV-N

 Intended: 'Roger wants John to sing to me.' (EM)
 - b. *Roger n-puwa-tom-a-ku-n Asawis nt-olintuw-ew-ku-n.

 Roger 1-want-TI-appl-inv-N John 1-sing_{AI}-appl-inv-N

 Intended: 'Roger wants John to sing to me.' (EM)

Here, I've tried to get agreement and inverse marking on the matrix verb, triggered by the embedded first person object. That's unacceptable, no matter if the embedded subject is obviative or proximate. These facts demonstrate that the third person subject in the 3>SAP inverse remains the highest argument in the subordinative clause—the object does not A-move over it.

4.2 3>3 inverse

Now let's turn to the 3>3 inverse. We get morphological inversion in 3>3 configurations when you have an obviative acting on a proximate, or an inanimate acting on an animate:

- (22) a. Wasis-ok Ø-wolikolul-ku-wa-l w-ikuwoss-uwa-l. Obv>prox child-prox.pl 3-praise-inv-pl-obv.sg 3-mother-ppl-obv.sg

 'The children were praised by their mother.' (GP, MA, RP)
 - b. '-Teksqihka-ku-n-ol Piyel tehpiseweya-l.
 3-make.sneeze_{TA}-inv-N-in.pl Peter pepper-in.pl
 'The pepper make Piyel sneeze.' (GP, MA, RP)

In (22a), we have an obviative external argument *wikuwossuwal* 'their mother.obv' and a proximate internal argument *wasisok* 'children.prox'—thus, we get morphological inversion. Similarly, in (22b), we have an inanimate external argument *tehpiseweyal* 'pepper' and an animate internal argument *Piyel* 'Peter', and we also get morphological inversion.

Now, let's consider what would happen if we embedded these under 'pawatomon. If the internal argument raised over the external argument, the internal argument would participate in ECM—it would become obviative, and the matrix verb would be able to agree with it in the TA and TA+O structures. And this is exactly what we get:

- (23) a. Piyel '-pawa-tom-on wasis-L Ø-wolikolul-ku-ni-ya w-ikuwoss-uwa-l. TI
 Peter 3-want-TI-N child-obv.pl 3-praise-inv-N-pl 3-mother-ppl-obv.sg

 'Peter wants the children to be praised by their mother.' (GP, MA, RP)
 - b. '-Puwa-l-a-L <u>wasis-L</u> Ø-wolikolul-ku-ni-ya w-ikuwoss-uwa-l. TA 3-want-TA-30BJ-0BV.PL <u>child-0BV.PL</u> 3-praise-INV-N-PL 3-mother-PPL-0BV.SG 'He wants the children to be praised by their mother.' (GP, MA, RP)
 - c. Piyel '-pawa-tom-uw-a-n <u>wasis-^L</u> Ø-wolikolul-ku-ni-ya w-ikuwoss-uwa-l. TA+O Peter 3-want-TI-appl-3obj-N <u>child-obv.pl</u> 3-praise-inv-N-pl 3-mother-ppl-obv.sg 'Peter wants <u>the children</u> to be praised by their mother.' (GP, MA, RP)

(24) Sapet '-pawa-tom-uw-a-n <u>Piyel-ol</u> '-teksqihka-ku-n tehpiseweya-l. TA+O Elizabeth 3-want-TI-appl-3obj-N <u>Peter-obv.sc</u> 3-make.sneeze_{TA}-inv-N pepper-in.pl 'Elizabeth wants pepper to make <u>Peter</u> sneeze.' (GP, MA, RP)

In all these examples, the embedded internal argument (wasis^L 'children.овv' and Piyelol 'Peter.овv') has become obviative.⁶ Recall that in the general case, third person internal arguments cannot become obviative due to a matrix third person animate:

- (25) a. Roger n-puwa-tom-a-ku-n nt-olintu-wew-a-n Asawis.

 Roger 1-want-TI-appl-inv-N 1-sing-appl-3obj-N John

 'Roger wants me to sing to John.' (EM, RP)
 - b. *Roger n-puwa-tom-a-ku-n nt-olintu-wew-a-n Asawis-ol.

 Roger 1-want-TI-3o-inv-N 1-sing-appl-3obj-N John-obv.sg

 Intended: 'Roger wants me to sing to John.' (EM, RP)

Thus, it must be the inverse that's allowing the internal argument to participate in ECM in (23)—in other words, the 3>3 inverse is a voice construction, involving the internal argument moving over the external argument.

Additionally, it's the embedded object that can trigger object agreement. We can see this in (24), where we find the third person animate object agreement marker -a, agreeing with Piyelol. We also see this with (23b), where the matrix verb ' $puwala^L$ is agreeing with obviative plural $wasis^L$ 'children'. If we try to agree with obviative singular wikuwossuwal 'their mother', the result is ungrammatical:

(26) *'-Puwa-l-a-l wasis-^L Ø-wolikolul-ku-ni-ya <u>w-ikuwoss-uwa-l</u>. TA 3-want-TA-3obj-obv.sg child-obv.pl 3-praise-inv-N-pl 3-mother-ppl-obv.sg Intended: 'He wants the children to be praised by <u>their mother</u>.' (GP, MA, RP)

This isn't due to word order, as scrambling is relatively free in Passamaquoddy, and we can and do get ECM with a postverbal argument:

- (27) a. *Laca '-sekpawol-oku-l espons-ol.*Roger 3-scare_{TA}-INV-OBV.SG racoon-OBV.SG
 'Roger was scared by a raccoon.' (EM, GP, RP)
 - b. Husa '-pawa-l-a-l espons-ol '-siktehpawol-oku-n <u>Laca-wol.</u> TA
 John 3-want-TA-3obj-obv.sg raccoon-obv.sg 3-scare_{TA}-INV-N <u>Roger-obv.sg</u>
 'John wants <u>Roger</u> to be scared by a raccoon.' (GP, MA, RP)

We know that we have ECM with *Lacawol* here, as *Lacawol* has been assigned obviative due to the matrix proximate. Strictly speaking, we don't know whether the matrix verb 'pawalal 'want' is agreeing with *esponsol* 'raccoon.obv' or *Lacawol* 'Roger.obv', as they are phi-featurally identical.⁷

The conclusion: the 3>SAP inverse does not involve a voice construction, as the third person external argument remains the highest argument for ECM, whereas the 3>3 inverse does involve a voice construction, as the internal argument becomes accessible to the matrix clause for ECM.

⁶The obviative plural marker is a floating low tone, represented here by a superscript ^L, that associates with the rightmost vowel/syllable in the word. This is not represented in the standard Passamaquoddy practical orthography.

 $^{^7}$ We also don't know which argument we're agreeing with in the ditransitive structure in (23c)—this is because agreement with goals in Passamaquoddy never tracks number features, and $wasis^L$ 'children.obv' and wikuwossuwal 'their mother.obv' are identical in phi features except for number.

5 A corollary

If the 3>SAP and 3>3 morphological inverses involve distinct syntaxes, we expect to find other syntactic differences between them. Here's one such difference:

- (28) a. *Tihtiyas n-pawa-tom-a-ku-n nt-olintu-n*. TA+O Tihtiyas 1-want-TI-APPL-INV-N 1-sing_{AI}-N 'Tihtiyas wants me to sing.' (EM, RP)
 - b. *Wasis-ok '-pawa-tom-a-ku-wa-n w-ikuwoss-uwa-l '-pomoka-hti-ni-ya. TA+O child-prox.pl 3-want-TI-appl-inv-pl-N 3-mother-ppl-obv.sg 3-dance-pl-N-pl Intended: 'Their mother wants the children to dance.' (GP, MA, RP)

We can have 3>SAP inverse on TA+O 'pawatomuwan (28a), but not the 3>3 inverse (28b). What's the source of this contrast?⁸

If the 3>SAP inverse doesn't involve A movement, then (28a) doesn't involve A-moving the embedded subject over the matrix subject. In contrast, if the 3>3 inverse does involve A movement, then (28b) must require you to A-move the embedded subject over the matrix subject. If so, the impossibility of (28b) starts to bear a striking similarity to the impossibility of passivizing ECM want in English (a fact known since at least Bresnan 1972:154):

(29) *The children were wanted (by their mother) to dance.

Under this light, the ungrammaticality of (28b) seems like it's due to the movement operation involved in the 3>3 inverse. Why this movement is impossible, I do not know.

While I don't have clear independent evidence that things cannot A-move out of the complement of 'pawatomon' in Passamaquoddy, there is evidence that embedded subjects participating in ECM can actually remain inside the embedded clause. It is possible to sandwich the embedded subject in between the embedded verb and an embedded adverb, as follows (I do not have the relevant data for the TA structure):

- (30) a. *Makolit '-pawatom-on* ['-qasqi-li-n <u>Piyel-ol</u> sepawonu]. TI

 Margaret 3-want_{TI}-N 3-run_{AI}-obv-N <u>Peter-obv</u> tomorrow

 'Margaret wants Peter to run tomorrow.' (EM, RP)
 - b. *Makolit '-pawatom-uw-a-n* ['-qasqi-li-n <u>Piyel-ol</u> sepawonu]. TA+O Margaret 3-want_{TI}-APPL-**30BJ**-N 3-run_{AI}-OBV-N <u>Peter-OBV</u> tomorrow 'Margaret wants Peter to run tomorrow.' (EM, RP)

Note that we still get the same ECM action going on: *Piyelol* is obviative because of the matrix proximate *Makolit*, and in the ditransitive structure we get matrix object agreement with *Piyelol*. All this without *Piyelol* overtly raising into the matrix clause.

We know that *sepawonu* 'tomorrow' cannot possibly be in the matrix clause, because in order to have a future interpretation in a matrix clause we need an explicit future marker, e.g. the preverb *koti*- 'be going to' or the second position clitic =oc 'will'; sepawonu(k) 'tomorrow' alone won't cut it:

- (31) a. *Koti-miyahsi-ewepiye-Ø kisuhs sepawonuk.* going.to-early-rise_{AI}-3 sun tomorrow 'The sun is going to rise early tomorrow.' (GP, RP)
 - b. Miyahsi=hc ewepiye-Ø kisuhs sepawonuk. early=fut rise_{AI}-3 sun tomorrow
 'The sun will rise early tomorrow.' (GP, RP)

⁸TI verbs do not participate in the direct-inverse contrast, so we cannot look at this configuration with TI 'pawatomon.

c. #Miyahsi-ewepiye-Ø kisuhs sepawonuk. early-rise_{AI}-3 sun tomorrow Intended: 'The sun rises early tomorrow.' (GP, RP)

Thus, the embedded subject *Piyelol* in (30) really must be inside the subordinative clause, even though it participates in ECM.

Interestingly, we don't seem to find the same pattern with TA 'pawalal 'want'—there, it is actually possible to have 3>3 inverse on the matrix verb (32).

(32) Wasis-ok '-pawa-l-ku-wa-l w-ikuwoss-uwa-l '-pomoka-hti-ni-ya. TA child-prox.pl 3-want-TA-inv-pl-obv.sg 3-mother-ppl-obv.sg 3-dance-pl-N-pl 'The children were wanted by their mother to dance.' (GP, MA, RP)

I do not know for sure why this is the case. One potential hypothesis is that TA 'pawalal 'want' involves a different syntax. Other TA verbs that embed subordinative clauses seem to have the semantics of object control verbs, like 'tolokimal 'order' and 'tahsimal 'convince'. And, suggestively, these likely object control predicates allow for matrix syntactic inversion, just like TA 'pawalal 'want':

(33) Roger Ø-nican-ol '-kisi-olokim-ku-l '-ciksotuw-a-n. TA, obj. control Roger 3-child-obv.sg 3-pfv-order_{TA}-inv-obv.sg 3-listen_{TA}-3obj-N 'Roger_i was ordered by his_i child_i to listen to him_i.' (EM, RP)

Thus, perhaps TA 'pawalal 'want' is also an object control verb, and its object originates in the matrix clause, binding PRO in the embedded clause. Having 3>3 inverse on an object control verb should cause no issue, as there wouldn't be any A-moving out of the embedded clause, but rather just A-movement within the matrix clause:

- (34) a. Roger i Ø-nican-ol '-kisi-olokim-ku-l [PRO_i '-ciksotuw-a-n]. Roger 3-child-овv.sg 3-pfv-order_{TA}-inv-овv.sg 3-listen_{TA}-3овј-N 'Roger_i was ordered by his_i child_j to listen to him_j.' (EM, RP)
 - b. Wasis-ok_i '-pawa-l-**ku**-wa-l w-ikuwoss-uwa-l [PRO_i '-pomoka-hti-ni-ya]. child-prox.pl 3-want-TA-inv-pl-obv.sg 3-mother-ppl-obv.sg 3-dance-pl-N-pl 'The children were wanted by their mother to dance.' (GP, MA, RP)

If so, the TA structure wouldn't actually be a case of ECM, but rather object control; only TI and TA+O structures would involve ECM.

This hypothesis also makes the interesting prediction that, all else being equal, the pattern in (30), where the embedded subject remains firmly in the embedded clause, should not replicate with TA 'pawalal (or other likely object control predicates), as the matrix object started out its life in the matrix clause. More work needs to be done to see if this is the right hypothesis to pursue.⁹

6 ECM vs. LDA

Bruening (2001) and LeSourd (2019) report that Passamquoddy is like Innu-aimûn (Branigan and MacKenzie 2002) and Meskwaki (Dahlstrom 2013) in allowing LDA with any argument in an embedded (conjunct) clause—i.e. anything in the embedded clause can act as a matrix object. The pattern with ECM in subordinatives is different: only the highest A position in the embedded clause can act like a matrix object.

⁹The classic tests for control vs. ECM involve sentential idioms and expletives. Unfortunately, we haven't yet found any sentential idioms in Passamaquoddy, and expletives cannot participate in inversion as they are inanimate (inanimate objects cannot invert over subjects).

Here's an idea about this difference: subordinative verbs lack the agreement found in C, and appear in contexts that are reasonably considered to be structurally reduced. This naturally suggests the following hypothesis: subordinative clause lack a CP layer. If so, we can make use of this structural difference to explain the locality contrast between ECM and LDA.

Bruening (2001) and Branigan and MacKenzie (2002) argue that the LDA-with-anything pattern is derived by $\bar{\rm A}$ movement to the edge of the embedded clause feeding agreement with the matrix verb (though see LeSourd 2019 for a dissenting view). If subordinative cluases lack a CP layer, we can't $\bar{\rm A}$ extract anything to their edge, so we can't get the LDA-with-anything pattern. Thus, whatever ends up in the highest A position in the embedded clause is the only thing that can participate in ECM—hence the strict locality of ECM.

7 Conclusion

In this note I've provided novel data on an ECM construction in Passamaquoddy that has, to my knowledge, not been described in the literature. In this construction, we get a subordinative clause embedded under a verb like 'pawatomon' want', and the highest argument within the subordinative clause shows certain matrix object properties: it is part of the same obviation domain as the matrix subject, and the matrix verb can show object agreement with it. I used the crucial locality properties of this construction to probe the syntax of the inverse in Passamaquoddy, finding support for Oxford's (2022) stance that the 3>SAP morphological inverse doesn't involve syntactic inversion, but the 3>3 inverse does. Thus, the 3>3 inverse (but not the 3>SAP inverse) is a kind of voice construction akin to Austronesian object voice. I ended by speculating on two threads for future research: when you can get inverse marking on the matrix verb in ECM and the difference between ECM and object control, and the distinct locality signatures of ECM and LDA in Passamaquoddy.

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