

**Syntax at the Edge: Cross-Clausal Phenomena and the Syntax of  
Passamaquoddy**

by

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### Abstract

This study attempts to understand a variety of cross-clausal dependencies through detailed study of one language, Passamaquoddy (Algonquian). It focusses in particular on three phenomena: successive cyclic wh-movement, wh-scope marking, and raising to object. In exploring these issues I adopt and argue for a recent approach to cyclicity, the *phase* and *Agree* theory of Chomsky (1998, 1999).

The successive cyclic nature of wh-movement is shown to be visible in Passamaquoddy in a phenomenon of agreement with moving operators (wh-phrases, relative operators, and focus operators). This agreement appears on every verb along the path of movement. I argue that the phase theory coupled with a necessary Agree relation between each verb and a moving operator can account for this pattern, as well as a complex pattern of interaction between types of extraction and verbal morphology.

Successive-cyclic agreement is also able to decide between competing theories of wh-scope marking, a construction in which short-distance wh-movement takes place but gives rise to a long-distance interpretation, through association with a scope-marking element in a higher position. Agreement is shown to take place even with covert movement in Passamaquoddy, in focus constructions and internally headed relative clauses. In wh-scope marking, agreement indicates that one type of scope marking construction involves covert movement of the lower wh-phrase, but a second type (the less restricted of the two) does not. This fact and others that correlate with the difference in agreement indicate that Passamaquoddy instantiates both of the leading analyses of wh-scope marking: Direct and Indirect Dependencies (van Riemsdijk 1983, Dayal 1994).

Raising to object is shown to involve a dependency of a different kind: one that is clause-bounded in one respect but not in another. Raising to object position does not actually target object position in the higher clause; instead an NP moves just to the edge of the lower clause, where Agree can take place with the higher verb (across a clause boundary). However, raising to object apparently feeds A-movement in the higher clause; but when it does, I show that the “raised” NP must be base-generated at the edge of the lower clause and not moved out of it. The reason (the ban on improper movement) follows from the way features are checked in a cyclic derivation. Data from Japanese are brought in to show the cross-linguistic generality of the principles adduced.

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# Abbreviations

Note: the unmarked value of certain categories is simply not indicated in the glosses. These are: Direct vs. Inverse (Direct unmarked), Independent vs. Conjunct (Independent unmarked), proximate vs. obviative (proximate unmarked), singular vs. plural (singular unmarked).

Abbreviations:

**1, 2, 3** first, second, *proximate* third person (obviative third person marked “Obv”)

**12** first person plural inclusive (both first and second persons involved); opposed to 1P, first person plural exclusive (no second person involved)

**Absent** absentative

**Adj** Ending that turns a noun or other element into a preverb or prenoun, usually with an adjectival meaning; resembles compounding

**AI** intransitive verb with animate subject

**AI+O** intransitive verb that takes an object

**An** animate

**App** applicative

**Conj** Conjunct (unmarked = Independent)

**Dir** Direct voice

**DubPret** dubitative preterit

**Emph** emphatic particle

**Foc** Focus particle

**Hes** hesitation pronoun, inflected for features of NP it fills in for

**IC** Initial Change (ablaut occurring in Changed Conjunct)

**II** intransitive verb with inanimate subject

**Inan** Inanimate

**Indef** indefinite subject (Indef/3 = indefinite subject + third person proximate object)

**Imp** Imperative

**Inv** Inverse voice (unmarked = Direct)

**Obv** obviative (unmarked = proximate)

**ObvS** obviative subject marker appearing internal to agreement morphology

**N** morpheme appearing in TI, AI+O, TA+O, and Subordinative verbs

**Neg** negative

**P** plural (e.g., ObvP = obviative third person plural)

**Part** participle agreement (agreement with the head of a relative clause; e.g., PartObv = participle agreement with an obviative third person antecedent)

**Poss** possessed theme

**Plural** stem plural marker used with AI verbs to distinguish dual from plural subjects

**Pret** preterit

**Quot** quotative particle (usually second position particle *yaq*), indicates that the sentence is known by hearsay or is reported speech

**(R)** remote; demonstratives distinguish three proximities: this (near speaker), that (near listener), that (remote)

**Recip** reciprocal

**Refl** reflexive

**Sub** Subordinative mode of the Independent Order

**TA** transitive verb with animate object

**TA+O** ditransitive verb

**TH** Theme Sign, generally not used but it appears in some examples cited from published sources

**TI** transitive verb with inanimate object

**Top** topic

# Orthography and Citations

## Orthography

Examples are given in the practical orthography in use in the Passamaquoddy community. Symbols have their usual IPA values, except that:

o = schwa

q = [kw]

hC = aspirated C

e = [æ] before h

' = abstract morpheme (historically w-) inducing aspiration in following consonant

C voiced intervocalically and initially.

Pitch accent is generally not marked, except where morphosyntactically relevant (for instance, agreement for obviative plural objects is often marked only in pitch accent on the verb). For a full treatment of Passamaquoddy pitch accent, see LeSourd (1993a).

## Citations

Examples without citations referring to the bibliography come from my own field notes, collected over the period August 2000–July 2001. These are coded in the following way: by the initials of the speaker(s) followed by numbers: AH,SN4:2.1 = Anna Harnois and Stella Neptune, from fieldnotes4.tex, dated February 1. AH = Anna Harnois, SN = Stella Neptune, WN = Wayne Newell, of Indian Township; DF = David Francis, DD = Dolly Dana, of Pleasant Point.

Text citations are reproduced exactly as they appear in the original texts, most of which were prepared by native speakers. Only morpheme boundaries (and morpheme interlinearization) are added. Occasional alterations to the Passamaquoddy are enclosed in [square brackets]. (Some word boundaries have been added without comment; none have been taken away.) The English translation that appeared with the text is included as the gloss; if it is altered in any way, the gloss provided here appears in [square brackets]. One text did not have an English translation: Newell (1974b). The English translations included here for the examples from this text were done by myself.



# Chapter 1

## Introduction: Passamaquoddy Syntax

### 1.1 Theoretical Goals

This study attempts to understand a variety of cross-clausal dependencies through detailed study of one language, Passamaquoddy (Algonquian). It focusses in particular on two constructions: raising to object, in which a single constituent acts as though it is an argument of two clauses simultaneously; and wh-scope marking, in which short-distance wh-movement takes place but gives rise to a long-distance interpretation, through association with a scope-marking element in a higher position. Both of these phenomena, it will be seen, will have much to tell us about the way multiple clauses are put together, and how material within one clause can become relevant to another.

#### 1.1.1 Cyclicity: Phases

In exploring these issues, I will take as given the notion of the cycle (Chomsky 1973, and much other work), and in particular will adopt and argue for one recent approach to cyclicity, the *phase* theory of Chomsky (1998, 1999). According to this theory, successive-cyclicity is forced by the fact that the output of the syntax is sent to the interfaces (the conceptual-intentional interface and the perceptual-articulatory interface) not all at once, but in stages. Each such stage is termed a *phase*; CP and  $\nu$ P constitute the phases of the syntactic derivation (where CP is the highest projection of the clause, and  $\nu$ P is the level at which all arguments of the verb have been introduced, internal and external; on  $\nu$ P see Kratzer 1996, Chomsky 1995, Marantz 1997). Once a phase has been sent to the interfaces, its contents are no longer relevant or accessible to the syntactic derivation; it has essentially been changed from a syntactic representation into representations that are interpretable at the two interfaces.

Successive cyclicity is forced by the *Phase Impenetrability Condition* (PIC), which is simply a restatement of the above: once a phase has been spelled out, its contents are no longer accessible to further syntactic derivation. However, material at the edge of the phase—the head of the highest projection (C and  $\nu$ ) and its specifier(s)—is accessible, because it is not spelled out with the rest of the phase, but with the next higher phase. It follows that any constituent that must move to a higher phase for some syntactic or semantic reason—for instance, a wh-phrase that must move long-distance to achieve a matrix interpretation—must

move to the edge of any containing phase in order to avoid being frozen in place, and be able to move further. The PIC, then, forces all long-distance movement to take place via at least Spec-CP (the edge of the CP phase) and Spec- $\nu$ P (the edge of the  $\nu$ P phase); that is, the PIC forces successive cyclicity of movement.

Successive cyclicity of operator movement is visible in Passamaquoddy in the phenomenon of participle agreement, described in detail in Chapter 4. This is a pattern of agreement with *wh*-phrases, the heads of relative clauses, and focus operators. It occurs over unbounded distances, with the verb of any clause that the operator passes through able to register agreement with it. Such a phenomenon provides *prima facie* evidence for successive cyclicity and the phase theory that derives it, particularly when combined with the notion of Agree.

### 1.1.2 Agree

Chomsky (1998, 1999) argues that feature checking, the mechanism of syntactic licensing and movement (Chomsky 1993, 1995 and much other work), takes place via an abstract operation called Agree. In Chomsky's system syntactic elements enter the derivation with uninterpretable features, which must be deleted prior to the derivation being sent to the interfaces. In the phase theory, any uninterpretable features must be deleted within the phase where their bearer is spelled out. Deletion takes place via matching or valuation, whereby one element matches or values its uninterpretable features against those of another element. For example, a functional head might possess uninterpretable  $\phi$  features (specifications for person, number, gender, etc.), which it must check against the  $\phi$  features of a noun phrase (NP). In order to check its features the head must find an NP with suitable features within its c-command domain; when it does Agree takes place. By this operation the  $\phi$  features of the functional head are valued by the  $\phi$  features of the NP it Agrees with (and spelled out as agreement morphology, when possible), and thereby deleted. In the same way, an NP that possesses uninterpretable features, call them Case, must check them against a functional head, by Agreeing with it. Agree can be symmetric, with both the functional head and the NP simultaneously checking features, or asymmetric, with only one checking features.<sup>1</sup>

Returning to movement, Agree is a prerequisite for movement to occur. Once an Agree relation is set up between a functional head and some element within its domain, that head may make available a specifier into which the Agreeing element can move. The exact mechanism of movement will not be as relevant to this study—whether it requires EPP features, empty features that only exist to permit movement through a phase boundary (the *p*-features of (Chomsky 1998))—; what will be important is the necessity of Agree. Successive cyclic movement, according to the phase theory, requires moving to and through the edges of CP and  $\nu$ P; if Agree is necessarily prior to Move, an element moving successive-cyclically must Agree with every C and  $\nu$  on its path. This, I contend, is what is visible as participle agreement in Passamaquoddy.

Moreover, the necessity of Agree explains a complex pattern of long-distance *wh*-movement described in Chapter 3. Passamaquoddy possesses two types of arguments: what will be called *core arguments*—subjects

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<sup>1</sup>Various refinements and additions can and have been made to this theory. For example, Pesetsky and Torrego (2001) hypothesize (following suggestions of Chomsky) that all syntactic features are in principle interpretable. It is only in certain syntactic contexts where they are not interpretable. For example,  $\phi$  features are interpretable on NPs, but uninterpretable on functional heads like  $\nu$  or T(ense); conversely, Case might be thought of as T or V features that are uninterpretable on NPs. Checking consists in matching uninterpretable against interpretable features in the derivation.



and objects—and *relative root arguments*. The latter are introduced by a preverb attached (sometimes only loosely) to the verb stem; they comprise various types of adjuncts, such as locative phrases, manner adverbials, degree modifiers, and so forth. The perhaps surprising fact is that long-distance extraction of relative root arguments requires the addition of relative roots to higher verbs. I argue in Chapter 3 that this is a reflex of the necessity of the Agree relation between a moving wh-phrase and *v*. The pattern is complicated by the existence of inherently relative root verbs, but it falls out from the theory of phases and Agree.

### 1.1.3 Raising to Object

Raising to object provides confirmation of this approach to multi-clausal derivation, and permits us to make various refinements. In this construction, an NP in a complement clause raises to the edge of that clause, and by doing so becomes, in important respects, a member of the higher clause. Various phenomena have been shown to target constituents that are clausemates (this is particularly clear in Japanese, data from which are brought into the investigation in Chapter 5); in raising to object, an element at the edge of the lower clause counts as clausemate with elements in the higher clause. That is, what these phenomena actually target are “phasemates,” and the edge of one phase counts as part of the next higher phase. The relevance of phase edges to higher phases in these cases follows from the PIC: all of these phenomena depend ultimately on *accessibility*; as hypothesized by the phase theory, phase edges (and only phase edges) are syntactically accessible.

At the same time, raising to object illustrates much about the nature of movement to the clause edge. In particular, this movement can only be A-bar movement. Moreover, it cannot feed A-movement processes in the higher clause (the ban on improper movement; Chomsky 1973, May 1979). There is a twist in raising to object constructions in Passamaquoddy (and Japanese), however, which will enable us to come to a deeper understanding of the ban on improper movement. This is that NPs *can* undergo A-movement in the higher clause, but when they do they do not originate in the lower clause. Instead, the evidence suggests that they are simply base-generated at the edge of the clause, in the position to which a moving NP raises. There is evidence in both Passamaquoddy and Japanese for two different derivations: in one, the raised NP moves to an A-bar position at the edge of the lower clause; in the other, it is base-generated there, and must move to an A-position in the higher clause. The way to understand this, I suggest, involves two components with far-reaching implications.

First, the widely assumed ban on improper movement (e.g., Chomsky 1981) is an epiphenomenon of the way clauses are built. As stated above, functional heads and arguments both enter the derivation with uninterpretable features, which must be deleted before they reach the interfaces. In an embedded clause, then, feature checking will take place in the normal way, with functional heads and arguments valuing and checking each other via Agree. By the time any element from the lower clause reaches the edge of the lower clause, where it is visible to the higher clause, it will have checked off all its uninterpretable features, rendering it unavailable for higher checking operations. However (following Chomsky 1998 and Pesetsky and Torrego 2001), uninterpretable features, when checked, are not deleted immediately; instead they are *marked for deletion*. At the end of the phase, any features that are marked for deletion do delete. This means that an NP that moves to the edge of the CP phase will briefly have the uninterpretable features that are

necessary for Agree. The higher  $\nu$  can Agree with this moved NP, because its uninterpretable features are still active. At the end of the  $\nu$ P phase, however, those features will be deleted, making further Agree (and A-movement) impossible.

It then follows that an NP can only be base-generated at rather than moved to the edge of the clause if it undergoes A-movement in the higher clause. Either it is generated without uninterpretable features, in which case it is invisible to Agree (and there is no raising to object), or its uninterpretable features must be checked against a higher functional head driving A-movement. In both Passamaquoddy and Japanese, base-generation of the “raised” object is possible just when it undergoes A-movement in the higher clause.

These facts also indicate that the property of being A- or A-bar is not one of *position*, but of checking operations (Agree and movement). In raising to object, when the NP moves out of the lower clause it does so by A-bar movement, to what must count as an A-bar position. However, when it is base-generated in what is by all tests the same position, it can undergo A-movement in the higher clause, meaning that it must have come from an A-position. This is contradictory if the A/A-bar distinction is one of *positions*, but not if it is one of checking operations.

Raising to object also interacts with successive-cyclic wh-movement, in a way that also follows from this theory of Agree, and the phase theory of movement. The interaction also shows the effects of general economy conditions operative in syntactic derivations (Chomsky 1993).

These issues and a thorough analysis of raising to object in Passamaquoddy, supplemented with data from Japanese, are presented in Chapter 5. Before coming to that, however, it will be necessary to cover some background on Passamaquoddy syntax. The remainder of this chapter provides an overview of Passamaquoddy, its morphosyntax and phonology, and conventions to be used throughout this work. It also investigates basic word order and clause structure, primarily through the study of textual material. Chapter 2 turns to A-movement processes and the workings of variable binding and scope, which will be important in establishing the differences between A- and A-bar movement in raising to object, as well as in providing useful tests for c-command. Chapter 3 describes extraction phenomena: wh-questions and relative clause formation, and begins to explore the issues of Agree and successive cyclicity in long-distance extraction. Finally, Chapter 4 turns to wh-scope marking.

#### 1.1.4 Wh-Scope Marking

Wh-scope marking represents another type of cross-clausal phenomenon. In this construction, an embedded wh-phrase moves to some embedded Spec-CP; however, it is interpreted not as an embedded question, but as a matrix question, by virtue of being associated with another wh-phrase (typically the one meaning ‘what’) in the matrix Spec-CP. This construction is currently the subject of much theoretical debate (see, e.g., the papers collected in Lutz, Müller, and von Stechow 2000), with the debate centering around how the matrix question interpretation is achieved. One camp, the Direct Dependency theory, claims that the embedded wh-phrase moves covertly to the matrix Spec-CP, replacing the scope-marker, which is analyzed as a purely expletive element. Hence, the Direct Dependency analysis assimilates wh-scope marking to long-distance wh-movement. In contrast, the Indirect Dependency theory claims that the scope marker is a question word in its own right, ranging over propositions. The embedded wh-question acts as a restriction

on this question. Hence *wh*-scope marking is not equivalent to long-distance *wh*-movement, and is instead a relation between one question (the matrix question, ranging over propositions) and another (the embedded question, functioning as a restriction on the first).

Passamaquoddy, it turns out, actually instantiates both types: it possesses one scope-marking construction with the properties predicted by the Direct Dependency theory, and another (more common and less restricted) scope-marking construction with the properties predicted by the Indirect Dependency theory. This means that universal grammar makes available both constructions, as has been suggested by various researchers (e.g., Beck and Berman 2000, Horvath 2000, von Stechow 2000). Of relevance to the study of cross-clausal phenomena, this means that elements appearing overtly at the edge of a lower phase can undergo further (successive cyclic) movement covertly; and that an entire clause can be doubled by another element representing the type of the whole, and this latter element can move independently of the former. (I offer some other constructions that might instantiate the same phenomenon.)

In exploring these theoretical issues, I present novel data on a language whose syntax has not been explored before. I have attempted to do this in a way that both makes it accessible to the linguistic community and does justice to the depth and subtlety of the language itself. Passamaquoddy, as I hope to show, has much of relevance for current syntactic debates, and much to teach us about the intricate workings of syntax. It is also an endangered language, in need of documentation, preservation, and revival. I hope that this study can contribute in some small way to keeping alive the richness of a truly unique human language.

## 1.2 Passamaquoddy

Passamaquoddy is one of four extant Eastern Algonquian languages, together with the closely related Micmac, Western Abenaki, and Delaware. Originally spoken along the Atlantic seaboard from the Maritime provinces to the Carolinas, Eastern Algonquian languages like Wampanoag (in Massachusetts) and Powhatan (in Virginia) were among the first languages encountered by the Europeans. Most of these languages are either lost or have been pushed westward (such as Delaware—into Oklahoma and Ontario). Passamaquoddy is still spoken in its original home, in the river valleys along the Maine-New Brunswick border. In New Brunswick the language is known as Maliseet (or Malecite); the language is thus often referred to as Passamaquoddy-Maliseet or Maliseet-Passamaquoddy. (The language will generally be referred to here simply as Passamaquoddy, since the speakers who participated in the study are all from the Passamaquoddy reservations.) Fewer than 500 fluent speakers of Passamaquoddy-Maliseet are left: roughly 100 in two communities in Maine (Sipayik or Pleasant Point and Motahkomikuk or Indian Township) and 400 or so in several towns in New Brunswick. Most fluent speakers are over 50 years old, but the communities have begun to institute bilingual education programs. Other language revival efforts are under way, with the aid of the Micmac-Maliseet Institute of the University of New Brunswick.

## (1) The Algonquian language Family (after Goddard 1978)

<u>Central and Plains Languages</u>	<u>Eastern Algonquian</u>	
Blackfoot	Micmac	Mahican
Cheyenne	Maliseet-Passamaquoddy	Munsee Delaware
Arapaho	Eastern Abenaki (Penobscot)	Unami Delaware
Cree	Western Abenaki	Nanticoke
Ojibwa	Loup A	Powhatan
Potawatomi	Loup B	Carolina
Menominee	Massachusetts/Wampanoag	
Fox	Narragansett	
Illinois	Mohegan-Pequot	
Shawnee	Eastern Long Island	

The Algonquian language family includes members spoken across North America from the Atlantic to the Rocky Mountains (1). It does not appear to be divisible into smaller genetic units, except for the Eastern Algonquian group (Goddard 1978, 1980, 1994), of which Passamaquoddy is a member. The data reported here, unless cited as published material (chiefly texts), comes from fieldwork carried out by the author in Motahkomikuk and Sipayik between July 2000 and July 2001.

Descriptive work on Passamaquoddy dates back several centuries. Recent published material includes LeSourd 1986, 1993a, 1993b, 1995; Leavitt 1985, 1996; Leavitt and Francis 1983; Sherwood 1986; Szabó 1980; Teeter 1971. There is also a large number of texts, which will be cited throughout this study.

### 1.2.1 Typology: Morphology and Syntax

Typologically the Algonquian languages are agglutinative and head-marking (Nichols 1986), or *polysynthetic*: they use complex, synthetic morphology to construct verbal and nominal stems, and to mark inflectional categories such as agreement. Two examples of fully inflected Passamaquoddy verbs appear below, illustrating these morphological properties:

- (2) **Kisi** yaq ona **skitapew-ehl-os-ultu-wok** tan te **etuci-woli-tahatomu-htit**.  
 Able Quot also man-change.form-Refl-Plural-3P WH Emph **IC.X.time-good-think.TI-3PConj**  
 ‘They could, it is said, change themselves into men whenever it pleased them.’ (Mitchell 1921/1976b, 16)

The first verb includes a preverb *kisi* expressing ability (which happens to be separated from the rest of the verb by two second-position clitics), and an initial element meaning ‘man’ plus a verbalizing suffix that gives the meaning ‘turn into a man’. (This sentence is from a story about a tribe of loons.) This is followed by a reflexive suffix, and then inflectional suffixes indexing the subject: a final suffix indicating a non-singular subject (glossed ‘3P’) and a plural stem marker to distinguish dual from plural (without the plural stem marker the subject would be dual).

The second verb, in a temporal adjunct clause, includes a preverb *etuci-* indicating a point in time (with the quantifier *tan*, it means ‘whenever’ or ‘every time’); this modifies ‘think of as good’, a transitive verb

formed from an initial ‘good’ plus a transitive verbal suffix used in many psychological predicates? The subject is marked by an inflectional ending, *-uhtit* (the dual-plural distinction is usually not made with transitive verbs). In addition to the fact that both verbs are morphologically complex, both derivationally and inflectionally, it should be noted that the verbs themselves constitute their respective clauses almost in their entirety. The arguments are indicated only in the verbal morphology.

Many of the languages of the Americas are polysynthetic in typology, for instance the neighboring Iroquoian languages, of which Mohawk is a famous example (Baker 1996). Other examples include Nahuatl and Southern Tiwa (Baker 1996), Kadiweu (Sandalo 1997), and other, unrelated languages. Such polysynthetic languages, defined by morphological properties, are also typically (possibly always) *nonconfigurational* in their syntax. Nonconfigurational or “free word order” languages, of which Japanese and Warlpiri are classic examples, do not rigidly place subjects before objects as in English, or vice versa. Instead nouns and verbs can appear in a variety of positions relative to each other. Word order is often manipulated to discourse effect, but it is usually the case that order does not mark any grammatical distinction (in particular, grammatical roles such as subject and object), as it does in English.

Approaches to nonconfigurationality as a syntactic type began with the influential work of Ken Hale in unpublished manuscripts in the late 1970s. Hale (1983) lists three properties characteristic of the syntax of nonconfigurational languages, illustrated for Passamaquoddy below. These are free word order (3), the use of null anaphora (5), and the appearance of discontinuous constituents (6).

(3) Free Word Order

- a. **N-siwehs** n-kisi-mil-a-n-ol *psite oqitonu-l.*  
 1-brother 1-Perf-give-Dir-N-InanP all canoe-InanP  
 ‘I gave my brother all the canoes.’
- b. N-kisi-mil-a-n-ol **n-siwehs** *psite oqitonu-l.*  
 1-Perf-give-Dir-N-InanP 1-brother all canoe-InanP
- c. *Psite oqitonu-l* **n-siwehs** n-kisi-mil-a-n-ol.  
 all canoe-InanP 1-brother 1-Perf-give-Dir-N-InanP

In 3, we see that the direct and indirect objects of a ditransitive verb can appear in basically any order with respect to each other and with respect to the verb. The topic of word order and allowable variation will be taken up directly below. For now, it is important to note that all order variations appear to be possible, and do occur in texts (though to varying frequency; see Section 1.4). Native speakers, when asked, will accept almost every combinatorial possibility (depending on syntactic context; see below). Free word order also permits NPs to appear across clause boundaries from the position in which they are interpreted:

- (4) **Nit** **mil-ut-ss** **assok-taqsuwakon**, *kiseltomuw-a-n* *’-tuwehka-n*  
 that.Inan give-Indef/3-DubPret strange-noise Indef.allow-Dir-N 3-use-N  
*etoli-piskahte-k.*  
 IC.there-be.dark-IIConj

<sup>2</sup>For a mostly descriptive approach to Algonquian word formation, see Goddard (1990b).

‘The wondrous noise that was given to him he is allowed to use in the dark world.’ (Mitchell 1921/1976c, 24)

Turning to null anaphora, the English translation of 5 contains three third-person pronouns: subject and object of ‘punish’ and subject of ‘behave’. None of these pronouns are present in the Passamaquoddy (hence, “null” anaphora):

(5) Null Anaphora

- a. Pol ’-koti-wsikiya-l eli-milomahtu-li-t  
 first 3-Fut-punish-Obv IC.thus-be.mischievous-ObvS-3Conj  
 ‘First, he will punish him for the many ways he has behaved’ (Mitchell 1921/1976a, 5:4–5)

Pronominal arguments are marked only in the verbal morphology. As is generally the case in *pro*-drop languages, overt pronouns only appear for emphasis or to serve some other marked function. The sentence in 2 above also illustrates the use of null anaphora.

The third of Hale’s properties is the use of discontinuous constituents, some Passamaquoddy examples of which appear in 6:

(6) Discontinuous Constituents

- a. “Keq **nikt** itom-uk **sipsis-ok**?” ’-toli-qecikes-in Wiwilomeq.  
 what Dem say-3P bird-3P 3-thus-ask-N W.  
 ‘“What are **those birds** saying?” asks Wiwilomeq.’ (Mitchell 1921/1976a, 21)
- b. Ipcol **msi=te** k-nacitaham-ku-k **skinuhsis-ok** **yut**, kt-oqeci=hc nehpuhu-ku-k.  
 because all=Emph 2-hate-Inv-3P young.man-3P here 2-try=Fut kill-Inv-3P  
 ‘Since **all the young men here** hate you, they will try to kill you.’ (Mitchell 1921/1976d, 12)

The pattern of discontinuity in Algonquian languages is highly restricted, to that shown here: a determiner appears preverbally, while the rest of the noun phrase appears postverbally (on this construction in the related language Fox, see Dahlstrom 1987). In this way it differs from the discontinuous constituents Hale considered in Warlpiri, which appear to be fairly unconstrained (see also Speas 1990 and Baker 2001).

Nonconfigurationality is independent of other properties of a language, such as morphological properties (e.g., polysynthesis); it refers simply to freedom of word order and the use of null anaphora and discontinuous constituents, and the apparent lack of structural asymmetries to be discussed below. I will not have much to say on the relation between morphology and syntax here; see LeSourd (2000b) on agreement morphology (in Passamaquoddy) and its bearing on syntactic typology.

### 1.2.2 Nonconfigurationality

It is necessary to begin a study of the syntax of an Algonquian language with the issue of nonconfigurationality, since most previous work on the syntax (and morphology) of languages of this family has either taken it for granted that Algonquian languages are nonconfigurational (Halle and Marantz 1993; Reinholtz 1999; Reinholtz and Russell 1995; Russell and Reinholtz 1995, Russell and Reinholtz 1997), or has asserted it, showing that nonconfigurational properties characterize the language in question (Dahlstrom 1986,

Grafstein 1989). For example, Dahlstrom (1986) argues that weak crossover is absent in Cree due to its nonconfigurationality and the obviation system. (I will explain this fact differently; see below and Chapter 2.) More functionally oriented studies of word order imply that syntactic principles simply play no role in determining constituent order (Rhodes 1979, Tomlin and Rhodes 1979, Leman 1999)<sup>3</sup>

Nonconfigurationality is also a large question with far-reaching consequences for the language's syntax, given that most theories of nonconfigurationality view it as a language-wide property, a "macroparameter" (Baker 1996) that sets the syntax as once and for all as nonconfigurational, giving rise to a host of properties besides the three identified by Hale. Such an approach to nonconfigurationality argues that there is a fundamental grammatical property distinguishing nonconfigurational languages from configurational ones. Hale's original proposal was that nonconfigurational languages lack phrase structure rules that order arguments (hierarchically or linearly), at least as far as surface syntax goes (see also Hale 1992). Instead arguments (determined at a level of Lexical Structure) are mapped onto a flat structure in any linear order.

A variant of this theory that has been more widely adopted (proposed originally in response to Hale's theory) is the **Pronominal Argument Hypothesis** (PAH) of Jelinek (1984). This theory claims that argument positions in nonconfigurational languages are hierarchical, but they can only be occupied by null pronominals, or in some versions the agreement morphology itself. Overt noun phrases must appear as clausal modifiers—sentence adjuncts. Baker (1996) has advanced a version of this proposal that is specific to polysynthetic languages, and attempts to account for a number of syntactic properties beyond those originally discussed by Hale. On all versions of this approach, nonconfigurationality is an underlying property, one that is determined once and for all for a given language.

It should be noted right from the outset that all of the properties that the PAH attempts to account for can be found in indisputably configurational languages. Hence, there must also be configurational mechanisms that give rise to nonconfigurational properties (many have been proposed). For any given language, then, it is an open question whether its nonconfigurational properties arise from some sort of macroparameter (e.g., mandatorily pronominal arguments), or from disparate configurational mechanisms (e.g., scrambling).

I will show here that Passamaquoddy, despite initially appearing to fit quite snugly in the nonconfigurational mold, possesses many properties that contradict a nonconfigurational analysis. Only configurational mechanisms can account for the data that will be presented in this thesis, as should become clear as the study progresses. These mechanisms will also account for the nonconfigurational properties that Passamaquoddy does possess. In the following sections I foreshadow the data to come by offering several arguments that Passamaquoddy *must* be viewed as configurational; but first I introduce some of the mechanisms and predictions of a nonconfigurationality theory.

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<sup>3</sup>There are many studies that have ignored the issue of nonconfigurationality, and simply investigated the syntax of Algonquian languages. These include Branigan and Mackenzie 1999; Frantz 1971, 1978b, 1978a, 1980; James 1984; Rhodes 1990a, 1990b, 1991, 1998, and Richards 2000.

### 1.2.3 The Pronominal Argument Hypothesis

In the rest of this section I will argue against a generalized version of the Pronominal Argument Hypothesis (PAH), as advocated by Jelinek (1984, 1995)<sup>4</sup> and Baker (1991, 1995, 1996), though similar arguments can be given against other theories (e.g., the Dual Structure Hypothesis of Hale 1983 and Austin and Bresnan 1996).

The Pronominal Argument Hypothesis, originally advanced by Jelinek (1984), states that noun phrases in nonconfigurational languages may not appear in argument positions, but must be adjoined at the clause level, as sentence modifiers (see also Speas 1990, Hale 1994). As such they are analogous to adjuncts like those in the following English sentences:

- (7) a. She out-bowled him.  
 b. She out-bowled him *yesterday*.  
 c. She out-bowled him *yesterday at the league game*.  
 d. *Yesterday* she out-bowled him **at the league game**.  
 e. **At the league game** *yesterday* she out-bowled him.

These adjuncts are optional, can iterate, and can appear on both the left and the right sides of the clauses they modify. If NPs in nonconfigurational languages have the status of adjuncts, we immediately explain why they are optional (null anaphora) and can appear in any order (free word order).

The NPs are interpreted as arguments of the clause via coindexation with a pronominal element in argument position. They are therefore not exactly analogous to the adjuncts presented above, but are more like cases of left-dislocation (Ross 1967, Chomsky 1977), where a peripheral NP is resumed by a pronoun in argument position:

- (8) a. *The man my father works with in Boston*, **he**'s going to tell the police that the traffic expert has set that traffic light on the corner of Murk Street far too low. (Ross 1967)  
 b. *A company like that*, you know **it** can shell out big bucks.

The pronouns in pronominal argument languages are either null, on the model of subject *pro*-drop languages (e.g., Jaeggli and Safir 1989 and references there), or are the agreement morphology itself. On the first view, *pro* is licensed or identified by the agreement morphology that is the hallmark of many nonconfigurational languages (particularly the polysynthetic ones); on the second, the pronominal argument attaches via affixation (head movement) or cliticization to the verb or other predicate (e.g., Halle and Marantz 1993).

The structure that the null pronominal version of the PAH would posit for the Passamaquoddy sentence in 6b (simplified just to the quotation here) would be the following. The overt NPs are adjoined to IP, coindexed with null pronouns in argument position. The relative positions of the noun phrases are freely

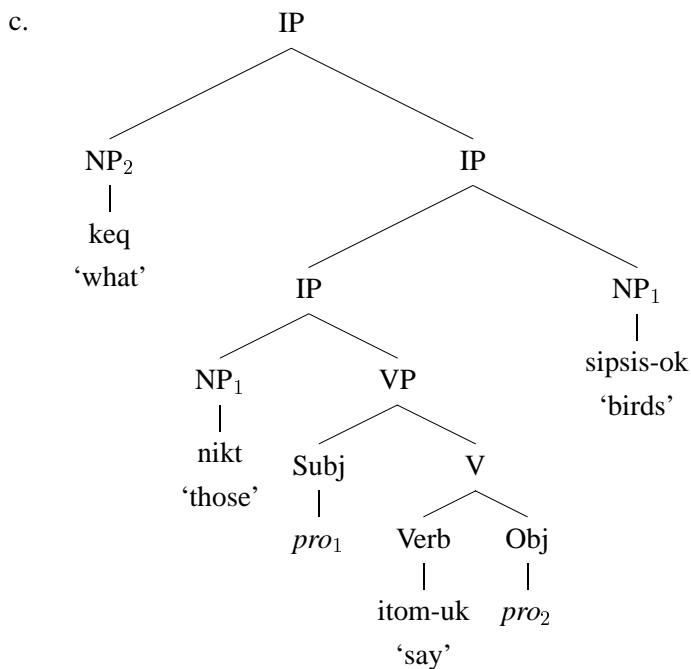
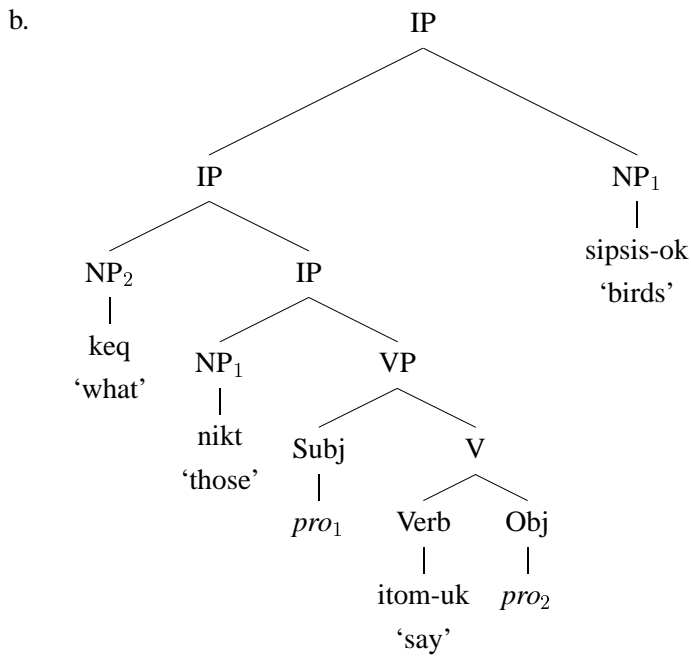
<sup>4</sup>In this presentation I ignore parts of Jelinek's original proposal that are specific to Warlpiri and other case-marking languages (dependent-marking in the sense of Nichols 1986), for instance split ergativity. I will only discuss those parts of the theory that apply to the class of nonconfigurational languages as a whole; other researchers have applied these to nonconfigurational languages other than Warlpiri.



reversible, giving considerable structural ambiguity (as indicated by the two structures shown for this simple sentence; there is actually a third, where *sipsis-ok* is adjoined beneath *nikt*):

(9) Passamaquoddy (Mitchell 1921/1976a, 21)

- a. Keq nikt itom-uk sipsis-ok?  
 what Dem say-3P bird-3P  
 ‘What are those birds saying?’



Actual argument positions within the VP are occupied by null pronouns, indicated as *pro* in 9. These are

coindexed with the NPs adjoined at the IP level. In Jelinek's original formulation, more than one NP adjunct could be coindexed with a given argument position, as shown here for 'those' and 'birds', resulting in discontinuous constituents. (Baker (1996) argues against this, and suggests a different analysis of discontinuous constituents in Mohawk; this will not be important here.)

As stated, this theory can account for free word order, at least to some extent (it is difficult to see how it would permit certain orders, for instance NPs appearing between the verb and a complement clause that is supposedly in argument position; see below), and for null anaphora (however, any proposal to account for pro-drop in configurational languages can be extended to null anaphora in nonconfigurational ones). The PAH is most impressive when it can successfully account for less superficial syntactic properties, such as a lack of structural asymmetries.

### Condition C

According to the PAH, overt NPs are adjoined to IP, and can be adjoined in (almost) any order. Relations among NPs, then, should not show the subject-object asymmetries characteristic of configurational languages like English.

For example, configurational languages obey what is known as Condition C, a principle that forces disjoint reference. This condition, the third of three principles of Chomsky's (1981) Binding Theory (see also Lasnik 1976 and Reinhart 1981), can be stated as follows:

- (10) a. Condition C:  
       a referring expression (e.g., a name) must not be coreferent with a c-commanding NP.  
       b.  $\alpha$  c-commands  $\beta$  iff the first branching node dominating  $\alpha$  also dominates  $\beta$ .

This principle is behind the subject-object asymmetry in English in 11 (where coreference is indicated by subscripts):

- (11) a. Joseph<sub>1</sub> sold his<sub>1</sub> car.  
       b. \*He<sub>1</sub> sold Joseph<sub>1</sub>'s car.

In English, the subject c-commands the object and not vice-versa. It follows that an R(efering)-expression like *Joseph*, as a subject, can be coreferent with a pronoun contained within the object, since that pronoun does not c-command it; but the same R-expression in object position cannot be coreferent with a subject pronoun, since that pronoun does c-command it.

In a pronominal argument language, however, NPs are never c-commanded by pronominal arguments, since they are adjoined to the clause, while the pronouns are in argument positions within the VP (as in 9)<sup>5</sup>. Therefore, the PAH predicts that Condition C should be absent in pronominal argument languages. In other

<sup>5</sup>Overt pronouns pose a problem: are they in argument position, or are they, like overt NPs, adjoined to IP? If the latter, there should be specific configurations where they *will* c-command an R-expression. Similarly, overt R-expressions will also c-command each other in specific configurations; hence sentences like 'John likes John's brother' should be grammatical in some word orders but not in others (barring other factors; see Ritter and Rosen 1993). These configurations have never been tested, to my knowledge. Note also that Condition C would rule out Jelinek's original approach to discontinuous constituents: in any of the possible structures for 9, one of *nikt* and *sipsisok* will c-command the other.

words, a pronominal subject or object should be able to be coreferent with an R-expression contained within any NP, subject or object.<sup>6</sup>

This is exactly the case in Passamaquoddy. In fact, in the absence of another NP in the discourse, the default interpretation of the pronouns (visible as agreement<sup>7</sup>) in the following Passamaquoddy sentences is exactly the coreference indicated.<sup>8</sup>

(12) DF6:3.2

- a. Sakom nokka-tekatun (w)-mani-m.  
governor completely-hide (3)-money-Poss  
'The governor hid all of his money.'
- b. ?Nekom nokka-tekatun sakom (w)-mani-m.  
3 completely-hide governor 3-money-Poss  
'He<sub>1</sub>' hid all of the governor<sub>1</sub>'s money.'

Speakers will initially hesitate in accepting the coreference pattern in 12b (the single question mark indicates this hesitation), but after some thought will generally accept it (see below).

It is possible for the PAH to make an additional prediction regarding such structural asymmetries as Condition C, given some additional hypotheses about *why* NPs are excluded from argument positions in nonconfigurational languages. Baker (1996) attempts to derive this ban from a restriction on Case assignment: the agreement morphology of nonconfigurational languages absorbs Case. There is no Case to be assigned to NPs, due to this absorption, and hence NPs cannot appear in argument positions due to the Case Filter (Rouveret and Vergnaud 1980, Chomsky 1980).<sup>9</sup> Clauses, however, are widely regarded as not requiring Case (Stowell 1981). Hence, Baker concludes, clauses can and do appear in argument positions. Empirically this is motivated by the fact that clausal complements appear in a fixed position in Mohawk (and in Passamaquoddy): after the verb that selects them.

If clausal complements are in object position, it follows that pronouns in argument position in a higher clause will always c-command into a complement clause. Therefore, the PAH predicts that, although structural asymmetries like Condition C are absent within a clause, they should appear across clause boundaries.

Baker (1996) shows that this prediction holds in Mohawk. However, it does not hold in Passamaquoddy. Pronouns and R-expressions can be coreferent across clauses to the same extent that they can be within clauses:

(13) AH 6:2.22

<sup>6</sup>This actually becomes more complicated, given the possibility of connectivity (Barss 1986) or reconstruction effects; see Baker (1996).

<sup>7</sup>The third person prefix /'-/ is historically /w-/ (parallel to *n-* and *k-*). This informant (DF) is one of the oldest living speakers, and he occasionally pronounces the third person prefix as a voiceless /w/ before sonorants, as in 'his money' here. Younger speakers do not pronounce any reflex of the prefix before sonorants.

<sup>8</sup>I have not yet found any word order permutations that do give rise to a Condition C violation. On Condition C in the Algonquian language Cree see Russell and Reinholtz 1997.

<sup>9</sup>The Case Filter: \*NP without Case if NP has phonetic features and is in an argument position. *Pro* does not have phonetic features, and is permitted in argument position; it is required, by the Projection Principle.

- a. Susehp litahasu [<sub>CP</sub> 'tahcuwi-tqon-ku-l hisis-ol not nucitqonket ] .  
 Jos. think.3 3-must-arrest-Inv-Obv older.bro-Obv this policeman  
 'Joseph<sub>1</sub> thinks that his<sub>1</sub> older brother the policeman has to arrest him<sub>1</sub>.'
- b. Litahasu [<sub>CP</sub> 'tahcuwi-tqon-ku-l Susehp hisis-ol not nucitqonket ] .  
 think.3 3-must-arrest-Inv-Obv Jos. older.bro-Obv this policeman  
 'He<sub>1</sub> thinks that Joseph<sub>1</sub>'s older brother the policeman has to arrest him<sub>1</sub>.' (Informant: same as previous sentence)

It is even possible for a dual or plural (null) pronoun to be coreferent with more than one R-expression in the lower clause:

- (14) Litahasu-wok [<sub>CP</sub> cipotu te Piyel nonom-uw-a-n Lehpit-ol utapakon ] .  
 think-3P maybe Emph P. recognize-App-Dir-N L.-Obv 3.car  
 'They<sub>1,2</sub> (ProxDual) think that Peter<sub>1</sub> (Prox) will recognize Lehpit<sub>2</sub>'s (Obv) car.'

At the same time, the binding of pronouns by quantifiers indicates that elements within the higher clause c-command into the lower clause (see below and Chapter 2):

- (15) Psi=te wen litahasu [<sub>CP</sub> eli w-itapi woli-pomawsuwin-uw-ulti-htit ] .  
 all=Emph someone think.3 C 3-friend.ObvP good-person-be-Plural-3PConj  
 'Everyone<sub>1</sub> thinks his<sub>1</sub> friends are good people.' AH7:3.18

Hence, there must be some other explanation for the lack of Condition C effects in Passamaquoddy, and in other languages: according to Koenig and Michelson 1998, 131, Oneida speakers accept the cross-clausal coreference that Baker's Mohawk speakers reject (Oneida is the closest relative of Mohawk); Baker himself notes some disagreement among his informants.

C-command does not seem to be at issue, as illustrated by the variable binding above.<sup>10</sup> I suspect that the explanation for the lack of Condition C effects is that various (ill-understood) factors in Passamaquoddy allow the type of "accidental coreference" discussed by Reinhart (1983b, 1999), which permits violations of Condition C. In English, for example, Condition C can be violated under certain pragmatic conditions (following Reinhart, coreference is marked by italics to distinguish it from binding):

- (16) John and Mary have something in common. SHE thinks John's a genius, and HE thinks *John's* a genius too.

In Passamaquoddy, most of the speakers I have presented with sentences involving Condition C violations initially objected to them, but then began to permit them more and more (suggesting that they became used to inferring pragmatics that would permit the coreference). Using discourse particles facilitates the coreference reading:

- (17) a. Nekom **te** 'kisi-kospahtun Susehp utapakon.  
 3 **Emph** 3-Perf-wash.TI Jos. 3.car  
 'HE<sub>1</sub> washed Joseph<sub>1</sub>'s car.' AH7:3.18

<sup>10</sup>It would seal the case to show that Condition C is violable at the same time as variable binding holds across the clause boundary, but I do not have such examples at this point.

- b. Nekom **te** ' -kisi-yah-a-n Tihtiyas mihtaqs-ol keti-naci-witka-t.  
 3 **Emph** 3-Perf-tell-Dir-N T. 3.father-Obv IC.Fut-go.do-dance-3Conj  
 'SHE HERSELF<sub>1</sub> told Tihtiyas<sub>1</sub>'s father that she<sub>1</sub> was going dancing.' AH,SN 6:3.4

This fact also suggests that it is pragmatics that governs coreference in such cases. In English, coreference becomes better with words like 'only' and 'even': *Only he ever gets to drive John's car.* Moreover, I find the English translation of 17b, using 'she herself', to be fairly acceptable.

In addition, there is a structural factor that influences the availability of the coreferent reading in Passamaquoddy. This is the fact that, when the subject and the possessor of the object are to be interpreted as disjoint in reference, possessor raising—promoting the possessor to object status and making it obviative with respect to the subject—is virtually obligatory.<sup>11</sup> For example, the disjoint reading of 12b, repeated in 12a, requires possessor raising (12b):

(18) DF6:3.2

- a. ? Nekom nokka-tekatun sakom (w)-mani-m.  
 3 completely-hide governor 3-money-Poss  
 'He<sub>1</sub>' hid all of the governor<sub>1</sub>'s money.' (=12b)
- b. Nekom nokka-tekat-uw-a-n sakoma-I (w)-mani-m.  
 3 completely-hide-App-Dir-N gov.-Obv 3-money-Poss  
 'He<sub>1</sub> hid all the governor<sub>2</sub>'s money.'

In possessor raising, an applicative suffix is added to the verb, making it ditransitive. The possessor is the primary object, while the possessed NP is the secondary object (see below for these terms).

Interestingly, the speaker who produced the pair in 18 initially ruled out coreference in 18a, but when presented with 18b, revised his judgement to the effect that 18a *must* involve coreference. This fact suggests that Condition C *is* operative in Passamaquoddy, but it can be overruled by various pragmatic and structural factors. (It remains to be seen whether similar factors are at work in Oneida and Mohawk.)

### Weak Crossover

A second widely discussed asymmetry is known as Weak Crossover (WCO; Postal 1971, Wasow 1972). WCO arises when an operator that should be able to take scope over and hence bind a pronoun is unable to, due (in a purely descriptive sense) to the fact that it has crossed over the pronoun in its scope-taking movement. For example, in English wh-phrases take scope over the entire clause, but an object wh-phrase nevertheless cannot bind a variable contained in the subject. In contrast, a subject wh-phrase can bind a variable contained in the object:

- (19) a. \* [CP Who<sub>1</sub> does his<sub>1</sub> mother love *t* ] ?  
           ↑  
           └──┘
- b. [CP Who<sub>1</sub> *t* loves his<sub>1</sub> mother ] ?  
       ↑  
       └──────────┘

<sup>11</sup>According to Sherwood 1986, possessor raising *is* obligatory, but I have found cases where it does not apply, for reasons that are unclear to me.

This asymmetry is usually ascribed to some principle or principles with the following descriptive force:

- (20) Weak Crossover: A pronoun interpreted as a variable bound by an operator *Op* must be c-commanded by the trace of *Op*.

In English, the base position of the subject (prior to wh-movement) c-commands the object, but not vice-versa.

At first sight WCO is simply absent from Algonquian languages, as illustrated here for Passamaquoddy and as claimed by Dahlstrom (1986) for Cree:

- (21) Passamaquoddy

- a. Wen pihce w-itapihi-l nekol-iht kcihku-k?  
 who long.ago 3-friend-Obv IC.leave-3Conj**Inv** forest-Loc  
 ‘Who<sub>1</sub> did his<sub>1</sub> friend abandon in the forest a long time ago?’ AH,SN 8:5.8
- b. Wen pihce wenitaham-iht ’-qoss-ol?  
 who long.ago IC.forget.about-3Conj**Inv** 3-son-Obv  
 ‘Who<sub>1</sub> did his<sub>1</sub> son forget about long ago?’ AH,SN 8:5.8

- (22) Cree (Dahlstrom 1986, 56–57)

- a. namo-ya awiyak wanikiskisitota·k otawa-simisa  
 no one forget.Obv/3[**Inv**] his.child.Obv  
 ‘His<sub>1</sub> (Prox) children (Obv) forget no one<sub>1</sub> (Prox)’
- b. awi-na e--sa·kihikot oma-ma-wa?  
 who love.Obv/3[**Inv**] his.mother.Obv  
 ‘Who<sub>1</sub> (Prox) does his<sub>1</sub> (Prox) mother (Obv) love?’

Initial studies of Japanese made the same claims: WCO was absent. Saito and Hoji (1983), however, showed that WCO is present in Japanese, it is just masked by the availability of other movement operations. In the same way, it can be shown that WCO is only absent in one specific configuration in Passamaquoddy: the Inverse. The examples above are all in the Inverse Voice, as are all of Dahlstrom’s Cree examples. When the Direct Voice is used, WCO does appear:

- (23) WN5:11.15

- a. [<sub>NP</sub> Not kis-uwikho-k ] ’-pott-aqosomon ’t-ahtwikhikon.  
 Dem Perf-write-3ConjTI 3-accidentally-burn 3-book  
 ‘The one who wrote it accidentally burned his book.’
- b. \* Keqsey pett-aqoso-k [<sub>NP</sub> not kis-uwikho-k ] t?  
 what IC.accidentally-burn-3ConjTI Dem Perf-write-3ConjTI  
 ‘What<sub>1</sub> did the one who wrote it<sub>1</sub> accidentally burn?’ (Echo question only)

In Chapter 2, I argue that the Inverse involves an A-movement operation that raises the object to a position c-commanding the subject. From this position it is able to take scope over and bind into the subject; hence wh-movement will not cross the subject, and WCO will not arise. If this is correct, the explanation for the

lack of WCO—a nonconfigurational property—is crucially configurational: an A-movement mechanism, which requires that NPs be in argument positions.<sup>12</sup>

### 1.2.4 Passamaquoddy is Configurational

Despite its influence on syntactic studies of Algonquian, the PAH could not be correct for Passamaquoddy. The above discussions of Condition C and WCO made it clear that some nonconfigurational properties have other explanations. WCO, in particular, requires configurational mechanisms like A-movement. In Chapter 5, I will show that raising to object also requires movement and reference to argument positions. In Section 1.4, I show that textual counts and fixed word order in certain embedded contexts indicate a basic word order for overt NPs Passamaquoddy. In the remainder of this section I will give one more argument that Passamaquoddy must be configurational: from quantifiers and variable binding. Finally, I will raise some conceptual issues that arise from specific implementations of the PAH that liken NP positions to left-dislocation structures.

#### Quantifiers and Variable Binding

In Chapter 2, I will show that quantifiers can bind pronominal variables that they A-bind in Passamaquoddy. A-binding is defined in terms of argument positions: an NP A-binds another NP iff it binds that NP from an argument position. Thus, a subject A-binds an object but an object does not A-bind a subject:

- (24) a. Katolu **psi=te** **wen** ’-koselom-a-l *wikuwoss-ol*.  
of.course all=Emph someone 3-love-Dir-Obv 3.mother-Obv  
‘Of course everyone<sub>1</sub> loves his<sub>1</sub> mother.’ AH8:5.3
- b. *Skitap musqitaham-ac-il* ’-koti-tqon-a-l **psi=te** **wen-il**.  
man hate-3Conj-PartObv 3-Fut-arrest-Dir-Obv all=Emph someone-Obv  
‘A man that he<sub>\*1</sub> hates will arrest everyone<sub>1</sub>.’ AH,SN 10:7.15

The only way for an object to c-command the subject is to use the Inverse, which, as stated above, reverses the hierarchical order of subject and object:

- (25) Kat=op **wen** **nokol-oku-hi-l** **woli-witapihi-l**.  
Neg=would someone-Obv leave-Inv-Neg-Obv 3.good-friend-Obv  
‘His<sub>1</sub> best friend would abandon no one<sub>1</sub>.’ AH,SN 6:3.2

The generalization follows argument structure hierarchies generally: the subject’s argument position c-commands the object’s argument position but not vice versa. However, there is also an A-position above the subject in Passamaquoddy that an object can move to in the Inverse, enabling it to A-bind the subject.

<sup>12</sup>The PAH, by itself, does not explain any lack of WCO in a pronominal argument language. If wh-movement applies (Baker argues that it does in Mohawk), a moving wh-phrase will necessarily cross any NP adjoined to IP that contains a pronoun, which should give rise to WCO. Without additional stipulations, the PAH therefore predicts a lack of an asymmetry in the opposite direction: WCO should rule out binding by the object and by the subject. Baker suggests that variable binding in Mohawk is actually parasitic gap formation, which is made available by the lack of c-command among NPs (parasitic gaps are known to be subject to an anti-c-command condition; Chomsky 1986). This will not work for Passamaquoddy, where WCO is only absent in the Inverse.

It is unclear how to state such a generalization if all overt NPs in Passamaquoddy are sentence adjuncts. The quantifier itself must be an adjunct; and the NP containing the variable must also be an adjunct. Stipulating conditions on which quantifiers can bind into which other NPs would require reference to the pronoun in argument position that each is related to. The relevant condition would have to state that a quantifier may bind a variable if and only if the pronominal it is co-indexed with c-commands the pronominal that the NP containing the variable is coindexed with. While such a baroque condition could be stated, it misses a simple generalization, and would be nothing more than a stipulation, itself in need of explanation. It would also require a difference between, on the one hand, the coindexing relation between the quantifier and its pronoun placeholder in argument position, and the binding of the variable contained within another NP on the other. In contrast, stating that quantifiers (overt NPs) appear in or pass through argument positions enables a simple statement about the availability of variable binding: it requires A-binding.

Turning to elements that are unquestionably sentential adjuncts, we find that c-command is again relevant. A subject quantifier, for example, is able to bind into a temporal adjunct clause, but an object quantifier is not:

- (26) a. Kenoq ma=te wen mehcine-w mesq kisi-westuwam-ahq pahtoliyas-ol.  
 however Neg=Emph someone die.3-Neg not.yet Perf-talk.to-3ConjNeg priest-Obv  
 ‘No one<sub>i</sub> died before he<sub>i</sub> talked to a priest.’ AH,SN 8:5.7
- b. \*Piyel naka Petak ’-koti-komutonom-a-wa-l psi=te wen-il [ qeni macaha-t ].  
 P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during leave-3Conj  
 ‘Piyel and Petak are going to rob everyone<sub>i</sub> while he<sub>i</sub>’s away.’ AH,SN 10:7.16

This means that subjects c-command into such adjunct clauses, but objects do not. If the PAH were correct, this would be very difficult to explain: even an object quantifier should be adjoined to the clause, where it should c-command into the adjunct just like the subject.

In other words, the conditions on variable binding are easy to state, and resemble conditions familiar from other languages, if quantifiers and NPs start out in (and pass through) argument positions, and variable binding requires A-binding. They are much more difficult to explain, requiring bizarre stipulations, if all NPs are adjoined to the clause. The conclusion must be that overt NPs in Passamaquoddy do not have the status the PAH requires.

### Left-Dislocation and Quantifiers: Issues

As stated above, the PAH claims that NPs are not arguments in nonconfigurational languages, but are instead adjuncts, analogous to left-dislocated NPs in English and other languages. They are like left-dislocation in being related to a pronoun in argument position. Various authors have tried to extend the analogy further, making predictions for pronominal argument languages if all NPs are left-dislocated. For example, Jelinek (1995) and Baker (1996) claim, following Cinque (1990), that nonreferential quantifiers are barred from left-dislocated positions, and hence pronominal argument languages should simply lack nonreferential quantifiers. If this is true, Passamaquoddy is obviously not a pronominal argument language, since it possesses nonreferential quantifiers that bind variables, as illustrated above.



However, the claim that nonreferential quantifiers are banned from left-dislocated positions is not exactly true. To illustrate the ban, Jelinek (1995) and others have provided English examples like the following:

(27) English (Austin and Bresnan 1996, 238)

- a. \* Every fish, it swam.
- b. \* They swam, most fish.

Baker (1996) models his version of the PAH on Romance Clitic Left-Dislocation (CLLD). Cinque (1990) has argued that, like English left-dislocation, CLLD disallows nonreferential quantifiers:

(28) Italian

- a. \* Qualcosa, prima o poi lo farò.  
something, sooner or later it I will do (Cinque 1990, 76)
- b. \* Nessuno, lo conosco in questa citta.  
'Nobody, I know him in this city.' (Rizzi 1986, 395–397)
- c. \* Tutto, lo diro' alla polizia.  
'Everything, I will say to the police.' (Rizzi 1986, 395–397)

However, there are problems with these claims. First, quantifiers are not banned from dislocation structures at all (or adjunct positions in general). Austin and Bresnan (1996) point out examples of quantifiers that are perfectly grammatical in left-dislocated position in English:

- (29) a. Every man she meets, she tells him her life story. (Austin and Bresnan 1996, 238)
- b. Everyone who comes through that door, shoot him.
  - c. Most people who meet her, they end up asking her on a date.
  - d. Each person who came to the party last night, what movie did she bring?

The pronouns in these examples, according to Austin and Bresnan (1996), must be interpreted as e-type pronouns (Evans 1980). E-type pronouns are arguably referential (see, e.g., Heim and Kratzer 1998), but they do contain variables bound by true quantifiers. Most importantly, these examples include dislocated quantifiers that are themselves nonreferential.

Similarly, it is well-known that CLLD does not absolutely ban nonreferential quantifiers. Cinque (1990) notes that adding material to the quantifier greatly improves the examples given above (some sort of D-linking may be required). In Modern Greek, the quantifier 'each' (but not 'every') can be CLLD-ed:

- (30) kathe pedhi i mitera tu to agapa  
each child mother its it loves (Iatridou 1995, 13)

Any claims about quantifiers in pronominal argument languages based on left-dislocation structures, then, are ill-founded.

Moreover, the notion that nonreferential quantifiers could be absent from a language is semantically untenable. It requires that quantifiers in nonconfigurational languages could only denote individuals or sets of individuals (i.e., they refer). But the same arguments that certain kinds of NPs in English (and other configurational languages) could not refer (see, e.g., Heim and Kratzer 1998) carry over directly to languages like Passamaquoddy and Mohawk. This will not be demonstrated here, but it should be easy to see simply by inspecting the examples above and those in Chapter 2. On the Salish languages, with reference in particular to Jelinek's claims about the absence of quantifiers in that language family, see Matthewson 1996.

Finally, the analogy between NPs in nonconfigurational languages and left-dislocated NPs in configurational languages is itself suspect, for a very simple reason. Left-dislocated NPs in English and CLLD-ed NPs in Romance languages and Modern Greek always appear to the *left* of wh-phrases:

(31) English

- a. A company like that, who would it care about stepping on?
- b. \* Who, a company like that, would it care about stepping on?

(32) Italian (Rizzi 1995)

- a. A Gianni, che cosa gli hai detto?  
'To Gianni, what did you tell him?'
- b. \* Che cosa, a Gianni, gli hai detto?  
'What, to Gianni, did you tell him?'

(33) Modern Greek (Iatridou 1995, 15)

- a. tin Maria pios tin idhe  
the Mary who her saw
- b. tin Maria tin idhe pios (echo only)

As reported by Baker (1996), wh-phrases are obligatorily initial in Mohawk, coming *before* non-wh NPs.

Passamaquoddy happens to possess a construction that strikingly resembles CLLD and English left-dislocation, in both discourse and prosodic properties. In this construction, a leftmost noun phrase (sometimes with an overt topic marker), interpreted as old information, is separated by a clear prosodic break from the rest of the clause, indicated by the comma (which in the text examples was placed there by the speaker transcribing the stories):

- (34) a. Not olu n-ikuwoss, ma te ' -kosiciht-uw-on eli toli motewolonuwihponol-ut.  
Dem Top 1-mother, Neg TE 3-know.TI-Neg-N C Prog curse-Indef/3Conj  
'[My mother,] she didn't know that she was being cursed.' (Newell 1979, 13)
- b. Wot olu yaq Kci Anuwit, ma te coni posonut-ehke-w.  
Dem Top Quot great Hannah, Neg TE stop basket-make-Neg  
'Old Hannah didn't even stop working on her basket.' (Newell 1979, 13)

These examples look like the Passamaquoddy equivalents of English left-dislocation and Romance CLLD. Left-dislocated NPs in Passamaquoddy, like their counterparts in English and Romance, obligatorily come *before* wh-phrases.<sup>13</sup>

(35) Passamaquoddy

- a. Yet       olu atomupil, wen-ihī   kis-eh-t-uw-ahtit       monuhmuw-ew-a-n?  
 this.Inan Top car,       who-ObvP Perf-make-App-3PConj buy-App-Dir-N  
 ‘This car, who did they make buy it for them?’ AH,SN 5:11.11
- b. \*Wen-ihī yet       olu atomupil, kis-eh-t-uw-ahtit       monuhmuw-ew-a-n?  
 who-Obv this.Inan Top car,       Perf-make-App-3PConj buy-App-Dir-N  
 ‘Who, this car, did they make buy it for them?’ AH,SN 5:11.11

This perhaps universal fact about left-dislocated elements indicates that unmarked NPs in pronominal argument languages like Mohawk could not be left-dislocated. If they were, all NPs would have to come *before* wh-phrases. As Baker shows, however, wh-phrases in Mohawk must be initial. What this means is that no expectations for pronominal argument languages can be based on left-dislocation structures. They are demonstrably not the same.<sup>14</sup>

## Conclusion

In conclusion, properties of Passamaquoddy indicate that it is not the type of language that the PAH attempts to describe. Any nonconfigurational properties that it does possess result from configurational mechanisms. These mechanisms are the topic of the rest of this study.

In what follows, I will investigate the syntax of Passamaquoddy with an eye to establishing structural relationships and tests for constituency and hierarchical relations. Such an approach necessarily assumes configurational mechanisms that underly better-studied languages. As we will see, this assumption is justified: once we look for familiar constraints on variable binding and movement, for example, it is easy to find them. Chapter 2, for instance, will show that variable binding provides a consistent diagnostic of c-command, and uses it to establish the existence of the Inverse as a syntactic movement process. Chapter 3 investigates wh-movement and other types of extraction; the findings there inform Chapter 4, the study of wh-scope marking and operator movement and agreement. Finally, Chapter 5 finds evidence of movement processes in raising to object.

<sup>13</sup>Again like Romance CLLD and English LD, the left-dislocated NP appears to the *right* of an embedded complementizer:

- (i) N-kisi-akuhutehkas [<sub>CP</sub> **eli** [<sub>NP</sub> yet       olu man ] , kisi-komutonatom ] .  
 I-Perf-deny                   C       that.Inan Top money   Perf-steal.1Conj  
 ‘I denied that that money, I stole it.’ AH,SN 5:11.11

See, on different positions for complementizers, wh-phrases, and topic and focus phrases in various languages, Rizzi (1995).

<sup>14</sup>Attempting to unify pronominal argument languages and (CL)LD structures in configurational languages also runs into a problem with Connectivity (Barss 1986), which Baker (1996, 110, 267–268) addresses to some extent. The problem is that both CLLD and English LD evidence Connectivity effects, in the binding of anaphors (Condition A) and Condition C. Baker attempts to derive the lack of NP anaphors in Mohawk from the PAH (he goes to great lengths to show that they are missing from the grammars of pronominal argument languages, on pp. 49–53), but if NPs in Mohawk are like Romance CLLD, NP anaphors should be grammatical, since they can appear in CLLD in Romance. Similarly, CLLD-ed NPs reconstruct for Condition C effects, giving rise to ungrammaticality; if Mohawk NPs are analogous, Condition C should not be absent.

### 1.3 Morphosyntax of Passamaquoddy

Before we can proceed with a study of Passamaquoddy syntax, it is necessary to understand its morphology and basic syntactic structures. It is also important to establish transcription conventions, and clarify what the transcriptions are and are not meant to represent.

#### 1.3.1 Transcription

First, it is not my intent to give morphological or phonological analyses. The syntax is the object of study here, and the morphology is only relevant to the extent that it is important to the syntax (it is, to a large extent). If breaking a form down into all of its constituent morphemes would just be distracting, it is avoided; instead I gloss them together as a unit. For example, what I gloss as ‘policeman’ is actually the participle form of a verb meaning ‘to arrest as an occupation’:

- (36) a. Pesku-wok **nucitqonkec-ik** n-kisi-tqon-ku-k.  
 some-3P policeman-Part3P 1-Perf-arrest-Inv-3P  
 ‘Some of the policemen arrested me.’ AH,SN 6:2.21
- b. nuci-tqon-ke-c-ik  
 Hab-arrest-AI-3Conj-Part3P  
 ‘those who arrest as an occupation’

For all intents and purposes this word functions as a noun in all of the examples appearing here. It is not relevant that it is morphologically complex.

The glosses of the morphemes reflect, for the most part, established conventions in Algonquian studies, but I hope that they are also intuitive enough for the linguistically informed reader to be able to parse them with only a small amount of habituation (and minimal consultation of the list of abbreviations in the frontmatter).

On the phonological side, I employ the orthography established by the bilingual program in the Passamaquoddy communities, and transcribe in an admittedly impressionistic way—for instance, I omit vowels that speakers do not pronounce or severely reduce, and will transcribe the same morpheme in different ways if it is pronounced differently in different contexts. I also try to avoid any “undoing” of phonology for the sake of transparent morphemic analysis. It should be clear that the transcriptions given here are not sufficiently detailed to form the basis of any phonological analysis. There is a large body of recorded material, including most of the examples presented here, which those interested in phonetics and phonology should consult.

#### 1.3.2 Phonology

The segmental phonology of Passamaquoddy is fairly simple. There is no voicing distinction in consonants: /p,t,k,q,c,s/ are voiceless in clusters, but voiced elsewhere.<sup>15</sup> (/q/ represents a labiovelar [k<sup>w</sup>]; /c/ is an alveopalatal affricate.) The sonorants /h,l,m,n,w,y/ have their usual values. (There is no /r/, except in

<sup>15</sup>The exception is that obstruents are voiced following the first-person prefix /n-/.

loan words.) The segment transcribed as an apostrophe /ʔ/ was a consonant historically that is no longer pronounced, but it does give rise to the voiceless allophone of a word-initial obstruent (which would otherwise be voiced).

The vowels /a,i,e/ have their usual values; /u/ is between [o] and [u]; and /o/ represents a schwa. There is no length distinction. One of /e/'s allophones is [æ], which is particularly pronounced before /h/.

The suprasegmental phonology of Passamaquoddy is more complex. Passamaquoddy is a pitch-accent language, and uses accent to make grammatical distinctions. Accent is to some extent predictable, however, and, following the practice of the community, I do not include it in my transcriptions. Where it makes grammatical distinctions I attempt to indicate them in the gloss (from which the accent should be recoverable). I will make no attempt to describe or analyze the complex accentual and stress systems; they are described in great detail in LeSourd (1993a).

Similarly, the morphophonology of the language includes tremendous complexity, which I will make no attempt to describe or analyze here or in my transcriptions. The reader is again referred to LeSourd (1993a), and the vast literature on Algonquian languages (and their diachrony; the classic reference is Bloomfield 1946).

Several (morpho-)phonological processes should perhaps be pointed out. One is that /q/ + /o/ (schwa) become /ku/. This occurs frequently with suffixes beginning with /o/, such as the locative suffix /-ok/. A second is the change that affects the applicative morpheme /-uw-/ (also a TA final) before the Inverse suffix /-(o)ku-/, such that it becomes /-a-/: *n-messunom-uw-a-n* (1-show-App-Dir-N) 'I showed him/her it', vs. *n-messunom-a-ku-n* (1-show-App-Inv-N) 'he/she showed me it'.

Third, final truncation affects most open-class words in the language, nouns and verbs. This process deletes material at the ends of words, unless they are followed by further material. Thus, /mani/ 'money' is pronounced *man* in isolation, but the /-i/ is restored when the possessive suffix is added: *mani-m*. Similarly, *mahtoqehs*, 'rabbit', becomes *mahtoqehsu-wok* in the plural (with an epenthetic glide); when it is obviative plural, truncation does not occur and the pitch contour of the word is different: *mahtoqehsu* (where the accent is not transcribed, being recoverable from the presence of the final vowel).

Finally, the person prefixes *n-*, *k-*, and *'-*, used to mark possessors on nouns and arguments of verbs, have an epenthetic /t/ before vowel-initial stems: *nt-*, *kt-*, *'t-*. The exception is before /u/, where they become *nu-*, *ku-*, and just *u-*. (In addition, many dependent nouns are apparently vowel-initial but lack the epenthetic /t/; these have *w-* in the third person: *nitap* 'my friend', *kitap* 'your friend', *witapihil* 'his/her friend (Obv)').

### 1.3.3 Major Syntactic Categories

Algonquianists traditionally divide stems into three types: nouns, verbs, and particles. Nouns have a consistent pattern of inflection and make distinctions of animacy, number, and obviation; pronouns are usually included in this category. Verbs also have a consistent pattern of inflection, and are all built on the same derivational pattern. Particles are basically everything else: free-standing morphemes that are not inflected. These include prepositions, adverbs, negation, and other elements.

Many common nouns are derivationally verbs, in a form known as the participle (see below). Many of them are clearly nominal in current use, although they are diachronically built from verb stems. The

participle form of any verb can be used syntactically as a nominal, however. Conversely, most nouns can be turned into a verb simply by the addition of a verb final (see below).

### 1.3.4 Nominal Inflection

#### Animacy

All nouns in Passamaquoddy belong to one of two genders, animate and inanimate. For the most part animacy values are what would be expected: humans and animals are animate, artifacts, minerals, and abstract notions are inanimate. However, there is variation with plants: trees are animate, but some smaller plants are inanimate. And there are many nouns whose gender is unexpected: containers for liquid are animate, as are ‘rope’ and ‘knee’ and ‘fingernail’, but ‘heart’ and ‘tongue’ are inanimate (Leavitt 1996, 5). Inanimate nouns can also become inflected as animates when they become personified, particularly in stories.

Animacy is not immediately determinable from the singular, citation form of a noun, but is indicated by different number suffixes and in verbal agreement. Inanimates take the plural *-ol*, while animates use *-ok*. In addition, animates make a distinction of obviation.

#### Obviation

All animate nouns in a syntactic context must be either *proximate* or *obviative*; the choice depends on discourse factors and grammatical principles. In a given discourse, one third person is considered more central, the topic, or the character whose point of view is adopted or with whom the speaker and hearer are to empathize. This is the proximate category. It is the unmarked category, meaning that if there is only one noun present it will be proximate. All other third persons, in addition to the proximate must be obviative. Obviation is marked on the noun by a suffix: *-ol* in the singular, and an abstract suffix in the plural that prevents final truncation and gives rise to a particular pitch accent. Obviatives are also marked on the verb using the same suffixes:

- (37) a. Mali ’-kis-ewestuwam-a-l peskuw-ol pomawsuwinuw-ol.  
 M. 3-Perf-talk.to-Dir-Obv one-Obv person-Obv  
 ‘Mary (Prox) spoke to one person (Obv).’
- b. Mali ’-kis-ewestuwam-a psi=te pomawsuwinu.  
 M. 3-Perf-talk.to-Dir.**ObvP** all=Emph person.**ObvP**  
 ‘Mary (Prox) spoke with all the people (Obv).’ WN8:5.9

In the glosses, agreement and number suffixes are glossed minimally as ‘3’ and ‘3P’ for third person proximate and third person proximate plural, and ‘Obv’ and ‘ObvP’ for third person obviative and third person obviative plural. In addition to the verbal agreement shown above, there is also a stem marker that indexes certain obviative arguments; this is glossed ‘ObvS’.

Obviation can change within a sentence. It must be set within a clause, between co-arguments, but it is not necessarily maintained across clause boundaries. The usual case seems to be to reset obviation within each new clause, except in narratives, where it is used as a device for keeping track of characters, changing

topics, and switching point of view. It is also used to track coreference, both in narratives and in discourse more generally: if there is more than one third person, they will often retain their obviation values across clauses.

Grammatical constraints on obviation include the one just described: co-arguments must differ in obviation status. In addition, a possessed noun is always obviative with respect to its possessor: ‘Susehp’s daughter’ is obligatorily *Susehp ’-tus-ol*, and cannot be *\*Susehp-ol ’-tus*.

Studies of obviation in Algonquian languages, particularly with a view to their use in texts, include Goddard 1984, 1990a; Russell 1991, 1996; Wolfart 1978.

### Possession

Possessed nouns are inflected for their possessor: the possessor is indicated by a prefix (*n-tus* ‘my daughter’, *k-tus* ‘your daughter’, *’-tus-ol* ‘his/her daughter (Obv)’) and by a suffix if plural, which comes inside the number marking of the noun itself (*n-tus-onu-k* 1-daughter-1P-3P, ‘our (Excl) daughters’). In addition, many nouns require a possessive suffix *-om*: *nt-atomupil-om* ‘my car’. This suffix immediately follows the noun stem, preceding plural marking for the possessor and the noun. The possessor, if present as a separate noun, can precede or follow the possessed noun.

### Other Categories

Nouns can also be locative, marked with a suffix *-ok*. Locative nouns are not marked for obviation, but can be marked for a possessor. There is a plural locative ending *-ihkuk* (actually bimorphemic: *-ihq-ok*); only this ending is used with people and animals (e.g., *ahahsu-wihkuk* ‘where the horses are, in the stable’; Leavitt 1996).

In addition, nouns can be marked with a diminutive suffix (there is also an augmentative prefix) and an absentative suffix (indicating someone who has died or is no longer present, or prior possession). A small number of nouns also have vocative forms.

Passamaquoddy’s pronouns include personal pronouns, demonstratives, interrogatives, and ‘hesitation’ pronouns. The personal pronouns are the following, making singular-plural and inclusive-exclusive ‘we’ distinctions:

(38)

	Singular	Plural
1	<i>nil</i>	<i>nilun</i> (Excl)
		<i>kilun</i> (Incl)
2	<i>kil</i>	<i>kiluwaw</i>
3	<i>nekom</i>	<i>nekomaw</i>

There are also emphatic forms of the first and second person singular pronouns, *nila* and *kila*. The inclusive/exclusive distinction is marked in the glosses as ‘12’, for first and second person together (inclusive) versus ‘1P’ for first person plural without a second person (exclusive).

The demonstratives make three spatial distinctions: ‘here (near speaker)’ (*wot* An., *yut* Inan.), ‘there (near hearer)’ (*not* An., *nit* Inan.), and ‘there (Remote)’ (*yat* An., *yet* Inan.). The inanimate demonstratives have

plural forms; the animate demonstratives have plural, obviative, and obviative plural forms. There are also absentative demonstratives. See LeSourd (1993b).

The inanimate demonstratives are also used as locative pronouns, making the same three-way spatial distinction: *yut* ‘here’, *nit* ‘there’, and *yet* ‘there (Remote)’. *Nit* is also used as a temporal particle meaning ‘then’. It is also the pronoun that is used as an “expletive” for clauses, for instance with sentential subjects.

The interrogative pronouns are *wen*, Animate, generally glossed ‘who’ here, and *keq(sey)*, Inanimate, glossed ‘what’. There is also a locative *tama*, glossed ‘where’. All of these can be used as indefinites as well, in which case they are glossed as ‘someone’, ‘something’, and ‘somewhere’. In combination with negation they can be translated as negative quantifiers, NPIs, or negated existentials (e.g., ‘no one’, ‘not anyone’, or ‘someone not...’). See Chapter 2.

There is in addition a pronoun meaning ‘the other’, *kotok*, which takes obviation and number suffixes. Finally, Passamaquoddy has a series of what are known as “hesitation pronouns”—pronouns that are used as a filler or hesitation prior to the actual word. These are always inflected to match the anticipated noun in number and obviation (e.g., *iyey* Proximate Singular, *ihil* Obviative Singular); there is also a locative form (*ihik*). See LeSourd (1993b).

### 1.3.5 The Noun Phrase

Every nominal element listed above can be used by itself as a full noun phrase (NP). Some elements can also co-occur: for instance, demonstratives may precede a noun, and a possessor is often juxtaposed with the possessed noun. It is difficult to argue for an NP constituent in these cases, however, as they often occur in separate positions. For instance, a very common pattern is for the demonstrative to precede the verb while the noun it is associated with follows the verb:

- (39) Mahkiywoss **not**    apc    mete-htehsi-t                    **'puwin.**  
 little.while    that.An again IC.be.heard-fall-3Conj body  
 ‘After a little while, though, [the body was heard to fall again].’ (Gabriel 1979, 3)

However, even in such split cases the demonstrative must precede the noun, arguing for some form of constituency.<sup>16</sup>

One argument for constituency in such cases is movement: multiple words can dislocate as a unit if they together constitute a single argument, namely a noun phrase. For instance, a demonstrative plus a noun can appear together at the left edge of the clause, before *wh*-words and clause-initial particles:

<sup>16</sup>There is evidence of movement in deriving split NPs. For instance, they can be split long-distance across perception verbs, but not if a *wh*-phrase intervenes (a *wh*-island effect):

- (i) a. Estela **psi=te**    nomiy-a-l    etoli-cem-at                    **pilsqehsis.**  
 Stella all=Emph see-Dir-Obv IC.Prog-kiss-3Conj girl.ObvP  
 ‘Stella saw him kissing **all the girls.**’ AH,SN 3:9.25
- b. \* Ma=te    **psi=te**    nomiy-a-w    wen    kelha-t                    **kiwhosu.**  
 Neg=Emph all=Emph see-Dir-Neg who IC.trap-3Conj muskrat  
 ‘I didn’t see *who* trapped **all the muskrats.**’ AH,SN 8:5.4



- (40) a. **Yet mihqotakon**, wen-il kisi-messunom-uwa-t Susehp?  
 that.Inan knife who-Obv Perf-show-App-3Conj Jos.  
 ‘That knife, who did Joseph show it to?’ AH,SN 5:11.12
- b. **Yuktok olu muwinuw-ok** nitte yatte wen nokkahl-a-l mahtoqehsuw-ol.  
 these.An Top bear-3P right.away each one eat.up-Dir-Obv rabbit-Obv  
 ‘These bears, right away each one eats up a rabbit.’ AH7:4.5

They can also dislocate together across clause boundaries:

- (41) [ Nit mil-ut-ss assok-taqsuwakon ] , kiselto muw-a-n ’-tuwehkan  
 that.Inan give-Indef/3-DubPret strange-noise Indef.allow-Dir-N 3-use.TI  
 etoli-piskahte-k.  
 IC.there-be.dark-IIConj  
 ‘The wondrous noise that was given to him he is allowed to use in the dark world.’ (Mitchell 1921/1976c, 24)

Here the NP is an internally-headed relative clause, and the whole acts as a single constituent.<sup>17</sup> (Relative clause frequently split away from the NP they modify, usually on the pattern of extraposition—to the right.)

Numerals and quantifiers are described in Chapter 2. They appear to form constituents with nouns that they modify, but, like demonstratives, they can also appear separated from the noun. Some of these appear to be verbal (in origin and possibly in use); see Chapter 2.

### 1.3.6 Verb Inflection

Verbs come in transitive and intransitive varieties. Which they are is determined by what is called the “final” in Algonquian linguistics—a morpheme that follows various other types of verbal morphemes, including other finals, and immediately precedes the inflectional morphology. The finals determine not only transitivity, but also the gender of one of the arguments of the verb. With intransitives this is the subject; with transitives it is the object.

#### Intransitive Verbs

Transitive verbs with animate subjects are referred to as AI verbs, for “Animate Intransitive”; inanimate subject verbs are, correspondingly, II verbs. Most verbs come in AI and II pairs (these examples are from Leavitt 1996, 32):

<sup>17</sup>Second-position clitics usually come after the first word, disrupting constituents. However, they may occasionally follow the entire first constituent, particularly if it is left-dislocated. This fact argues, again, for NP constituents.

- (42)
- |                         |                       |
|-------------------------|-----------------------|
| kin-kil                 | kin-kihqon            |
| big-be.size.AI.3        | big-be.size.II        |
| ‘he/she is big’         | ‘it is big’           |
| <br>                    |                       |
| pit-toksu               | pit-tokot             |
| long-be.stringlike.AI.3 | long-be.stringlike.II |
| ‘he/she is long’        | ‘it is long’          |

AI verbs end in a stem vowel, which surfaces in various forms depending on the morphosyntactic context. In the examples above, *kin-kil* ends in /o/, which is deleted in the third person singular; *pit-toksu* ends in /i/, which changes to /u/ in the third person. It resurfaces in other forms, for instance the Conjunct: *pit-toksi-t* (long-be.stringlike-3Conj).

A third person subject is marked in the AI by a suffix *-w*, which I usually do not segment out of the verb stem, because it almost never surfaces as such, and usually combines with the stem vowel. In *pit-toksu*, for instance, /-i-w/ become *-u*. The third person plural in addition adds the suffix *-ok*: *pit-toksu-w-ok*. For these cases I do not segment the *w-ok*, writing them as a unit (*-wok*, glossed ‘3P’).

AI verbs make a singular-dual-plural distinction for their subject. The form just given, *pit-toksu-wok*, using the third person plural suffix *-ok*, is actually dual (in other contexts this suffix is simply plural; its basic meaning seems to be non-singular). A plural subject is indicated by the addition of a plural stem marker, glossed ‘Plural’ here:

- (43)
- |                        |                              |
|------------------------|------------------------------|
| pit-toksu-wok          | pit-toks-ultu-wok            |
| long-be.stringlike-3P  | long-be.stringlike-Plural-3P |
| ‘they (Dual) are long’ | ‘they (Plural) are long’     |

There are several different plural markers; individual verbs select one or more. See Teeter (1971).

First and second persons are marked by prefixes (the same prefixes that mark possessors on nouns; they are also used in transitives): *n-pit-toks* ‘I am long’ (with final truncation of the stem vowel), *k-pit-toks* ‘you are long’. First and second persons also make a singular-dual-plural distinction through the use of the plural stem markers.

II verbs index their subject through suffixes, for instance the plural: *pit-tokotu-l* ‘they (Inan) are long’. II verbs do not make a dual-plural distinction.

In general I do not segment AI and II finals, instead glossing them as part of the verb stem. I also do not mark them as AI or II unless it is relevant; which they are should be obvious from the context.

### Transitive Verbs

Transitive verbs are formed with finals that dictate (or possibly reflect) the animacy of their object. Thus, there are TA verbs (Transitive Animate) that take animate objects, and TI verbs (Transitive Inanimate) that take inanimate objects. Like AI and II pairs, TA and TI finals occur in pairs:

- (44)    'kosiciy-a-l                      'kosicihtu-n  
           3-know.TA-Dir-Obv            3-know.TI-N  
           'he/she knows him/her'        'he/she knows it'
- 'ciksotuw-a-l                      'ciksotom-on  
           3-listen.to.TA-Dir-Obv        3-listen.to.TI-N  
           'he/she listens to him/her'    'he/she listens to it'

Again, I do not segment the finals in the glosses, even though many of them are quite regular and easy to segment (TA *-y-* corresponds to TI *-ht(u)*, as in '*kisiy-a-l* and '*kisihtu-n* 'he/she made it (An. vs. Inan.)). I also leave out the labels TA and TI in the glosses, except where they are relevant (for instance in Chapter 5, where TA and TI forms contrast in raising to object).

TI verbs index their subject (which must be animate) with a prefix (*n-*, *k-*, *'-*, the same prefixes that mark possessors in nominal inflection) and with suffixes for plurals. TI verbs sometimes make a dual-plural distinction through the use of the same plural stem markers as the AI verbs. A plural object is marked by the same inanimate plural suffix *-ol* used to mark plural subjects of IIs and plural nouns. TI verbs also use the suffix glossed '*-N-*'; see below. An example with multiple suffixes appears below:

- (45)    k-ciksotom-uhti-ne-nnu-l  
           2-listen.to.TI-Plural-N-1P-InanP  
           'we (Incl.Pl.) listen to them (Inan)'

TA verbs also use the prefixes *n-*, *k-*, *'-*, but not necessarily to mark the subject. Instead the prefix marks the proximate argument, and a "theme sign" indicates whether that is the subject or the object. The theme signs mark a distinction known as the Direct versus the Inverse.

### Direct vs. Inverse

As stated, the prefix on a TA verb always indexes the proximate argument. A plural suffix also always marks this argument, called the Central Ending (Goddard 1979). In the examples below, the prefix and the Central Ending are boldfaced. The other argument is indexed by a suffix in final position (underlined below), in the slot where the inanimate plural ending *-ol* occurs in the TI example above.

If the subject is the proximate argument, the verb is Direct, and has the theme sign *-a-* (underlined); if the object is the proximate argument, the verb is Inverse, and has the theme sign *-oku-*. First and second persons are always proximate with respect to third persons:

- (46) a.    **k-ciksotuw-a-nnu-k**                      Direct  
           2-listen.to.TA-Dir-1P-3P  
           'we (Incl) listen to them'
- b.    **k-ciksota-ku-nnu-k**                      Inverse  
           2-listen.to.TA-Inv-1P-3P  
           'they listen to us (Incl)'

In other words, the subject of the Direct and the object of the Inverse take the same inflection. There has been a long debate in the Algonquian literature over whether the morphology registers a syntactic inversion; see Chapter 2, where evidence is presented that the Inverse does involve syntactic movement (meaning that the subject of the Direct and the object of the Inverse end up occupying the same argument position in the syntax).

### First-Second Person Interaction

First and second persons as both subject and object agree on a slightly different pattern. The easiest way to think about it is as both of them trying to occupy the same agreement slots: the slots where they would agree if their co-argument were a third person. The principle that decides the conflict is that the second person prefix *k-* always overrules the first-person prefix *n-*. The suffixes obey the opposite preference: singulars are not marked, if there is a first person plural it is marked (by the same suffix as the first person inclusive, i.e. first and second person together), otherwise a second person plural may be marked. Which is subject and which is object is marked by a theme sign like those marking the Direct and the Inverse described above: first person subject, second person object *-l-*; second person subject, first person object *-i-*. Some examples follow:

- (47) a. **k-ciksotuw-*i*-pon**  
 2-listen.to.TA-2/1-1P  
 ‘you (Sg/Pl) listen to us (Excl)’
- b. **k-ciksotu-*l*-pon**  
 2-listen.to.TA-1/2-1P  
 ‘we (Excl) listen to you (Sg/Pl)’

The theme signs are glossed as ‘2/1’, for a second person subject with a first person object, and ‘1/2’ for the opposite relation. The Central Ending slot (the boldfaced suffix) is occupied by the first person plural suffix in these examples, meaning that no distinction in number can be made for the second person argument.

### Indefinite Subject Forms

TA verbs also have forms for indefinite subjects, similar to passives. These are formed differently for third person objects and first/second person objects. With the former, the Direct theme sign is used, but there is no prefix:

- (48) Ipa, wot pesq pskuw-a.  
 well, Dem one Indef.find-Dir  
 ‘Just one of them was found.’ (Newell 1979, 20)

The absence of the prefix results in the deletion of schwa in initial syllables and the change of /m/ to /p/ before a consonant; compare *moskuw-a-l* ‘he/she found him/her’.

First and second person objects with indefinite subjects use the normal prefix (*n-* or *k-*), but a different theme sign, *-oke-*:

- (49)      nt-uwikhu-ke-pon  
             1-make.picture-Indef-1P  
             ‘our pictures were taken’

Indefinite subject can appropriately be translated with passives, as here. In Chapter 2 I suggest that they are like passives in involving movement of the object.

### Independent vs. Conjunct Morphology

All of the examples so far have used the Independent Indicative morphology, which is characterized by the use of the prefixes and suffixes described above. However, there are actually several different orders and modes of inflection, with different patterns of morphology.

The two orders that will be most relevant here are the Independent Order, illustrated above, and the Conjunct Order. The Independent is generally used in matrix declarative clauses, while the Conjunct is used in various subordinate environments.<sup>18</sup>

The defining characteristic of the Conjunct is that agreement with the arguments of the verb is exclusively suffixal. For example, the Conjunct versions of some of the Direct and Inverse TA verbs from above are the following:

- (50)    a.      ciksotuw-oq  
             listen.to.TA-12Conj  
             ‘if we (Incl) listen to him/her/them’  
             b.      ciksota-linoq  
             listen.to.TA-12ConjInv  
             ‘if he/she/they listen to us (Incl)’

The gloss does not mark the Direct, only the Inverse.<sup>19</sup> In addition, Conjunct endings are glossed as including ‘Conj’; if the gloss does not specify, the form is Independent.

The Conjunct endings do not make any number distinctions for the obviative argument, and the final suffixes that appear in the Independent to make this distinction are not used. Hence the ambiguity of the examples above. In the glosses, only the proximate argument is specified in forms including third persons; ‘12Conj’, for example, means a first person plural inclusive subject acting on a third person object (unspecified number). ‘12ConjInv’ indicates the reverse: a first person plural inclusive *object* and a third person (singular or plural) subject.

It is generally not possible to segment out the Direct and Inverse theme signs in the Conjunct. The 2/1 (-i-) and 1/2 (-l-) theme signs *are* visible in the Conjunct, though I will not segment them:

- (51)    a.      ciksotuw-iyek  
             listen.to.TA-2/1PConj  
             ‘if you (Sg/Pl) listen to us (Excl)’

<sup>18</sup>Much has been written on the distribution of the Conjunct and Independent. See, for example, Campana (1996), Blain (1997), Brittain (1997, 1999), Richards (2000).

<sup>19</sup>Note that the TA final *-uw-* changes to *-a-* in the Inverse here, just as it does in the Independent form.

- b. ciksotu-lek  
listen.to.TA-1P/2Conj  
'if we (Excl) listen to you (Sg/Pl)'

The Conjunct can be divided into two main types: the Unchanged Conjunct, which uses just the suffixes above, and the Changed Conjunct; the different uses of these are described below. In addition to the Conjunct suffixes, the Changed Conjunct verb undergoes Initial Change, an ablaut process that affects the first vowel of the (extended) verb. The basic change is from /o/ (schwa) to /e/; other vowels are not affected. (There are complications, but we need not dwell on them here.) For example, Initial Change affects the vowel /o/ (schwa) of *pomhul-* in 52, ablauting it to an /e/:

- (52) 'T-iy-a-n **pemhul-ac-il**, "Keq olu etoli-ntuwato-k ess?"  
3-say.to-Dir-N IC.carry-3Conj-PartObv what Emph IC.Prog-sing.TI-3Conj clam  
'She says to [**the one she is carrying**], "What is the clam singing?"' (Mitchell 1921/1976b, 11)

The Unchanged Conjunct is used in conditionals ('if' clauses), as in 50 and 51. The Changed Conjunct has a variety of uses and accentually distinct forms. With a final low tone it is used in temporal adjunct clauses with a perfective meaning. With a penultimate high tone the Changed Conjunct is used in temporal adjunct clauses with an imperfective aspect:

- (53) (LeSourd 1993a, 431)
- a. Nékè éluhk-è-t, éci síkté-hsoni-t.  
then(past) IC.work-AI-3Conj very to.death-tired-3Conj  
'When he worked, he was very tired.'
- b. Nékè élúhk-e-t, wol-ápesú-hpon.  
then(past) IC.work-AI-3Conj good-paid-(3)-Pret  
'When he was working, he was well paid.'

The high tone is also used in main clauses in a presentational sense (LeSourd 1993a). It is also used in 'who' and 'what' questions, and to form participles.

The participle is the form of the verb used in relative clauses. It is in the Changed Conjunct, with a high tone on the penultimate syllable. The head of the relative clause is indexed on the verb by a final suffix, which I will call the "participle ending":

- (54) 'Pecim-a-n [<sub>NP</sub> putep-ehsis-ol nut-ahc-**il** ], 'pet-oqotaha-n  
3-attract-Dir-N whale-Dim-Obv hear-3ConjInv-**PartObv** 3-come-swim-N  
eyi-li-t Koluskapiy-il.  
IC.be-ObvS-3Conj K.-Obv  
'He attracts [<sub>NP</sub> a little whale that hears him] ; he swims up to Koluskap.' (Mitchell 1921/1976b, 8-9)

These endings are not used elsewhere; they have the vowel /i/, which causes palatalization of a preceding /t/ (to /c/), and suffixes are not otherwise used in the Conjunct. Participles and participle agreement are discussed at length in Chapter 4.

Participles can be used as nouns, as in 52. In fact many common nouns are (diachronically or synchronically) participles, such as *ehpit* ‘woman’ and *nisuwihticil* ‘his/her spouse’. They can appear as arguments of other verbs, behaving in this respect like nouns, and they can be conjoined with nouns. Where it is not important, I will not break down participles used in this way in the glosses, glossing them instead as nouns (e.g., I gloss *nucitqonket* as ‘policeman’, when it is really *nuci-tqonke-t* ‘one who arrests as an occupation’).

The following table summarizes the different uses to which Independent and Conjunct verbs are put:

(55)	Independent	Unchanged Conjunct	Changed Conjunct
	Main clauses	Conditionals	Temporal Adjuncts (Perfective)
	Subordinate clauses: with <i>'sámi</i> ‘because’ verbs of saying or thinking		Temporal Adjuncts (Imperfective) <i>wen</i> ‘who’ and <i>keq</i> ‘what’ questions
	Yes-no questions		Participles (relative clauses)
	<i>tama</i> ‘where’ questions		
	<i>tayuwe/tayuwek</i> ‘when’ questions		

Finally, the differences between Independent and Conjunct morphology are summarized and illustrated in the table below:

(56)	Independent	Conjunct
	<b>k-ciksota-ku-wi-nnu-k</b> 2-listen.to-Inv-Neg-1P-3P ‘they don’t listen to us (Incl)’	<b>ciksotuw-aluhk</b> listen.to-12 <b>Conj</b> InvNeg ‘he/she/they do(es)n’t listen to us (Incl)’
Morphology	Prefixes, final suffix	Suffix only

### The Subordinative

There is also a mode of the Independent known as the Subordinative (sometimes as the Relative). This mode uses the morpheme glossed here as “-N-,” and moreover forbids the use of the final suffix that indexes the obviative argument in the TA verbs, or the inanimate argument in TI verbs. It also changes the inflection of an AI verb from suffixal to prefixal. Thus, the Subordinative form of the AI verb above, *pit-toks-ultu-wok* ‘they (PI) are long’, is *'-pit-toks-ulti-ni-ya*. The plural suffix is the one used to index the proximate argument in the TA, not the *-ok* suffix of the AI. (This suffix changes from *-uwa-* to *-ya-* following *-ni-*).

The Subordinative is used in the following contexts:

1. Complement to “judgemental” or “volitive” verbs (Sherwood 1986, 132)
2. Complement to verbs of wanting
3. Second verb in conjunction
4. Purpose clauses
5. Complement of causative

6. *tama* ‘where’ questions
7. *tan* ‘how’ questions
8. With particles *kamot* ‘is better’ and *on* ‘then’<sup>20</sup>
9. Polite commands

It also tends to be used with pronominal relative root arguments, and in narrative texts<sup>21</sup>

The morpheme -N- that appears in the Subordinative appears in several other environments as well. We saw it above with TI verbs. It also appears in ditransitives and AI+O verbs (verbs that are formally intransitive but take objects).

### Ditransitives

In addition to AI, II, TA, and TI verbs, Passamaquoddy possesses two other types of verbs. The first of these are ditransitives. Ditransitive verbs can be formed productively from transitive verbs by the addition of the final -*uw*- to the TI member of the pair. There are also several verbs that are specified as ditransitive, such as *mil-a-n* ‘give’.

The Inverse and Direct morphology in ditransitives reflects the relation of the subject and the first object, which is generally called the *primary object* in Algonquian linguistics. It corresponds to the indirect object in other languages. In Passamaquoddy it is the recipient, goal, beneficiary, maleficiary, etc. The prefix and central ending index whichever of the subject and primary object is proximate, just as in a TA. The morpheme -N- also appears, immediately before the central ending, and the final suffix that would normally agree with the obviative argument instead agrees with the second object, called the *secondary object*. Thus the obviative member of the subject/primary object pair can make no distinctions in number:

- (57)       '-komutonatom-uw-a-ni-ya-l  
               3-steal.TI-App-Dir-N-3P-InanP  
               ‘they steal them (Inan) from him/her/them’

In the Conjunct, the secondary object is not indexed at all; ditransitives inflect just like TAs:

- (58)       komutonatom-uw-ahtit  
               steal.TI-App-3PConj  
               ‘if they steal it/them (An/Inan) from him/her/them’

There are several restrictions on ditransitives. The secondary object cannot be first or second person, but it can be animate or inanimate. It also must be obviative with respect to the other arguments. This object can, however, be extracted in the normal way.

<sup>20</sup>Sherwood (1986, 133) glosses this as ‘it is then’ and says that the subordinative verb is a clausal complement to these particles. I see no evidence that *on* (and *kamot*) is anything other than a particle.

<sup>21</sup>On the diachrony of this morpheme and its relation to other patterns of inflection, see Goddard 1967, 1974; on its use in Wampanoag or Massachusetts, see Goddard and Bragdon 1988 and Bruening and Rackowski 2000.



A process of possessor raising frequently applies in Passamaquoddy, particularly when the subject and the possessor of the object are disjoint in reference (see Section 1.2.3 above). The form of the verb is exactly like benefactives, malefactives, and other ditransitives—the applicative morpheme *-uw-* is added to a TI verb stem:

- (59) DF6:3.2
- a. Sakom nokka-tekatu-n (w)-mani-m.  
governor completely-hide.TI-N (3)-money-Poss  
'The governor<sub>1</sub> hid all of his<sub>1</sub> money.'
- b. Nokka-tekatek-uw-on sakom (w)-mani-m.  
completely-hide.TI-App-N gov. (3)-money-Poss  
'The governor<sub>1</sub> hid all of his<sub>2</sub> money.'

Ditransitive verbs can be ambiguous between a possessor raising reading, in which the possessor is not affected by the action of the verb, and a benefactive or malefactive reading, in which it is. The example in 59b, for instance, could also mean 'the governor hid all of his money *from him*'.

### AI+O Verbs

The last type of verb is known as an AI+O (Goddard 1979), for its formal similarity to AI verbs. AI+O verbs are in many ways formally intransitive, but they take a syntactic object (hence, "plus O"). This object agrees on the pattern of the secondary object of ditransitives. AI+O verbs are like AIs in making a dual-plural distinction for their subject, and in not using the Direct-Inverse theme signs (there can be no Inverse AI+O). Their endings in the Conjunct are identical to AI Conjunct endings.

In the Independent, the morpheme *-N-* appears again:

- (60) ' -Koskahta-n-ol Mali ' -sokossuhun-ol.  
3-lose.AI+O-N-InanP M. 3-earring-InanP  
'Mary lost her earrings.'

Like the secondary object of a ditransitive, the object of an AI+O may not be first or second person, although it can be animate, and it must be obviative with respect to the subject. For these reasons and the similarity in agreement, most Algonquianists consider the objects of AI+Os to be secondary objects as well (see (Rhodes 1990a)).

### Relative Root Arguments

So far we have seen three types of verbal arguments: subjects, primary objects (the objects of monotransitives pattern with the primary objects of ditransitives), and secondary objects. I will refer to these as *core arguments*. In addition, Algonquian languages permit another type of verbal argument, the *relative root argument*. These are arguments that are added by a "relative root"—a preverb on the verb. Locative adjuncts, for example, are relative root arguments, added to the argument structure of the verb by the addition of a locative relative root, here *toli-*:

- (61) ’-Tol-acqim-a-n **akom-awti-k**.  
 3-there-drag-Dir-N snowshoe-path-Loc  
 ‘He drags it (An) **to the snowshoe path.**’ (Mitchell 1921/1976d, 17)

Other types of adjuncts are added by other relative roots. Manners, for instance, can be added by the preverb *oli-*, ‘thus’ (Changed form *eli-*); here the manner is a clause:

- (62) Nit tan te wen **eli-wewi-phuwe-t:** yat=te nekom pesq  
 then WH Emph someone IC.thus-perceivably-run-3Conj that(Remote)=Emph 3 one  
 oloqi-ye, apc kotok tetta.  
 thither-go.3 again other that.direction  
 ‘Then each one runs off on his own; that one goes one way and another that way.’ (Mitchell 1921/1976c, 7)

Other types of adverbs can be similarly added; in the following sentence, what is eaten for the evening meal is specified by the addition of the relative root *oli-* to the intransitive verb ‘eat’:

- (63) ’-Tol-iyam-a-n Mikcic-ol naka **kespahte-k wiyuhs** ’t-**oli**-wolaqi-hpi-n-iya.  
 3-there-go.to-Dir-N M.-Obv and IC.be.dry-IIConj meat 3-thus-evening-eat.AI-N-3PSub  
 ‘She goes to Mikcic and they eat an evening meal of dried meat.’ (Mitchell 1921/1976d, 8)

Degrees are added by the relative root *tuci-*:

- (64) **Etuci**-kotuhp-ulti-htit pokomk-ehsis-ok, on mah-a-ni-ya Espons  
 IC.X.degree-be.hungry-Plural-3PConj fisher-Dim-3P then eat-Dir-N-3P E.  
 mulcess.  
 mitten.ObvP  
 ‘The little fishers are so hungry that they eat Espons’ mittens.’ (Mitchell 1921/1976a, 11)

Relative root arguments can be relativized and questioned:

- (65) K-wewitaham-a **tan tuci**-molikikona-n-ess?  
 2-remember.TA-Dir WH X.extent-be.strong.3-N-DubPret  
 ‘Do you remember how strong he was?’ AH,SN 10:7.13

In fact, the only way to relativize or question a non-core argument is to make it a relative root argument.

Relative root arguments do not agree in any way, besides in the appearance of the relative root on the verb. These arguments are discussed in more detail in Chapter 3.

### Other Inflection

Verbs also inflect for aspect and tense, using preverbs and suffixes, respectively. There is one tense suffix, the preterite:

- (66) a. Nekom yaq ona pomuhse-**hpon** ihik kcihku-k.  
 3 Quot also walk.along-Pret Hes.Loc forest-Loc  
 ‘So he walked into the forest.’ (Newell 1974b, 1)

- b. Kat=te mace-tpitahatom-uw-on yuh-ut-**pon**:  
Neg=Emph start-think.about.TI-Neg-N tell-Indef/3-Pret  
'He does not even begin to think about what he was told:' (Mitchell 1921/1976c, 22)
- c. Siki yaq mehcine, eli moci pomawsi-t-**pon**.  
hard Quot die.3 C bad live-3Conj-Pret  
'He died a very hard death, they say, because he had led such an evil life.' (Gabriel 1979, 2)

There is also a dubitative morpheme that often co-occurs with the preterite:

- (67) a. N-ikuwoss siki mociki-t-s-**opon**, nit teh<sup>p</sup> nit nehpuh-uku-n Mali Pokomk  
1-mother hard be.evil-3ConjAI-Dub-Pret, then only that.Inan kill-Inv-N M. P.  
'-sisoq.  
3-eye  
'If my mother had been really wicked, Mary Pokomk's eye would have killed her.' (Newell 1979, 17)
- b. It-asu, neke Koluskap nekola-t skicinu, wapi kuhkukhahs  
say-Intrans.3 then.Past K. IC.leave-3Conj Indian.ObvP white owl  
oloqiye-ss etoli-mocimkahqihke-k.  
leave.3-DubPret IC.where-be.thick.trees-IIConj  
'It is said that when Koluskap left the Indians, the white owl went into the thick woods.'  
(Mitchell 1921/1976c, 9)

The most common aspectual preverbs are *kisi-*, which I gloss as 'Perf' for perfective, and *koti-*, which I gloss as 'Fut'. These glosses may be somewhat misleading: *kisi-* also has an ability meaning (which may not be incompatible with a basic perfective semantics), and *koti-* often means 'want' (its basic meaning seems to be a sort of modal like English *will*). I prefer to gloss the morphemes consistently over implying that there are homophonous morphemes with different semantics; I hope that the English translation is sufficient to show the various uses of the preverbs.

Other common aspectual preverbs include *mace-* 'start doing', *naci-* 'go to do', *(to)toli-* 'Prog(ressive)', *api-* 'have gone to do and come back', *ehqi-* 'stop doing'. There are various other aspectual preverbs as well.

In addition to the Independent and Conjunct Orders, there is also an Imperative Order. Very few (if any) examples of the Imperative appear in this study.

### 1.3.7 Negation

Sentential negation is indicated by one of several particles, *ma* (which is often followed by emphatic *te*), *skat*, *kat*, or particles with negation plus some other meaning, such as the temporal *mesq* 'not yet; before'. These particles are always preverbal. The verb also takes a negative suffix, following the theme sign in the Independent Order:

- (68) Nihtol kete **ma** te '-kosisiy-a-**wi**-wa-l tan op wecessi-t.  
that.Obv for.example Neg Emph 3-know.TA-Neg-3P-Obv WH would IC.arrive-3Conj  
'I mean, nobody knew where he could have come from.' (Newell 1979, 12)

The negative suffix never occurs without a negative particle in the sentence. It appears to be simply negative agreement.

In the Conjunct, negation is indicated in the suffix (the first clause of this sentence also includes negation):

- (69) Kat=op woli-naqot-u **skat** wicuhkem-awohq.  
 Neg=would good-look.II-Neg Neg help-12ConjNeg  
 ‘It would not look good if we did not help him.’ (Newell 1974b, 6)

I have also found examples of “negative concord,” where an embedded verb also has a negative suffix, in agreement with a higher verb in whose clause the negative particle occurs. Most examples are perception complements, but I have run across one with a raising to object verb as well. An example of a perception verb appears below:

- (70) [’]T-iy-a-l, “**Ma**=te tama k-nomiy-a-w mahtoqehs yut tuciye-w?”  
 3-say.to-Dir-Obv Neg=Emph somewhere 2-see-Dir-Neg rabbit here go.by.3-Neg  
 ‘He said to him, “Haven’t you seen a rabbit going [anywhere] by here?”’ (Newell 1974a, 5)

### 1.3.8 Prepositional Phrases

Some constructs occur in Passamaquoddy that have the appearance of prepositional phrases, such as the following:

- (71) a. ’-Qesqici-tuwiya-n **spiqiw woniyakon-uwa-k**.  
 3-across-fly-N upward head-3P-3P  
 ‘He soars over their heads.’ (Mitchell 1921/1976d, 17)
- b. Nitte na Cipelahq ’-pakskali-tuwiya-n **’ciw aluhkihku-k** naka maceph-a-n lamki-k.  
 right.away also C. 3-dive-fly-N from cloud-Loc and take-Dir-N hell-Loc  
 ‘Then Cipelahq swoops down from the clouds and takes him to the lower world.’ (Mitchell 1921/1976c, 24)

However, it is unclear if these form constituents. The preposition—a particle—can also appear preverbally, separated from its NP:

- (72) AH2:9.13
- a. Estela wiku **qihiw** malsanikuwam-ok.  
 Stella live.3 near store-Loc  
 ‘Stella lives near the store.’
- b. **Qihiw** wiku malsanikuwam-ok.  
 near live store-Loc  
 ‘She lives near the store.’

Relative root arguments can also be introduced by a preposition-like particle, often the free-standing form of the relative root itself:

- (73) 'T-**oloq**-aph-a-l                    **oloqi-w**                    qospem-ok.  
 3-that.way-track-Dir-Obv that.way-Particle lake-Loc  
 'She tracked him toward the lake.' Leavitt (1996, 12)

One reason to think that these particles are not prepositions heading a prepositional phrase is that they do not pied-pipe in *wh*-questions; instead they appear in their preverbal position:

- (74) AH2:9.13
- a. Tama **qihiw** Estela wiku?  
 where near Stella live.3  
 'Where does Stella live near?'
- b. Tan-iyut Estela **qihiw** wiki-t malsanikuwam-ok?  
 WH-that.Inan Stella near live-3Conj store-Loc  
 'Which store does Stella live near?'

However, it will not be relevant here whether there is a PP constituent in Passamaquoddy, and so I leave the matter undecided.

### 1.3.9 Particles

Several types of particles have already been illustrated—clausal negation and preposition-like particles. There are various others, some of which will also be discussed in Section 1.4.6. Particles comprise different types of adverbial elements, such as temporal modifiers, locative particles, manners; particles that resemble complementizers; and others. The following sentences illustrate the use of several different particles:

- (75) On nit te lu ketuwahsonotek-il, on oc '-peciy-aniya. Cel oc apc spasuwiw  
 then then TE Top IC.be.Saturday-InanP then Fut 3-come-3PSub. even Fut again in.morning  
 wesuwess-iniya.  
 return-3PSub  
 'On Saturdays they'd come home. Then the next morning they'd go back.' (Newell 1979, 19)

The particle *on*, meaning something like 'then', expresses temporal succession (sometimes it expresses logical succession as well, like its English counterpart, particularly with *saku*, 'therefore'). It is always initial in its clause. *Nit* is also temporal, indicating a point in time. *Te* is an emphatic particle that follows whatever it emphasizes: usually nouns or other particles. *Lu* is also emphatic, being contrastive, but it usually occurs in conjunction with other particles to give various meanings: *cuwal=lu* 'surely, it must be', *katolu* 'of course'. As *olu* it often occurs with a left-dislocated NP (occurring in second position within the NP), marking it as a (contrastive) topic. *Oc* indicates future time; it usually occurs in second position within the clause. *Cel* is usually translated as 'even' or 'besides'; it is usually initial, like *on*. *Apc* means 'again' or 'also'; like *oc*, it usually occurs in second position. Here they occur together. Finally, *spasuwiw* is a temporal adverb, meaning 'in the morning'. The latter type of particle generally appears preverbally, but can also appear in postverbal position.

Particles seem to fall into three different classes by their position within the clause. First, there are particles that only appear at the left edge of the clause; only left-dislocated elements appear before them.

*On* is one such particle; *katolu*, ‘of course’, is another. Nonreferential quantifiers (the singular *psite wen* ‘everyone’ and *yatte wen* ‘each one’; see Chapter 2) are unable to be left-dislocated; the fact that they cannot occur to the left of *katolu* indicates that only left-dislocated NPs can.<sup>22</sup>

(76) AH8:5.3

- a. Katolu psi=te wen wiku utene-k.  
of.course all=Emph someone live.3 town-Loc  
‘Everyone lives downtown of course.’
- b. \*Psi=te wen katolu wiku utene-k.  
all=Emph someone of.course live.3 town-Loc  
‘Everyone lives downtown of course.’

Particles that resemble complementizers fall into this class. The particle *on*, for example, comes in initial position and determines the inflection of the verb as Subordinative. The conjunction *naka* does the same; the Subordinative is indicated by the suffix -N- and the lack of the final suffix that occurs in the first verb of the conjunction in 77b:

- (77) a. **On** yaq [’]t-iyal-ahka-**n**                    **naka** [’]-tehsaq-otohqi-**n**.  
then Quot 3-around-throw.AI+O-N and 3-on.top.of-jump-N  
‘Then he threw them down and jumped on them.’ (Newell 1974a, 1–2)
- b. K-tomokuhu-ku-**k=c** **naka** k-tomokipil-ku-**n**.  
2-crush-Inv-3P=Fut and 2-trample-Inv-N  
‘They’ll crush you and trample you.’ (Mitchell 1921/1976d, 12)

The second class of particles consists of those that usually occur in second position. These include *oc* and *apc* from above, and *yaq*, Quot, *op*, ‘would’, *na*, ‘also’, and *al*, Uncertain. Initial particles count as first position in 78a (*oc* becomes =*hc* after the vowel /e/), as does the entire verb in 78b; second-position particles disrupt noun phrase constituents in 78c:

- (78) a. Espons ’-kocicihtu-n eli=**hc** opos kipiya-t,                    nitte=**hc**    **na** nekom macaha-n.  
E. 3-know.TI-N C=Fut tree fall.over-3Conj right.then=Fut also 3 leave.3-N  
‘Espons knows that the tree will fall, and then he will leave.’ (Mitchell 1921/1976a, 8)
- b. Kt-apenk-ul-oni-ya-k=**c** yukt muwin-ewiyeya-k n-mulcess-ok.”  
2-pay-1/2-N-2P-3P=Fut Dem bear-skin-3P 1-mittens-3P  
‘I will pay you with these bearskin mittens of mine.’ (Mitchell 1921/1976a, 8)
- c. Yuhk yaq **ona** Skicinuw-ok sikte-hpay-ultu-wok.  
these Quot also Indian-3P to.death-be.scared-Plural-3P  
‘The Indians are scared to death.’ (Newell 1974b, 11)

<sup>22</sup>Although I argued above that nonreferential quantifiers *can* appear in left-dislocated positions, it is also true that they are restricted, to only certain kinds of quantifiers; in addition, quantifiers with an overt restriction are better able to appear in this position (perhaps due to some kind of D-linking). In Passamaquoddy, these singular quantifiers cannot be left-dislocated, but plural quantifiers with NP restrictions can be, as in the examples in 132 below (Section 1.4.6).

Second-position particles can also follow an entire noun phrase constituent, as in 79a; in such cases it is likely that the NP is left-dislocated. In 79b, an NP that is most certainly left-dislocated—it is proximate even though it is obviative in its argument position (see Chapter 4), and it occurs before a clause-initial particle—is ignored in computing second position:

- (79) a. Yuhuht ess **op** mehcine-hl-oku.  
these.ObvP clam.ObvP would die-make.TA-Inv.ObvP  
'These clams would cut him to shreds.' (Mitchell 1921/1976b, 11)
- b. Nt-olitahas wot ampokolam cu **apc** Pokomk nomiy-a-l.  
1-think this.An bullfrog surely again Fisher see-Dir-Obv  
'I think that this bullfrog, Fisher surely saw again.' AH,SN 8:5.9

Second-position particles can also disrupt verbal constituents, appearing between a prefix+preverb and the rest of the verb stem:

- (80) a. 'T-ali **yaq** qecimul-a-wa psite Skicinu cipotute wen nomiy-a-l yuttol  
3-around Quot ask-Dir-3P.ObvP all Indian.ObvP maybe someone see-Dir-Obv this.Obv  
kukec-ol, not olu palitahamsi-t.  
warden-Obv this.An Top be.proud-3Conj  
'They're going around asking all the Indians if someone saw this warden, the one who thinks highly of himself.' (Newell 1974b, 6)
- b. Ipocol msi=te k-nacitaham-ku-k skinuhsis-ok yut, kt-oqeci=hc nehpuhu-ku-k.  
because all=Emph 2-hate-Inv-3P young.man-3P here 2-try=Fut kill-Inv-3P  
'Since all the young men here hate you, they will try to kill you.' (Mitchell 1921/1976d, 12)

This disruption also occurs to emphasize the preverb, using the emphatic particle *te* (the prefix *k-* is null before /k/):<sup>23</sup>

- (81) Tokec oc 'cimaciw kisi **te=hc** yali-topskans etol-amkole-k, kisi=hc  
now Fut from.now.on (2)-Able Emph=Fut around-roll IC.there-burn-IIConj (2)-Able=Fut  
pomaws ktahkmiku-k naka 'samaqan-ok.  
live land-Loc and water-Loc  
'From now on you will be able to roll in the fire, you will be able to live on land and in the water.'  
(Mitchell 1921/1976d, 15)

One item of interest is that two or more second-position particles can combine together and thereby appear in first position:

- (82) **Apc=oc** mawon-a, on **oc apc** skicinu-w-ok 'sankewi-mawiya-n-iyā.  
again=Fut gather-Dir.ObvP then Fut again Indian-3P 3-peaceful-gather-N-3P  
'He will bring them together again, and then the Indians will assemble peacefully.' (Mitchell 1921/1976c, 7)

<sup>23</sup>In this example only I gloss the preverb *kisi-* as 'Able', because ability is what is being emphasized here. Elsewhere I gloss it as 'Perf', even when it has its ability meaning.

In the first clause of 82, *apc* counts as first position for *oc* to cliticize after it, but in the second clause the order is *oc apc*, where there is another particle in first position.<sup>24</sup>

The final class of particles includes everything else—elements that do not have a fixed position. These include particles like *te* that follow whatever they emphasize, as well as adverbial particles that generally appear preverbally but are quite content to appear postverbally as well:

- (83) a. **Nihikehs** oqim-uwi sakom wiwni-tuwiye qospem-ok.  
 thrice loon-Adj chief around-fly.3 lake-Loc  
 ‘Three times the chief of the loons flies around the lake.’ (Mitchell 1921/1976b, 17)
- b. K-mil-l-on=c piluwapiyuwakon weci=hc kisi-pasit-toqqi-yin **nisokehs**,  
 2-give-1/2-N=Fut supernatural.power so.that=Fut able-over-jump-2Conj twice  
 ‘I’ll give you the power of supernatural illusion so that you’ll be able to jump over the house twice;’ (Mitchell 1921/1976d, 12)

This class also includes particles that are almost always preverbal, but are not initial; negative particles fit this description, for example. Another example is *cipotu*, ‘maybe’ (usually followed by emphatic *te*). This type of particle does not force an NP to its left to be left-dislocated, as shown by the ability of a nonreferential quantifier to appear to the left of the particle:

- (84) Yatte wen **cipotu=te** nokkahl-a-l mahtoqehsuw-ol.  
 each one maybe=Emph eat.up-Dir-Obv rabbit-Obv  
 ‘Each maybe ate a rabbit.’ AH7:4.5

This completes the survey of Passamaquoddy morphosyntax. For further information, Sherwood 1986, LeSourd 1993a, and Leavitt 1996 should be consulted.

## 1.4 Word Order and Clause Structure

As stated in Section 1.2.1, native speakers readily assent to all possible combinations of subject, verb, and object (or multiple objects) in Passamaquoddy, although the co-occurrence of all of these in a single clause is fairly rare in real speech. Textual counts, however, give a different picture from grammaticality judgements. Examination of texts reveals an overwhelming preference for SVO word order. Furthermore, there are several contexts in which the word order *must* be SVO. When agreement is ambiguous, in addition, a preference for subjects to precede objects appears.

I conclude from these facts there is a basic underlying word order to Passamaquoddy, which is SVO. Grammatical mechanisms do in fact make available structures and derivations in which all manner of combinations can occur, but pragmatic principles make only certain deviations from the base order all that common. The situation can be compared to scrambling languages like Japanese, where textual counts show a huge preponderance of basic SOV word order, even though native speakers will readily assent to other permutations. In linguistic studies of Japanese, much attention has been paid to determining what the exact mechanisms

<sup>24</sup>It is possible that *apc* is able to stand on its own, in addition to being a second-position clitic. The phrase *apc=oc* is used to mean ‘again’, or ‘next time’; *apc=oc k-nomiy-ul* means ‘see you later’ (again=Fut 2-see-1/2).



are that lead to deviations from SOV order; the same attention should be accorded the study of languages like Passamaquoddy. Chapter 2 examines this issue to some extent, but the bulk of the thesis is concerned with cross-clausal dependencies that are only indirectly dependent upon intra-clausal permutations.

### 1.4.1 Word Order: Statistics from Texts

For the purposes of this study I examined seven texts: *Espons* (Mitchell 1921/1976a), *Kehtaqs* (Newell 1979), *Mahtoqehs naka Malsom* (Newell 1974a), *Kukec* (Newell 1974b), *Mikcic* (Mitchell 1921/1976d), *Ehpit naka 'Puwin* (Gabriel 1979), and *Akonutomuwin* (Anonymous 1974). These seven texts were written by six different authors, all native speakers of Passamaquoddy (*Espons* and *Mikcic* are by the same speaker, and are also older, from the turn of the century). In most cases they were told orally and transcribed later, either by the same speaker (often working with a linguist) or an editor.

The first set of counts is given below, showing the relative order of the verb and its arguments: SV vs. VS, VO vs. OV, etc. For ditransitives, the relative orders of the IO (the primary object) and the DO (the secondary object) are also given. (The total is not the total number of clauses, but the total number of overt noun phrases; an SVO sentence, for instance, is counted twice, as SV and as VO.)

(85)	<b>Espons</b> 93 Total	<b>Kehtaqs</b> 120 Total	<b>Mahtoqehs</b> 75 Total	<b>Kukec</b> 116 Total
	SV 42	SV 52	SV 31	SV 47
	VS 13	VS 35	VS 23	VS 16
	VO 31	VO 17	VO 18	VO 55
	OV 5	OV 17	OV 2	OV 6
	V DO 4	V IO 2	V IO 4	V IO 2
	DO V 1	IO V 3	IO V 1	IO V 0
		V DO 10	V DO 9	V DO 4
		DO V 2	DO V 0	DO V 0
		IO DO 3	IO DO 5	IO DO 2
		DO IO 0	DO IO 0	DO IO 0

(86)	<b>Mikcic</b> 138 Total	<b>Ehpit</b> 39 Total	<b>Akon.</b> 47 Total	<b>TOTAL</b>	Ratio
	SV 75	SV 17	SV 22	SV 286	<b>.71</b>
	VS 10	VS 10	VS 9	VS 116	.29
	VO 42	VO 14	VO 14	VO 191	<b>.81</b>
	OV 12	OV 1	OV 3	OV 46	.19
	V IO 5	2T 0	V IO 1	V IO 14	<b>.78</b>
	IO V 0		IO V 0	IO V 4	.22
	V DO 6		V DO 1	V DO 34	<b>.85</b>
	DO V 1		DO V 2	DO V 6	.15
	IO DO 0		IO DO 0	IO DO 10	<b>.83</b>
	DO IO 1		DO IO 1	DO IO 2	.17

The points to note in these counts are the following: the subject precedes the verb 71% of the time, while the object of a transitive follows the verb 81% of the time. Primary objects follow the verb 78% of the time, and secondary objects do 85% of the time. Secondary objects follow primary objects when they co-occur 83% of the time. In other words, these counts lead to an initial postulation of the following basic word order:

- (87) Basic Word Order of Passamaquoddy:
- a. Subject—Verb—Object (Transitive)
  - b. Subject—Verb—Prim.Object—Sec.Object (Ditransitive)

However, this is based just on the relative positions of the subject and object with respect to the verb, not with respect to each other (the ditransitive counts do include the order of the primary and secondary object with respect to each other).

### Multiple NPs

Few sentences occur with more than one NP. When they do, the order in which they appear is as follows:

(88)

Transitive	SVO	SOV	VSO	VOS	OVS	OSV
Espons	5	–	–	–	–	–
Kehtaqs	7	2	–	1	2	1
Mahtoqehs	7	–	1	–	–	–
Kukec	11	–	2	–	–	–
Mikcic	12	1	–	–	–	–
Ehpit	4	–	–	2	–	–
Akonutom.	3	–	1	–	–	–
TOTAL	49	3	4	3	2	1
Ratio	<b>.79</b>	.05	.06	.05	.03	.02

- (89) a.  $S > O = 56$  (ratio .90)
- b.  $O > S = 6$  (ratio .10)

Transitive clauses with an overt subject and an overt object are SVO close to 80% of the time. This is an overwhelming percentage. No other order even comes close to its frequency. Other orders occur in roughly equal ratios, hovering between two and six percent of the total. Of all possible orders, the subject precedes the object 90% of the time.

Figures for ditransitives are provided in the following table:

(90)	Ditrans.	IoSV	IoVDo	SVDo	VSDo	VIoDo	VSIoDo	SVIoDo	VDoIo	SVIo
	Espons	–	–	–	–	–	–	–	–	–
	Kehtaqs	1	1	1	1	2	–	–	–	–
	Mahtoqehs	–	1	–	2	2	1	1	–	–
	Kukec	–	–	–	–	1	1	–	–	–
	Mikcic	–	–	2	–	–	–	–	1	2
	Ehpit	–	–	–	–	–	–	–	–	–
	Akonutom.	–	–	–	–	–	–	–	1	–
	TOTAL	1	2	3	3	5	2	1	2	2
	Ratio	.05	.10	.14	.14	.24	.10	.05	.10	.10

- (91) a.  $S > IO = 5, IO > S = 1$  (ratio .83)  
 b.  $S > DO = 9, DO > S = 0$  (ratio 1.0)  
 c.  $IO > DO = 10, DO > IO = 2$  (ratio .83)

Not many examples of ditransitives with more than one overt NP occur in these texts (21 total); only three examples have three overt NPs. No one order occurs with overwhelming frequency; the one order with the highest rate of occurrence is VIoDo, at 24%. Perhaps more revealing numbers are those given in 91, the relative orders of the arguments. Subjects precede primary objects 83% of the time; primary objects precede secondary objects at the same percentage. Subjects *always* precede secondary objects (of course, non-occurrence does not equal impossibility).

These numbers confirm the basic word order of Passamaquoddy hypothesized above.<sup>25</sup>

- (92) Basic Word Order of Passamaquoddy:  
 a. Subject—Verb—Object (Transitive)  
 b. Subject—Verb—PrimaryObject—SecondaryObject (Ditransitive)

There are various ways to further analyze these data. One item of interest is the relative order of the object and the verb.

### OV Order

As shown above, the object (of a transitive, or either object of a ditransitive) precedes the verb roughly 20% of the time in these seven texts. The largest number of these preverbal objects occurs in *Kehtaqs*. On closer inspection it turns out this is because this story uses the indefinite quantifiers *wen* ‘someone’ and *keq* ‘something’ very frequently. (*Kehtaqs*, ‘Ghosts’, is a collection of ghost stories; the supernatural beings are frequently referred to as indefinites, particularly when they first appear, often invisibly.) These indefinite quantifiers almost always appear in immediately preverbal position, as will be discussed to some extent in Chapter 2.

<sup>25</sup>The numbers here indicate that grammatical role largely determines constituent order in Passamaquoddy. This contrasts with what has been found for other Algonquian languages; see especially Leman (1999).

(93) **Kehtaqs**

- a. OV, 17 total: 7 are *wen* or *keq*
- b. IO V, 3 total: 2 are *wen* or *keq*
- c. DO V, 2 total: 2 are *keq*

Interestingly, when both IO and DO are *wen* or *keq* and appear preverbally, the order is DO IO:<sup>26</sup>

- (94) a. Tan te **keq wen-il** yaha-htit, nit te=hc eley-ik  
 how Emph what who-Obv tell-3PConj this.Inan Emph=Fut IC.happen-IConj  
 ‘[Whatever they told someone, it would happen]’ (Newell 1979, 3)
- b. Tan te **keq wen-il** ptewolon yaha-t, nit teh wen elessit.  
 how Emph what who-Obv motewolon tell-3Conj, then Emph.Fut who what.happens(?)  
 ‘[Whatever a *motewolon* tells someone, it happens to someone.]’ (Newell 1979, 5)

In elicitation the same pattern holds for subjects and objects: the order is *keq wen*, object then subject. Speakers will assent to the opposite order, but will always produce the order *keq wen*. This is similar to judgements on the placement of second position clitics (see above): speakers almost always place them in second position (after the first word, disrupting constituents), but will assent to them appearing in almost any position. I suspect that the ordering here, like the placement of second position clitics, is largely morphophonological (with the broad placement of these elements determined syntactically), and will not draw any deep conclusions from it (such as the hypothesis that Superiority does not hold in Passamaquoddy, or that the basic order in ditransitives is DO-IO; the same reasoning for the latter would lead to the postulation of the basic order O-S in transitives).

Of the preverbal objects in *Kehtaqs* that are not *keq* or *wen*, four are demonstratives, pronouns, or numerals that are also particle-like and also often appear in preverbal position, like the indefinites (see Section 1.4.6:

- (95) a. Wot n-ikowoss el-eyi-t, nit te **nihtol** ’-tahsihpil-a-n.  
 this.An 1-mother IC.thus-be-3Conj then Emph this.Obv 3-give.medicine-Dir-N  
 ‘The way my mother was, she did give her what she needed.’ (Newell 1979, 17)
- b. Tehpu **kekesk** sunhom-uw-in n-sisk-uk, nit te=hc kikih-i-n.”  
 only a.little pour-App-2/1Imp 1-eye-Loc, then Emph=Fut (2)-heal-2/1-N  
 ‘Just pour a little in my eye, and you’ll make me better.’ (Newell 1979, 17)
- c. Ipa, **wot pesq** pskuw-a.  
 well, Dem one Indef.find-Dir  
 ‘Just one of them was found.’ (Newell 1979, 20)
- d. Ipa, on n-tiya-n, “Pol **nil** maceph-iq.”  
 well then 1-say.to-N first 1 take.away-2P/1Imp  
 ‘Then I said, “Take me home first.”’ (Newell 1979, 23)

<sup>26</sup>In these examples it might plausibly follow from headedness: *keq* is the head of the free relative, quantified over by *tan*. As such it might be expected to come first. However, other examples also appear in texts where headedness is not at issue, and I have elicited numerous examples also showing the preferred order *keq wen*.

In general, there is a preference for “smaller” elements (in a phonological sense), particularly particle-like elements like pronouns, to appear in immediately preverbal position.

Three of the preverbal objects in Kehtaqs are topics or foci, appearing before sentence-initial particles (see above):

- (96) a. Ipa, **Mali San** *nit* uci nuhsuhk-aku-n wen-il. Not te na nit  
 hey Mary Jane then from chase-Inv-N who-Obv. Dem Emph also then  
 elik-it.  
 IC.thus.look-3Conj  
 ‘Well, something chased after Mary Jane, something that looked just as Wallace had said.’  
 (Newell 1979, 8)
- b. **Nihtol** *kete* ma te ’-kosiciya-wi-wa-l tan op wecess-it.  
 Dem.Obv for.example Neg Emph 3-know.TA-Neg-3P-Obv WH could IC.arrive-3Conj  
 ‘I mean, nobody knew where he could have come from.’ (Newell 1979, 12)
- c. **Not olu kotok**, ma te pskuw-a-w.  
 Dem Top other Neg Emph Indef.find-Dir-Neg  
 ‘But they couldn’t find the other one.’ [Lit. ‘the other, he wasn’t found’.] (Newell 1979, 20)

The remaining four are not or may not be topics or foci (one of these is the IO V not yet accounted for); they appear *after* particles, immediately before the verb complex. Note that the first one, in the absence of particles, could be a topic; it is also an Inverse, translated by the author/editor as a passive (we will see below that there is an insufficient number of Inverse clauses with overt NPs to draw any conclusions about word order with inversion).

- (97) a. **Ahcossis naka Henry Mahciw** wen-il ’-kisi nuhsuhk-aku-wa-pon-il.  
 Archie and Henry M. who-Obv 3-Perf chase-Inv-3P-Pret-Obv  
 ‘Archie LaCoote and Henry Socoby were followed by something.’ (Newell 1979, 12)
- b. Nit ma te wen-il nomiya-wi-wa-l, kis yaka **Tiliye-wol** api  
 then Neg Emph who-Obv see-Neg-3P-Obv already then.Fut Delia-Obv go.and.back  
 macepha-htit.  
 take.away-3PConj  
 ‘They didn’t see anyone until after they had dropped Delia off.’ (Newell 1979, 23)
- c. Ipa, on **Makolit-ol** ’-kisi yah-a-n-ia.  
 Well, then Margaret-Obv 3-Perf tell-Dir-N-3PSub  
 ‘They told her [Margaret] what had happened.’ (Newell 1979, 25)

(98) IO V

- a. On oc **n-ikuwoss** n-moteht-ehm-uw-a-n possiyantesk-ik, nt-apqotem-a-ku-n.  
 then Fut 1-mother 1-knock-TI-App-Dir-N window-Loc 1-open-App-Inv-N  
 ‘When we got there, I knocked at my mother’s window, and she let me in.’ (Newell 1979, 23)

In conclusion, deviation from verb-object order can almost always be accounted for as either the tendency for particle-like elements like indefinite quantifiers, pronouns, and demonstratives to appear immediately

preverbally; or as left-dislocated NPs. Only the four examples above show the (apparently rare) possibility of a clause-internal preverbal object position.

For the other texts, similar numbers obtain:

(99) **Espons**

- a. OV, 5 total: 1 *psite*, 3 Top/Foc, 1 Other
- b. IO V, 0 total
- c. DO V, 1 total: numeral

(100) **Mahtoqehs**

- a. OV, 2 total: 2 *psite*
- b. IO V, 1 total: 1 Other
- c. DO V, 0 total

(101) **Kukec**

- a. OV, 6 total: 3 demonstrative or *keq*, 1 Top/Foc, 2 Other
- b. IO V, 0 total
- c. DO V, 0 total

(102) **Mikcic**

- a. OV, 12 total: 8 *psite*, *keq*, or pronoun; 2 clefts, 2 Other
- b. IO V, 0 total
- c. DO V, 1 total: 1 *psite*

(103) **Ehpit**

- a. OV, 1 total: 1 pronoun
- b. IO V, 0 total
- c. DO V, 0 total

(104) **Akonutomuwin**

- a. OV, 3 total: 1 *psite*, *keq*, or pronoun; 2 Other
- b. IO V, 0 total
- c. DO V, 2 total: 1 pronoun, 1 Top/Foc

The two “other” examples from *Kukec* are interesting:

- (105) a.  $[\text{NP Etuci wol-kilu-li-t} \quad \text{yaq otuhk-ol}] \text{ nemiya-htit, on yaq}$   
           very good-be.size-ObvS-3Conj Quot deer-Obv IC.see-3PConj then Quot  
           nehpaha-n-iyā.  
           shoot-N-3PSub  
           ‘They saw a nice big deer and shot it.’ (Newell 1974b, 1)

- b. ... sami wisokolamson, naka **psite** puscokpe **piwsokul** etol-owehke-c-il.  
 because wind.blows.strongly and all be.wet firewood IC.Prog-use-3Conj-InanP  
 ‘... because of the wind and the fact that all the firewood he uses is wet.’ (Newell 1974b, 2)

The second example is a relative clause: *piwsokul etol-owehke-c-il*, ‘the firewood he uses’; ‘firewood’ must be an external head, since it is discontinuous around the higher verb, being associated with *psite* before the matrix verb. In this case the order with respect to the verb of the relative clause ‘which he uses’ is completely expected: externally-headed relative clauses in Passamaquoddy are all postnominal.

The “other” examples from the other texts appear in 106–108:

- (106) a. Apc **kotok wikuwam** ’-peciya-n, etol-elu-c-ik ehpic-ik.  
 again other house 3-come-N where-be.many?-3Conj-3P woman-3P  
 ‘Again he comes to another *wikuwam*, where there are many women.’ (Mitchell 1921/1976a, 18)
- b. On **yey keptin-ol** [’]-toqecimul-a-n, “Ma=te k-nomiy-a-w mahtoqehs yut  
 then Hes.Obv captain-Obv 3-ask-Dir-Sub Neg=Emph 2-see-Dir-Neg rabbit here  
 tuciye-w?”  
 go.by.3-Neg  
 ‘he asked the captain, “Haven’t you seen a rabbit going by anywhere?”’ (Newell 1974a, 7)

In Chapter 4, I will suggest that contrastive elements often appear in a preverbal position, possibly through an operation of focus movement. The example in 106a may be an example of this phenomenon, where ‘other house’ is contrasted with the houses Espons has previously visited (and worked mischief within). The example in 106b may also be of this nature.

- (107) a. **Msi=te elehl-ut** ’-kis-uwehkan.  
 all=Emph IC.do.to-Indef/3 3-able-use.TI  
 ‘All that has been done to him he can now use.’ (Mitchell 1921/1976d, 15)
- b. ’-Tol-iyam-a-n Mikcic-ol naka **kespahte-k wiyuhs** ’t-oli-wolaqi-hpi-n-iy.  
 3-there-go.to-Dir-N M.-Obv and IC.be.dry-IIConj meat 3-thus-evening-eat-N-3PSub  
 ‘She goes to Mikcic and they eat an evening meal of dried meat.’ (Mitchell 1921/1976d, 8)

The first example from *Mikcic* (107a) could be some kind of topic (all the things that were done to him were just described); it does seem to have the force of the English translation, which involves topicalization. Without clause-initial elements like *wh*-phrases or initial particles, it is difficult to tell. The second example (107b) is actually a relative root argument, not a direct object; the verb here is intransitive. I include it to show the phenomenon of relative root arguments, when they are preverbal, occurring with Subordinative inflection (the AI verb now has a prefix, and is suffixed with -N-). (This sentence was also erroneously included in the counts above.)

- (108) a. On **skitapiy-il** ’t-iy-a-l yaq,  
 then man-Obv 3-say.to-Dir-Obv Quot  
 ‘He says to a man (who’s there),’ (Anonymous 1974, 9)

- b. On kisi kpukow-a-n **piksi piyehs** ewehke-t.  
 then Perf sew-Dir-N pig hair IC.use-3Conj  
 ‘He sews him up using a pig’s hair.’ (Anonymous 1974, 9)

The first example from *Akonutomuwin* (108a) is very interesting: the man is introduced out of the blue in this example (Rat has just gone up to a house to seek help), and ought to be existential. However, if the story is well known, it could be definite; the hearers all know who the man is. Again, this NP could also be contrastive. It should also be noted both with respect to this example and the one in 106b that verbs that embed quotations evidence a preference for appearing immediately before the quotation. Such a preference might account for the preverbal position of the object.

The broad conclusion with regard to the order of objects and the verb is that objects overwhelmingly follow the verb. There are three exceptions: pronouns, indefinites, and demonstratives, which tend to appear in immediately preverbal position; left-dislocated NPs (chiefly topics; see below); and a very small number of occurrences of an object between sentence-initial particles and the verb complex, which are so far not understood. They may involve disparate factors, including contrast (focus) and a preference with verbs embedding quotations for the verb to immediately precede the quotation.

### SV Order: Topic?

A question naturally arises: if all the preverbal objects have explanations as particle-like entities like *keq* or *wen* or as topics/foci, could not all the preverbal subjects? Subjects do occur preverbally 72 percent of the time, but how many of these are like preverbal objects?

The following table subtracts out those preverbal subjects that are pronouns, demonstratives, or preverbal-particle-like elements such as *wen*, *keq*, *psite*, *kotok*, etc; NPs that are explicitly marked as topics or foci; and pre-particle NPs that are most likely left-dislocated (in some manner). Included in this group are two relative clauses (whose head is probably external), one in *Kukec*, the other in *Mikcic*.

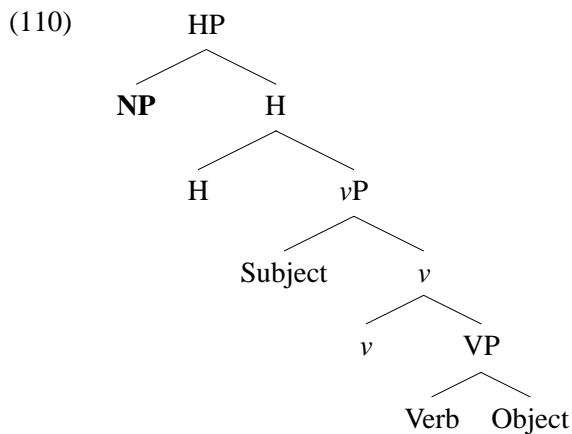
(109)	SV	Pronoun	T/F	New SV	VS	Ratio SV
Espons	42	10	2	30	13	.70
Kehtaqs	52	22	11	19	35	.35
Mahtoqehs	31	7	13	11	23	.32
Kukec	47	19	12	16	16	.50
Mikcic	75	12	10	43	10	.81
Ehpit	17	2	2	13	10	.57
Akonut.	22	5	4	13	9	.59
TOTAL	286	77	54	155	116	.57

Subtracting out these subjects results in an overall ratio of 57% preverbal subjects, 43% postverbal. The texts vary widely: *Kehtaqs* and *Mahtoqehs* have only 32% and 35% preverbal subjects, respectively, while *Mikcic*’s subjects are preverbal 81% of the time. *Espons*, by the same author as *Mikcic* (these are the two older texts, from the late 1900s), also has a high ratio SV, 70%. The other three texts are between 50–60%.



It should be recalled that *Kehtaqs* uses *keq* and *wen* frequently, as subject as well as object. Subtracting these out naturally reduces its ratio of SV sentences dramatically. Therefore the overall ratio is what should be emphasized: around 57% SV. This is a high enough percentage to conclude that there is an unmarked subject position before the verb that does not involve particle-like pronouns or topics/foci. Roughly half the time, however, subjects remain postverbal.

In Chapter 2, I analyze the basic Passamaquoddy clause as including a position above the base positions of the subject and object, labelled HP:



In a Direct clause, the subject will move to this position; in the Inverse, the object will. However, actual movement is not necessary, given the operation Agree: H Agrees with either the subject or object within vP. A natural way to understand the ratio of preverbal subjects given above is through the optionality of movement to HP, together with movement of the entire verb to H. If the subject does move to HP, it will be preverbal; but it is permitted to remain in vP, where it will be postverbal (but still precede the object, or both objects of a ditransitive).

Note that this account predicts that the object of the Inverse should pattern with the subject of the Direct in word order. Unfortunately, time constraints have prevented a full analysis of the Direct as opposed to the Inverse in the seven texts. I have only partial counts, for three of the seven texts, plus a fourth not included with the seven above, *Nekotok* (Mitchell 1921/1976c).

### The Inverse

There are very few examples of the Inverse with overt NPs. The following counts include ditransitives, where the primary object is considered as the object of the TA, and the secondary object is ignored; the numbers in the final column, which lists the occurrences of multiple NPs, are also included in the counts for the relative orders of the subject and object with respect to the verb.

(111)		SV	VS	VO	OV	
Espons	TADir	13	4	16	3	SVO 3
	TAInv	2	1			
	TAIndef					
	TI	8		13	2	SVO 2
Kehtaqs	TADir	8	5	9	10	SVO 3, OVS 1, OSV 1
	TAInv	2	5	1	3	OVS 1, OSV 1, VOS 1
	TAIndef				4	
	TI	6		6	2	SVO 2, SOV 2
Mahtoqehs	TADir	1	4	7	1	VSO 1
	TAInv					
	TAIndef					
	TI	5		7		SVO 5
Nekotok	TADir	14	1	19	2	SVO 7
	TAInv	3	3		1	SOV 1
	TAIndef			1	2	
	TI	9		9	4	SVO 2, OSV 1
TOTAL	TADir	36	14	52	16	SVO 13
	<b>TAInv</b>	<b>7</b>	<b>9</b>	<b>1</b>	<b>4</b>	
	TAIndef			1	6	
	TI	28		35	8	SVO 11

There are simply not enough instances of the Inverse to draw any strong conclusions. The total numbers do tend in the direction that the analysis suggests: the logical subject of the inverse follows the verb more than half the time (9/16, 56%), and the logical object of the verb precedes it in four of five instances (80%). These percentages are very different from the Direct, where the subject precedes the verb 72% of the time, and the object follows the verb 76% of the time.

In Chapter 2, I also analyze the indefinite subject forms as involving movement of the object to HP, similar to a passive. The word order counts for these four texts are consistent with this analysis: six out of seven of the indefinite subject forms have the object before the verb.

The table above includes TI forms for comparison. TI clauses turn out to be very consistent: the subject always precedes the verb, and the object almost always follows it (I suspect that the exceptions are all *keq*). These facts are again consistent with the analysis of Chapter 2, where inanimates have no syntactic reason to move out of their base position.

### Main Vs. Subordinate Clauses

I undertook one further comparison, using these same four texts. This was to compare main and subordinate clauses. Subordinate clauses were those that were clearly subordinated: adjunct clauses and complement clauses. Main clauses were everything else, including those linked to previous sentences with *naka* ('and') or

on ('then'), which generally take the Subordinative morphology described above. In making this comparison I also divided the clauses by the type of verb involved (based on the final):

(112) **Espons**

	Main					Subordinate				
	SV	VS	VO	OV	SVO	SV	VS	VO	OV	SVO
AI	11	6				5	4			
II	2	2								
TI	3		4	2	2	3		7		
TADir	9	1	10	2	2	1	3	3		1
TAInv	2						1			
TAIndef										

(note: 2T all Main; 2TDir: 3 V DO, 1 IO DO V;)  
(2TInv: 1 V DO, 1 DO V)

(113) **Kehtaqs**

	Main					Subordinate				
	SV	VS	VO	OV	SVO	SV	VS	VO	OV	SVO
AI	22	15				14	7			
II	2	3					1			
TI	2		3		1			1		1
TADir	4	3	3	4	3			1	3	OVS 1
TAInv	1	3		1						note
TAIndef				4						

(note: TAInv Main, 1 each OVS,OSV,VOS)  
(2TDir Main: 2 V DO, 2 V IO DO, 1 V S DO, 2 DO V, 1 IO V DO; Sub: 1 DO IO V, 1 DO IO S V)  
(2T Inv Main: 1 V DO, 1 S V DO; Sub: 2 V DO)

(114) **Mahtoqehs**

	Main					Subordinate				
	SV	VS	VO	OV	SVO	SV	VS	VO	OV	SVO
AI	18	9	3*			3	7			SplitS-2
II	4	3								
TI			2		4					1 SVSplitO-1
TADir	1	3	6	1	1					VSO-1
TAInv										
TAIndef										

(\* = AI + O)  
(2TDir Main: 1 V DO)

(115) **Nekotok**

	Main					Subordinate				
	SV	VS	VO	OV	SVO	SV	VS	VO	OV	SVO
AI	20	5				4	3			
II	1	1				1	1			
TI	2		5	2		4		2	1	2 OSV-1
TADir	4		6		5	1	1	5		2*
TAInv		2				2	1			
TAIndef				2				1		

(\* = 1 S V Split O)  
 (2TDir Main: 1 IO DO V, 1 S V DO, 1 V DO; Sub: 1 V IO DO, 1 DO S V)  
 (2TIndef Sub: 2 DO V, 1 V DO)

(116) **TOTAL**

	Main					Subordinate				
	SV	VS	VO	OV	SVO	SV	VS	VO	OV	SVO
AI	<b>71</b>	<b>35</b>	3*			<b>26</b>	<b>21</b>			
II	9	9				1	2			
TI	7		14	4	7	7		10	1	5 OSV-1
TADir	18	7	26	7	11	2	1	9	3	3 OVS-1
TAInv	3	5		1		2	2			(above)
TAIndef				6				1		

The main points that emerge were already discussed above: TI clauses are overwhelmingly SVO; Inverse clauses are roughly equal SV-VS; and indefinite subject clauses are almost always OV. For all of these clause types there does not appear to be much of a difference between main and subordinate clauses. Only one such difference did appear, involving AI verbs.

AI verbs occur as SV clauses roughly twice as often as they do VS in main clauses, but in subordinate clauses they split almost equally. That is, the subject is postverbal with much greater frequency in subordinate clauses. At present I have no explanation for this difference.<sup>27</sup>

## Conclusion

A study of Passamaquoddy texts suggests a basic word order: SVO. Departures from this order can and do occur, and it will be an important task to determine what the contexts and mechanisms involved in these deviations are. Subsequent chapters will address this issue to some extent, but the main focus will be on cross-clausal phenomena. Chapter 2, however, will examine intraclausal A-movement, and suggest that the subject in the Direct moves to an A-position that is above its base argument position, but it is the object that moves to this position in the Inverse. Counts from texts are consistent with such a difference between the two clause types, but there are simply not enough examples of Inverse clauses with overt NPs to draw any definitive conclusions.

<sup>27</sup>In Chapter 3, I note some indications that the verb may move to C in some subordinate clauses. If true this fact may go some way toward explaining the difference. The fact that it is only with AIs is interesting for another reason: the subject of a subordinate AI is often obviative with respect to a third person in a higher clause, but this never happens with embedded transitives.

### 1.4.2 Fixed SVO Order

Turning from texts to elicitation, it appears that certain syntactic environments require SVO word order when both the subject and the object are obviative, even when that would result in a feature mismatch with verb agreement. Chief among these is complement of the verb ‘think’. For instance, in 117a, the subject precedes the verb which precedes the object, and everything is fine. However, 117b, where what is meant to be the subject is now postverbal (VSO), is odd, and must be interpreted with the lower subject as coreferential with the higher; what was intended to be the subject is interpreted as part of the object instead:

(117) AH,SN 8:5.8

- a. Susehp litahasu [<sub>CP</sub> ’-temis-ol ma=te musaci-w-on-ol **nisuwihtic-il** ] .  
 Jos. think.3 3-dog-Obv Neg=Emph like-Neg-N-Obv spouse-PartObv  
 ‘Joseph thinks his dog doesn’t like his wife.’
- b. ? Susehp litahasu [<sub>CP</sub> ma=te musaci-w-on-ol ’-temis-ol **nisuwihtic-il** ] .  
 Jos. think.3 Neg=Emph like-Neg-N-Obv 3-dog-Obv spouse-PartObv  
 ‘Joseph thinks he doesn’t like **his dog’s wife**.’

Note that this pair shows that there is not just a preference for subjects to precede objects: when the subject is postverbal it has to be part of the object, and cannot be a separate argument.<sup>28</sup> Compare a case where only one of the NPs is obviative—word order is completely free:

(118) AH,SN 8:5.8

- a. N-utomeya-ku-n eli musqitaham-a *n-tutem-isq* **n-itapi**.  
 1-bother-Inv-N C hate-Dir.ObvP 1-white.friend-Female 1-friend.ObvP  
 ‘It bothers me that *my girlfriend (Prox)* hates **my friends (Obv)**.’
- b. N-utomeya-ku-n eli musqitaham-a **n-itapi** *n-tutem-isq*.  
 1-bother-Inv-N C hate-Dir.ObvP 1-friend.ObvP 1-white.friend-Female  
 ‘It bothers me that *my girlfriend (Prox)* hates **my friends (Obv)**.’
- c. N-utomeya-ku-n eli **n-itapi** musqitaham-a *n-tutem-isq*.  
 1-bother-Inv-N C 1-friend.ObvP hate-Dir.ObvP 1-white.friend-Female  
 ‘It bothers me that *my girlfriend (Prox)* hates **my friends (Obv)**.’

In the following pair the morphology is unambiguous, but deviation from SVO is still not tolerated in this context. Agreement on the verb indicates a third person proximate singular subject and a third person obviative plural object, but reversing the order of the subject and object in 119b reverses their interpretation despite the morphology:

<sup>28</sup>The order in 117b is possible if a demonstrative is added to the second NP, which is then interpreted as the subject:

- (i) Susehp litahasu ma=te musaci-w-on-ol ’-temis-ol **nihtol** **nisuwihtic-il**.  
 Jos. think.3 Neg=Emph like-Neg-N-Obv 3-dog-Obv this.Obv spouse-PartObv  
 ‘Joseph thinks this wife of his doesn’t like his dog.’ AH,SN 8:5.8

The now-heavy NP interpreted as subject is probably right-dislocated.

(119) AH,SN 8:5.8

- a. Susehp litahasu [<sub>CP</sub> **'-tutem-isqih-il** musqitaham-a **w-itapi** ] .  
 Jos. think.3 3-white.friend-Female-Obv hate-Dir.ObvP 3-friend.ObvP  
 ‘Joseph thinks his girlfriend hates his friends.’
- b. Susehp litahasu [<sub>CP</sub> **witapi** musqitaham-a **'-tutem-isqih-il** ] .  
 Jos. think.3 3.friend.ObvP hate-Dir.ObvP 3-white.friend-Female-Obv  
 ‘Joseph thinks his friends hate his girlfriend.’

The same situation obtains in 120, but now the choice of the NPs biases the interpretation. Nevertheless an SVO interpretation is required:

(120) AH,SN 8:5.9

- a. Litahasu Piyel [<sub>CP</sub> **nisuwihtic-il** '-koti-wesuwen-a (**nihiht**) **'t-akom** ] .  
 think.3 P. 3.spouse-PartObv 3-Fut-return-Dir.ObvP (these.ObvP) 3-snowshoe.ObvP  
 ] .  
 ‘Piyel thinks his wife is going to return his snowshoes.’
- b. Litahasu Piyel [<sub>CP</sub> **'t-akom** '-koti-wesuwen-a **nisuwihtic-il** ] .  
 think.3 P. 3-snowshoe.ObvP 3-Fut-return-Dir.ObvP 3.spouse-PartObv  
 ‘Piyel thinks his snowshoes are going to return his wife.’

The one clear case of fixed SVO order that I have found is in the complement to the verb that appears in the above examples, *litahasu*, ‘think’. Relative clauses might also require SVO, as the following example suggests—VSO does not seem to be permitted:

(121) AH,SN 8:5.9

- a. Piyel wolinomon nit atomupil [ *w-ikuwoss-ol* kis-onuhmuw-ew-at **mossis-ol** ] .  
 P. like.TI this.Inan car 3-mother-Obv Perf-buy-App-3Conj 3.older.sis-Obv  
 ‘Piyel likes the car that *his mother* bought for **his sister**.’
- b. Piyel wolinomon nit atomupil [ kis-onuhmuw-ew-at *w-ikuwoss-ol* **mossis-ol** ] .  
 P. like.TI this.Inan car Perf-buy-App-3Conj 3-mother-Obv older.sis-Obv  
 ‘Piyel likes the car that he bought for *his mother’s* **sister**.’

However, these are the only examples of relative clauses I have elicited; in particular, a case where the morphology does not match the word order is desirable.

These two contexts have in common the fact that they generally use the Changed Conjunct: the verb that is complement to ‘think’ is usually in the Changed Conjunct inflection, and relative clauses always are (see Chapter 4). However, ‘think’ does permit the Independent Indicative as well, as in 120, and there word order is still fixed.

Other embedded contexts permit deviations from SVO even when both NPs are obviative. For instance, if-clauses, which use the Unchanged Conjunct, do not have to be SVO (at least when the morphology is unambiguous):

(122) AH,SN 8:5.9

- a. Tokec op *Susehp* 'tutem-isqih-il skat tuci-yahqelm-ahq  
 if Would S. 3-white.friend-Female-Obv Neg X.extent-can't.stand-3ConjNeg  
**witapihi**, nit tehp nipuwam-a-n.  
 3.friend.ObvP then only marry-Dir-N  
 'If *Susehp*'s girlfriend didn't hate **his friends**, she would marry him.'
- b. Tokec op skat **Susehp witapihi** tuci-yahqelm-ahq  
 if Would Neg S. 3.friend.ObvP that.extent-can't.stand-3ConjNeg  
 'tutem-isqih-il, nit tehp nipuwam-a-n.  
 3-white.friend-Female-Obv then only marry-Dir-N  
 'If *Susehp*'s girlfriend didn't hate **his friends**, she would marry him.'

Sentential subjects, which use the Changed Conjunct, permit OVS (again, at least when the morphology distinguishes grammatical roles; compare the ending on the verb in 123c):

(123) AH,SN 8:5.9

- a. Utomeya-ku-n Susehp [<sub>CP</sub> eli 'tutem-isqih-il musqitaham-at **witapi** ] .  
 3.bother-Inv-N S. C 3-white.friend-Female-Obv hate-3Conj 3.friend.ObvP  
 'It bothers Susehp that *his girlfriend* hates **his friends**.'
- b. Utomeya-ku-n Susehp [<sub>CP</sub> eli **witapi** musqitaham-at 'tutem-isqih-il ] .  
 3.bother-Inv-N S. C 3.friend.ObvP hate-3Conj 3-white.friend-Female-Obv  
 'It bothers Susehp that *his girlfriend* hates **his friends**.'
- c. Utomeya-ku-n Susehp [<sub>CP</sub> eli *witapi* musqitaham-**ahtit** 'tutem-isqih-il  
 3.bother-Inv-N S. C 3.friend.ObvP hate-3PConj 3-white.friend-Female-Obv  
 ] .  
 'It bothers Susehp that *his friends* hate **his girlfriend**.'

In addition, speakers have strategies for avoiding the situations given above where SVO is required. For example, possessor raising can apply, in which case word order seems to become free:<sup>29</sup>

(124) AH,SN 8:5.9

- a. Litahasu [<sub>CP</sub> *w-itapih-il* apc 'komutonatom-a-ku-n-ol 'coqols-um-ol ] .  
 think.3 3-friend-Obv again 3-steal-App-Inv-N-Obv 3-frog-Poss-Obv  
 'He thinks *his friend* will steal **his frog** again.'
- b. Litahasu [<sub>CP</sub> 'coqols-um-ol cu apc 'komutonatom-a-ku-n-ol *w-itapih-il* ] .  
 think.3 3-frog-Poss-Obv surely again 3-steal-App-Inv-N-Obv 3-friend-Obv  
 'He thinks *his friend* will steal **his frog** again.'

<sup>29</sup>Other factors could be at work here as well. For instance, the presence of the particle *cu* in 124b could indicate that the object is left-dislocated, which might permit the deviation from SVO (right-dislocation seemed to be fine with this complement clause).

It is not clear to me why possessor raising would result in freer word order; the morphology is no less ambiguous between the frog doing the stealing and the friend doing the stealing. The Changed Conjunct versions of these sentences also permit deviations from SVO.<sup>30</sup>

(125) AH,SN 8:5.9

- a. Litahasu [<sub>CP</sub> eli=hc apc *w-itapih-il* komutonatom-uw-iht **'-coqols-um-ol** ] .  
 think.3 C=Fut again 3-friend-Obv steal-App-3ConjInv 3-frog-Poss-Obv  
 'He thinks *his friend* will steal **his frog** again.'
- b. Litahasu [<sub>CP</sub> eli=hc **'-coqols-um-ol** komutonatom-uw-iht apc *w-itapih-il* ] .  
 think.3 C=Fut 3-frog-Poss-Obv steal-App-3ConjInv again 3-friend-Obv  
 'He thinks *his friend* will steal **his frog** again.'

The fact seems to be that complements to 'think', whether Independent Indicative or Changed Conjunct, must be SVO when both arguments are obviative, unless they are ditransitive. Relative clauses might also have to be SVO when both arguments are obviative, but more examples are required to establish this with certainty.

### 1.4.3 Ambiguity: S Before O

In other cases SVO is not forced, but when ambiguity obtains, the NP that comes first is interpreted as the subject. For instance, in the following raising to object complement clauses, the interpretation changes when the relative order of the subject and object are reversed.<sup>31</sup>

(126) AH,SN 8:5.9

- a. Susehp **'-kosiciy-a-l** *w-itapih-il* **Susehp-ol mossis-ol** keti-nipuwam-at.  
 S. 3-know.TA-Dir-Obv 3-friend-Obv S.-Obv 3.older.sis-Obv IC.Fut-marry-3Conj  
 'Susehp knows that *his friend* wants to marry **Susehp's sister**.'
- b. Susehp **'-kosiciy-a-l** *mossis-ol* eli **w-itapih-il** koti-nipuwam-at.  
 S. 3-know.TA-Dir-Obv 3.older.sis-Obv C 3.friend-Obv Fut-marry-3Conj  
 'Susehp knows that *his sister* wants to marry **his friend**.'
- c. Susehp **'-kosiciy-a-l** *mossis-ol* eli koti-nipuwama-t **w-itapih-il**.  
 S. 3-know.TA-Dir-Obv 3.older.sis-Obv C Fut-marry-3Conj 3-friend-Obv  
 'Susehp knows that *his sister* wants to marry **his friend**.'

<sup>30</sup>The particle *eli*, which I gloss as a complementizer for reasons discussed in Chapter 3, takes up the Initial Change that would turn the vowel /o/ in the initial syllable of 'steal' to an /e/.

<sup>31</sup>If *Susehp* is not repeated the interpretation must be that the friend wants to marry his own sister:

- (i) Susehp **'-kosiciy-a-l** **w-itapih-il** keti-nipuwam-at **mossis-ol**.  
 S. 3-know.TA-Dir-Obv 3-friend-Obv IC.Fut-marry-3Conj 3.older.sis-Obv  
 'Susehp knows that his friend wants to marry his (the friend's) sister.'

It is interesting that possessor raising does not apply here; instead the possessor is indicated as disjoint from the subject by specifying it (note that it is obviative, as it would be if it had undergone possessor raising). It may be that this verb is formally unable to applicativize; there does not appear to be a TI version of the verb, which is what the applicative morpheme must attach to. It is also interesting that when the grammatical relations are reversed, the possessor of the object is interpreted as the higher subject, without specifying it.



However, either NP can come before or after the verb.<sup>32</sup>

This preference appears in matrix clauses as well, for instance here, in a question:

(127) AH,SN 8:5.9

- a. Keqsey *Piyel w-ikuwoss-ol* kis-onuhmuw-ew-at **mossis-ol**?  
 what P. 3-mother-Obv Perf-buy-App-3Conj older.sis-Obv  
 ‘What did *Piyel’s mother* buy for **his sister**?’
- b. Keqsey *Piyel mossis-ol* kis-onuhmuw-ew-at **w-ikuwoss-ol**?  
 what P. older.sis-Obv Perf-buy-App-3Conj 3-mother-Obv  
 ‘What did *Piyel’s sister* buy for **his mother**?’

The preference carries over to left-dislocation, where one of the NPs occurs to the left of the wh-phrase. When the agreement is ambiguous (both NPs are obviative), the left-dislocated NP must be the subject, even if the other NP is preverbal:

(128) AH,SN 8:5.9

- a. *Piyel w-ikuwoss-ol*, keqsey kis-onuhmuw-ew-at **mossis-ol**?  
 P. 3.mother-Obv what Perf-buy-App-3Conj older.sis-Obv  
 ‘*Piyel’s mother*, what did she buy for **his sister**?’
- b. *Piyel w-ikuwoss-ol*, keqsey **mossis-ol** kis-onuhmuw-ew-at?  
 P. 3-mother-Obv what older.sis-Obv Perf-buy-App-3Conj  
 ‘*Piyel’s mother*, what did she buy for **his sister**?’

It would be interesting to see if the preference reversed in the Inverse, with the first NP interpreted as the logical object. I do not have any data for the Inverse, unfortunately.

#### 1.4.4 Conclusion: Basic Word Order

Based on the study of word order in texts, environments where SVO order is forced, and the preference for the first NP to be interpreted as the subject when the morphology does not disambiguate, I conclude that there is an underlying, basic word order in Passamaquoddy, SVO. Deviations from this word order are allowed, by both grammatical mechanisms and discourse considerations, but they are crucially deviations, most likely achieved through syntactic movement.

<sup>32</sup>Some non-SVO orders evoked long hesitation from the informants before they accepted them; for instance, SOV in the following raising to object complement:

- (i) Susehp ’-piluwitaham-a-l ’-tutem-isqih-il ’-temis-ol ’t-aqami-kselom-a-l kat=op nekom.  
 S. 3-suspect-Dir-Obv 3-white.friend-Female-Obv 3-dog-Obv 3-more-love-Dir-Obv Neg=would 3  
 ‘Susehp suspects that *his girlfriend* loves **her dog** more than him.’

### 1.4.5 Proximates and Obviatives

At least two Algonquianists, Boling (1981) for Shawnee and Junker (2000) for Cree, have claimed that nothing can come between an obviative argument and the verb. If two NPs are present, the obviative one must immediately precede or immediately follow the verb.<sup>33</sup> This is not true in Passamaquoddy. In elicitation proximates freely intervene between an obviative and the verb, and several examples from texts can be cited:

- (129) a. Tan te keq **wen-il** *ptewolon* yah-at, nit tehc wen elessit.  
 how Emph what who-Obv motewolon tell-3Conj, then Emph.Fut who what.happens(?)  
 ‘Whatever a *motewolon* tells you—that’s what happens to you.’ [lit. ‘Whatever a *motewolon* tells **someone**, that’s what happens to someone.’] (Newell 1979, 5)
- b. Tiy-a-l yaq *wot mahtoqehs* **coqols-ol**, “Tan op kil ktolluhkan tokec ckuwi  
 say.to-Dir-Obv Quot Dem rabbit frog-Obv WH would 2 2-? if hither  
 motaha-t ya malsom?”  
 be.heard.coming-3Conj Hes.An wolf  
 ‘Rabbit said to **the frog**, “What would you do if a wolf were heard coming this way?”’  
 (Newell 1974a, 1)

I have noted no special restrictions on obviatives or on proximates, except the tendency for subjects to precede objects (in the Direct; in elicitation, the object usually precedes the subject in the Inverse, but textual occurrences to back this up are missing, as discussed above).

### 1.4.6 Clause Structure

The study of Passamaquoddy texts undertaken above, in addition to revealing a basic word order, has also revealed several types of elements that seem to flag positions in the structure of the Passamaquoddy clause. Nothing has been determined with absolute certainty, but I believe the following types of elements indicate fixed positions in the structure.

#### Initial Position

The first position is the one that is usually initial in a clause. This position is delimited by the type of particle discussed above as appearing in initial position. These particles include the following:

- (130) Initial Particles:
- a. *katolu* ‘of course’
  - b. *nitte* ‘immediately’
  - c. *on* ‘then’
  - d. *'sami* ‘because’
  - e. *nehtaw* ‘just in case’

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<sup>33</sup>Boling (1981, 27–29) states this, but then cites several examples that violate it, on page 55 and page 73.

- f. *eluwehk tehc* ‘I guess’  
 g. *n=op=al* ‘I wish’

Some of these were illustrated above, in Section 1.3.9. An example using *nehtaw* appears below:

- (131) **Nehtaw** skat micuwakon wikatom-uwon k-maceptun sukolis.  
 in.case Neg food like-2ConjNeg 2-take candy  
 ‘Just in case you don’t like any of the food, take some candy with you.’ AH7:4.18

Most of these initial particles are either complementizer-like elements or epistemic modals, which are known to occur high in the clause. NPs to their left must be left-dislocated, as shown by the inability of singular *psite wen* (‘everyone’) to appear there:

- (132) AH7:4.5
- a. \*Mate=hc n-kisi-wikuwamkom-a-wi-n Pil, *psi=te* emphwen ’**sami**  
 Neg=Fut 1-Able-visit-Dir-Neg-1P Bill, all=Emph someone because  
 naci-wikuwamkom-a-l w-ikuwoss-ol.  
 go.do-visit-Dir-Obv 3-mother-Obv  
 ‘We can’t go visit Bill, because everyone went to visit his mother.’
- b. Mate=hc n-kisi-wikuwamkom-a-wi-n Pil, *psi=te skinuhsis-ok* ’**sami**  
 Neg=Fut 1-Able-visit-Dir-Neg-1P Bill, all=Emph boy-3P because  
 naci-wikuwamkom-a-wa-l w-ikuwossu-wa-l.  
 go.do-visit-Dir-3P-Obv 3-mother-3P-Obv  
 ‘We can’t go visit Bill, because all the boys (Pl.) went to visit their (Pl.) mother (Sg.).’

*Psite* plus a plural NP *can* appear to the left of these particles, as shown in 132b. (The context for these utterances is that Bill is at a camp, where we want to go visit him.)

Second-position clitics often ignore left-dislocated NPs; hence they will follow clause-initial particles if they co-occur. In the following, *yaq* is a second-position clitic, here following *nit=te*:

- (133) Ahcossis *nit=te yaq* weci kipiya-t.  
 Archie right.away Quot when fall.over-3Conj  
 ‘Archie fell right down when he saw it.’ (Newell 1979, 25)

Other types of particles (non-initial ones), for instance negation, cannot appear to the left of initial particles:

- (134) AH,SN 9:6.13
- a. **N=op=al** skat kisi-woleht-uhk utapakan.  
 I.wish Neg Perf-fix-3ConjNeg 3.car  
 ‘I wish he couldn’t fix his car.’
- b. \*Skat **n=op=al** kisi-woleht-uhk utapakan.  
 Neg I.wish Perf-fix-3ConjNeg 3.car  
 ‘I wish he couldn’t fix his car.’ (also bad as ‘I don’t wish’)

Wh-phrases are also almost always initial; hence they occupy roughly the same position as these initial particles. Some particles cannot appear together with wh-phrases, while others can, but there are some differences (and uncertainty) in which comes first:

(135) AH8:5.6

- a. **Nitte** apc keqsey koti-olluhk?  
right.away again what Fut-do  
'What are you going to do right now?'
- b. Keqsey **nitte** koti-olluhk?  
what right.away Fut-do?  
'What are you going to do right now?'

(136) AH8:5.6

- a. ?? Keqsey apc **mamote** koti-olluhk?  
what again finally (2)-Fut-do  
'What are you finally going to do now?'
- b. **Mamote** apc keqsey koti-olluhk?  
finally again what (2)-Fut-do  
'What are you finally going to do now?'

With at least one type of relative root question, the initial particle has to follow not just the wh-phrase but the entire verb; it also cannot precede a wh-phrase (at least in an embedded clause):

(137) AH8:5.3

- a. \* Tan **nitte** 't-oli-y-a-n Estela amsqocephkan-ol?  
WH right.away 3-thus-make-Dir-N (right.away) Stella doll-Obv  
'How does Stella make a doll ["doll herself up"] right away?'
- b. Tan 't-oli-y-a-n **nitte** Estela amsqocephkan-ol?  
WH 3-thus-make-Dir-N right.away Stella doll-Obv  
'How does Stella make a doll ["doll herself up"] right away?'

(138) AH8:5.3

- a. Ma=te n-kosiciy-a-w keqomehsi eli-y-at amsqocephkan-ol.  
Neg=Emph 1-know.TA-Dir-Neg why IC.thus-make-3Conj doll-Obv  
'I don't know why she's making a doll ["dolling herself up"].'
- b. \* Ma=te n-kosiciy-a-w **nitte** keqomehsi eli-y-at  
Neg=Emph 1-know.TA-Dir-Neg right.away why IC.thus-make-3Conj  
amsqocephkan-ol.  
doll-Obv  
'I don't know why she's making a doll ["dolling herself up"] right away.'

In embedded clauses, a left-edge particle can appear with the complementizer-like element *eli*:

- (139) N-kosiciy-a *eli nitte* naci-y-at amsqocephkan-ol.  
 1-know.TA-Dir C right.away go.do-make-3Conj doll-Obv  
 ‘I know that she’s going to make a doll [“doll herself up”] right away.’ AH8:5.3

In some ways second-position clitics are also initial particles. They always appear *almost* initially, that is, in second position. It may be that syntactically they are initial particles, but morphophonologically they cannot appear by themselves in initial position.

### Left-Dislocated Position

As stated, initial particles and wh-phrases delimit the initial position within the clause. Anything to the left of such elements is left-dislocated. Besides the ban on singular quantifiers from this position, several other facts indicate that the NP is left-dislocated.

First, left-dislocated NPs are separated from the rest of the clause by a prosodic break, as shown above; the examples are repeated here:

- (140) a. Not olu n-ikuwoss, ma te ’-kosiciht-uw-on eli toli motewolonuwihponol-ut.  
 Dem Top 1-mother, Neg TE 3-know.TI-Neg-N C Prog curse-Indef/3Conj  
 ‘[My mother,] she didn’t know that she was being cursed.’ (Newell 1979, 13)
- b. Wot olu yaq Kci Anuwit, ma te coni posonut-ehke-w.  
 Dem Top Quot great Hannah, Neg TE stop basket-make-Neg  
 ‘Old Hannah didn’t even stop working on her basket.’ (Newell 1979, 13)

Second, left-dislocated NPs are frequently marked with discourse particles, such as *olu* above, that indicate their discourse-old, topic status. Another particle that appears with left-dislocated NPs is *kete*, ‘for example’; this NP must come before wh-phrases:

- (141) AH,SN 9:6.14
- a. Albert kete nehpah-a-l otuhk-ol.  
 A. for.example kill-Dir-Obv deer-Obv  
 ‘Albert for example killed a deer.’
- b. \*Wen-il Albert kete nehpah-ac-il?  
 who-Obv A. for.example kill-3Conj-PartObv  
 ‘What (An.) did Albert for example kill?’
- c. Albert kete wen-il nehpah-ac-il?  
 A. for.example who-Obv kill-3Conj-PartObv  
 ‘Albert for example, what (An.) did he kill?’

Another such particle is the contrastive focus marker *kahk* (illustrated in Chapter 4).

Third, second-position clitics frequently ignore left-dislocated NPs in computing second position. An example was given in 133.

Fourth, left-dislocated NPs can be proximate even though they are obviative in their argument position, and agree on the verb as an obviative:

(142) AH,SN 8:5.9

- a. Yehtol apc ampokolam-ol on Pokomk nomiy-a-n.  
 this.Obv again bullfrog-Obv then Fisher see-Dir-N  
 ‘This bullfrog, then Fisher sees it again.’
- b. Wot apc ampokolam on Pokomk nomiy-a-n.  
 this again bullfrog then Fisher see-Dir-N  
 ‘This bullfrog, then Fisher sees it again.’

(143) Nt-olitahas **wot ampokolam** cu apc Pokomk nomiy-a-l.  
 1-think this.An bullfrog surely again Fisher see-Dir-Obv  
 ‘I think that Fisher saw that bullfrog again.’ AH,SN 8:5.9

All of these facts together indicate that left-dislocated NPs are to some extent external to the clause itself. In Chapter 3, they will be shown to be able to violate islands, meaning that they are not necessarily moved to left-dislocated position, but might be base-generated there. In this context it is interesting to note that they can be the possessor of an argument, and not necessarily an argument of the clause they are dislocated out of:

- (144) a. **Nt-anti-m kete** nit weci mamatuwik-ok-pon **wolukon**,  
 1-aunt-Poss for.example then because be.crippled-IIConj-Pret 3.hip  
 ‘[My aunt, for example, that was why her hip got crippled.]’ (Newell 1979, 5)
- b. Wot olu sakom Piktu-k nuhu wisoki-woliku ’-tus, pciliw  
 this Top sachem P. three.ObvP very-be.pretty.ObvP 3-daughter.ObvP especially  
 ewasisuwi-t.  
 IC.be.young-3Conj  
 ‘[The chief at Pictou, his three daughters are very beautiful], especially the youngest.’ (Mitchell 1921/1976d, 8)

### Negation, Other Preverbal Particles

The second position that can be recognized consistently is marked by negation, which always appears pre-verbally. NPs can appear on either side of negation, as can various kinds of particles, but negation never follows the verb.

Subjects can precede or follow negation:

- (145) a. kenoq olu *Koluskap* **kotama** ’t-oloqi-tahatom-uw-on ’t-oli-ya-n pahpultimok.  
 however Emph K. Neg 3-away-think-Neg-N 3-there-go-N festivities  
 ‘but Koluskap does not think he will attend the festivities.’ (Mitchell 1921/1976d, 5)
- b. **Ma=te** *mihtaqs-ol* keq ol-luhke-wiy-il.  
 Neg=Emph father-Obv something thus-do.3-Neg-Obv  
 ‘Her father didn’t do anything.’ AH8:5.6

Multiple NPs can come before negation, but I have found few examples of multiple NPs after negation. An example of more than one NP before negation is the following (which includes variable binding):

- (146) **T-akoma-l** *psi=te wen* ma=te *'-kisi-wolehl-a-wiy-il.*  
 3-snowshoe-Obv all=Emph someone Neg=Emph 3-Perf-fix-Dir-Neg-Obv  
 'Everyone<sub>1</sub> didn't fix his<sub>1</sub> snowshoe.'

Those elements that come most comfortably between negation and the verb are particle-like NPs: pronouns, indefinites, split quantifiers/determiners. The indefinites *wen*, *keq*, *tama* appear in this position (see Chapter 2):

- (147) a. *Peciya-t, kotama=te olu wen* *maccessi-w.*  
 come-3Conj Neg=Emph Emph who move-Neg  
 'When she gets near them, none of them moves.' (Mitchell 1921/1976a, 13)
- b. *Kat=op keq* *kt-ol-essi-w.*  
 Neg=would something 2-thus-happen-Neg  
 'Nothing shall happen to you.' (Mitchell 1921/1976b, 11)
- c. *Tiya-l yaq mahtoqehsw-ol, "Mate tama* *k-nomiy-a-w mahtoqehs yut t[u]ciye-w?"*  
 say.to-Obv Quot rabbit-Obv Neg where 2-see-Dir-Neg rabbit here go.by.3-Neg  
 'He said to Rabbit, "Haven't you seen a rabbit anywhere going by here?"' (Newell 1974a, 3)

As was discussed above, pronouns and demonstratives also tend to appear in immediately preverbal position:

- (148) a. *Ipa pesq* *mahkuwiy-iq.*  
 well one lend-2PImp  
 'Here, let me have **one**.' (Mitchell 1921/1976a, 16)
- b. *Nemq yaq ote not* *mehtewestu, on yaq tan al 't-olessi-li-n*  
 barely Quot Emph that.An stop.talking.3 then Quot WH Uncertain 3-happen.to-ObvS-N  
*'-payisihkol-um-ol, on Antiw 'kipiya-n.*  
 3-bicycle-Poss-Obv then Auntie 3-fall.over-N  
 'She had hardly stopped talking when something happened to the bike, and Auntie fell.'  
 (Newell 1979, 5)

Pronouns will occasionally come between a preverb and the verb stem:

- (149) *Kisi nil* *motewolonuwihponol-ol."*  
 (2)-Perf 1 curse-1/2  
 'because I've been putting a curse on you.'" (Newell 1979, 16)

Quantifiers also appear in this position:

- (150) a. *Kehtaqs kahk psi te tama* *kisi yali-ye, peci te lampeq.*  
 ghost Foc all Emph somewhere Perf around-go.3, even Emph underwater  
 'A ghost can go **anywhere**—even under water.' (Newell 1979, 21)
- b. *Tokec olu msi=te keq* *'-kiwacehtun.*  
 now Top all=Emph something 3-make.lonely  
 'But now, he makes **everything** feel lonely.' (Mitchell 1921/1976c, 7)

This is also the position where split quantifiers and demonstratives appear, while the NP they are associated with is postverbal:

- (151) a. 'Tiy-a-l, "Msi=te=hc 't-iy-ulti-n-iyā **naksqiyi-k.**"  
 3-say.to-Dir-Obv all=Emph=Fut 3-be-Plural-N-3P young.woman-3P  
 'He tells him, "All the young girls will be there.'" (Mitchell 1921/1976d, 5)
- b. "Keq **nikt** itom-uk **sipsis-ok?**" 't-oli-qecikesi-n Wiwilomeq.  
 what Dem say-3P bird-3P 3-thus-ask-N W.  
 "What are those birds saying?" asks Wiwilomeq.' (Mitchell 1921/1976a, 21)

### The Verb

It is unclear where the verb occurs in the clause. Most adverbial elements are either part of the verbal morphology or are particles that can occur either pre- or post-verbally; hence they cannot be used to fix the edge of the VP, for example. Negation always precedes the verb, and subjects and other NPs that are not left-dislocated may precede it. The morphology that appears on the verb is mostly agreement, but there is also a negative suffix and a preterite suffix. Aspectual morphemes are generally preverbs.

The verb complex is schematized below, for the Independent and the Conjunct Orders of inflection:

Ind	Prefix	Preverbs	V Stem	Final	Theme	Neg	-N-	Central	Dub	Pret	Periph
'hit'	't-	oqeci- <i>Asp</i>	tok <i>V</i>	-om <i>v</i>	-a <i>H</i>	-wi <i>Neg</i>	?	-wa <i>Agr</i>	-s <i>?</i>	-opon <i>T</i>	-il <i>Agr</i>
Conj	IC				ConjEnding						Part End
'hit'	IC	eqeci-	tok	-om	-ahtihq				-os	-opon	-il

This example includes a preverb meaning 'try' and the verb stem 'hit', with a TA final (the TI version is *'tok-otom-on*, 3-hit-TI-N). In the Independent Order, a prefix attaches to the outermost preverb. (This example would mean something like 'they may have tried to hit him/her'.) Additional preverbs can be added, including relative roots; relative roots generally appear outermost. In the Conjunct, Initial Change affects the first syllable of the element to which the prefix attaches in the Independent; here, the preverb 'try'. In the Conjunct, the Theme Sign, Negation, and Central Ending are all fused into a single morpheme, the Conjunct Ending. (The Conjunct version might mean something like 'the one who they may have tried to hit'.)

It might be possible to argue from the morphology (the presence of the preterite suffix) that the verb stem raises as high as T(ense), but I will not attempt to do so here. A theory of how the various morphemes combine together would be necessary, and I am not prepared to defend such a theory. Some remarks may be in order, however.

First, the preverbs sometimes attach only loosely to the verb stem. They (including the prefix in the Independent and Initial Change in the Conjunct) can be separated from the verb by pronouns, particles, and other elements. It is likely that they simply "lean" on the verb stem phonologically, without appearing in the same syntactic location. Second, Initial Change seems in many instances to be associated with C. In Chapter



3, I describe several cases where it appears that the preverb bearing Initial Change appears in C. (Cf. Halle and Marantz 1993, where it is argued that Initial Change and the prefixes both appear in C, the prefixes by syntactic movement.) However, it is unlikely that the entire verb always moves to C. As stated, negation and unmarked (i.e., non-left-dislocated) NPs can appear between, say, wh-phrases and the verb. Moreover, in the cases where the bearer of Initial Change does seem to be in C, it is likely that it moved there as a phrasal category, not by head movement (see Chapter 3).<sup>34</sup>

In summary, the verb generally follows initial particles and preverbal particles like negation. It includes morphology for aspect, tense, negation, and some other functional categories (the head H from Chapter 2, agreement, and whatever category the dubitative would belong to). Evidence that might indicate where it occurs in the structure is unclear. As regards NP placement around the verb, there seems to be an unmarked position at least for the subject between material associated with Comp and negation, and possibly between negation and the verb. NPs, both subjects and objects, also appear comfortably after the verb.

### Conclusion: Clause Structure

The following positions appear to be fairly uniform: there is a left-dislocated position, chiefly for discourse-old NPs. This position precedes wh-phrases and initial particles, which delimit the edge of the clause. There then appears to be a position for an NP, usually the subject, sometimes the object, very occasionally both. This position usually precedes negation, but not always. Following sentential negation appear indefinites, demonstratives, pronouns, and determiner-like quantifiers, in immediately preverbal position. Following the verb are several NP positions. These positions are diagrammed below:

(152)  $\text{NP}_{\text{topic}}$  [<sub>CP</sub> WH Particles  $\text{NP}_{\text{subj/obj}}$  Neg Det/Q/pro Verb  $\text{NP}_{\text{subj/obj}}$  ]

Nothing in the remainder of this study hinges crucially on positions within a clause. I include this information here merely in the interests of completion, and to give a broad idea of the clausal syntax of Passamaquoddy.

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<sup>34</sup>There are one or two cases where the entire verb may undergo XP movement to C(P), such as 137 above, in which an initial particle must follow the entire verb. This seems to indicate that, to the extent that the verb complex is mobile, it moves as a phrasal category.



## Chapter 2

# Quantifiers, Binding, and A-Movement

### 2.1 Introduction

The previous chapter provided an overview of Passamaquoddy morphosyntax and word order. This chapter turns to tests for structure and movement, which will be relevant throughout this study. The most useful tests come from scope and variable binding, which are quite rigid in Passamaquoddy: they obey strict c-command among A-positions. There is exactly one operation of A-movement, the Inverse, which sets up new binding possibilities. The Inverse, based on the scope and binding facts, is a process that raises an object that outranks the subject on a participant hierarchy to a position c-commanding the subject. In the Independent Order this is reflected morphologically in the Theme signs, as described in Chapter 1. In the Conjunct Order, where grammatical relations are indicated by portmanteaux morphemes, it is less obvious that there is inversion in the morphology, but the binding facts illustrate that it does take place syntactically!<sup>1</sup> I will sketch a minimal analysis of this phenomenon, one that relates the obviation system to formal licensing requirements of argument NPs. This analysis will necessarily include a theory of how the participant hierarchy interacts with the grammar; as we will see, it does so only in a very minimal way, in choices for values of uninterpretable features. There is no independent hierarchy, and no need for constraint ranking as in Aissen's (1997) analysis of obviation.

The most important point of this chapter, independent of the analysis of the Inverse and obviation (though the analysis will come up again in Chapter 5), is to establish that there is a process of inversion that has the properties of A-movement. In order to establish this, we need to discover tests for c-command. The binding of reflexives and reciprocals will not work, since they are indicated only in verbal morphology. Disjoint reference (i.e., Principle C) also does not work for Passamaquoddy, for reasons that are not entirely clear; pronouns and R-expressions seem to be able to be coreferent freely. One test that does give reasonably clear and consistent results is variable binding. There are various types of quantificational expressions in Passamaquoddy, most of which can bind (null) pronominals as variables, subject to the familiar condition of c-command. The first two sections of this chapter explore the properties of these quantifiers and the structural

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<sup>1</sup>The morphological distinction in the Independent Order is what many Algonquianists reserve the term *Inverse* for. It is also used more broadly, to refer to any situation in which the object outranks the subject on a participant hierarchy. The syntactic evidence indicates that syntactic inversion follows the more general categorization; the morphology then follows from and reflects the syntax.

conditions on variable binding. These are then used to establish the Inverse as a syntactic phenomenon involving A-movement. Finally, I speculate about the derivation of free word order in Passamaquoddy, providing one argument that it is generally due to A-bar scrambling, which necessarily reconstructs as far as scope and binding are concerned.<sup>2</sup>

## 2.2 Quantifiers In Passamaquoddy

Passamaquoddy, as stated in Chapter 1, lacks NP anaphors, reflexives, and reciprocals. It also lacks Condition C effects, at least as far as can be determined; in particular, it lacks Condition C effects even where variable binding holds. The Binding Conditions, then, can tell us little about structure and constituency in the language, at least without much more data on coreference. For this reason, conditions on the binding of variables by quantifiers will prove invaluable in discovering what the structure of different constructions is, and how various word orders and structures are derived.

### 2.2.1 A-Quantifiers

Passamaquoddy possesses various types of quantificational elements, including both DP-quantifiers (quantifiers that take an NP complement—Partee, Bach, and Kratzer’s (1987) “D-quantifiers,”) and quantifiers with a different distribution (Partee, Bach, and Kratzer’s (1987) “A-quantifiers”).

A-quantifiers are quantificational elements that do not have the distribution of NPs. In Passamaquoddy, these include a wide range of elements: predicates (verbs; 153a), preverbs (153b–c), adverbs (153d–e), and floated quantifiers (153f):

- (153) a. N-koti-nomiy-a-k **kehceyaw-i-c-ik** weyossis-ok.  
 1-Fut-see-Dir-3P IC.be.many-3Conj-Part3P animal-3P  
 ‘I want to see a lot of animals.’ (lit. ‘I want to see animals that are many’) **Verb**
- b. **Kehsi**-nomiy-uk weyossis-ok.  
 many-see-1Conj animal-3P  
 ‘I see a lot of animals.’ **Preverb**
- c. Nokosanaqot **nokka**-koskotunen-a-n.  
 be.quick.II completely-strangle-Dir-N  
 ‘In no time at all, he strangles every one.’ (Mitchell 1921/1976a, 11) **Preverb**
- d. I... cel yaq [’]t-olekopisuwon, wape-kon [’]t-ahsowon, **psite** wap-sewe.  
 eee besides Quot 3-apron white-clothlike.II 3-hat all white-wear.3  
 ‘Eee... and he had an apron on, his hat was white, he was **all** dressed in white.’ (Newell 1974a, 3) **Adverb**
- e. Tepot olu ’t-olitahasi-n Pokomk, “Espons nit wilitpan **msite** nutehtem-uw-a-n.”  
 however Top 3-think-N P. E. that brain all knock.out-App-Dir-N

<sup>2</sup>Parts of this chapter were presented at the 32nd Algonquian Conference (November 2000), New York University (January 2001), and the Semantics of Under-represented Languages of the Americas (SULA) workshop (April 2001), and have appeared as Bruening 2001. It should be noted that many of the examples used in those presentations were problematic for various reasons; the data and generalizations presented here supersede all of the above.

‘But Pokomk thinks, “That is Espons’ brain that I have [completely] spattered.”’ (Mitchell 1921/1976a, 15) **Adverb**

- f. On yaq Skicinuw-ok **psi** maciyapasi-ni-ya.  
then Quot Indian-3P all leave.on.foot-N-3PSub  
‘Then the Indians all left.’ (Newell 1974b, 11) **Floated Quantifier**

Passamaquoddy also possesses several types of D-quantifiers, quantifiers that take NP restrictions. These will be the subject of investigation here. I will have little more to say about A-quantifiers in this study.

### 2.2.2 Universal Quantifiers

Universal quantifiers include *psi(w)* (*msi(w)* in older texts),<sup>3</sup> glossed as ‘all’ here, which often occurs with the emphatic marker *te* as *psi=te*, and the distributive *yatte wen*, ‘each’.<sup>4</sup> Because these quantifiers will be used extensively in testing for variable binding, it is worth going through their properties in some detail.

*Psi=te* occurs in construction with an NP, which is usually (but not always) plural. It also occurs with the indefinites *wen*, animate, glossed ‘someone’ here, *keq(sey)*, inanimate, glossed ‘something’, and *tama*, ‘somewhere’ (see below). In the latter case the whole quantificational DP is singular, and takes singular agreement. A sequence of sentences from a text illustrates these two uses:

(154) (Newell 1974b, 6)

- a. [’]T-ali yaq qecimul-a-wa **psi=te Skicinu** cipotu=te wen  
3-around Quot ask-Dir-3P.ObvP all=Emph Indian.ObvP maybe=Emph someone  
nomiy-a-l yuttol kukec-ol, not olu palitahamsi-t.  
see-Dir-Obv this.Obv warden-Obv this Top think.highly.of.self-3Conj  
‘They’re going around asking **all the Indians** if someone saw this warden, the one who thinks highly of himself.’
- b. **Psi** yaq **ote wen** itom, “Kotama.”  
all Quot Emph someone say.3 no  
‘**Everyone** said, “No.”’

Some more examples follow:

(155) *psi=te* + NP

- a. Wespahkiwik **msiw skitapiy-ik** kotunk-ahtu-wok.  
in.morning all man-3P hunt-Plural-3P  
‘In the morning, **all the men** go hunting.’ (Mitchell 1921/1976d, 17)

<sup>3</sup>Phil LeSourd (p.c.) tells me that *psi/msi* is accentually and possibly distributionally distinct from *psiw/msiw*, but any difference will not be relevant here (almost all of the binding examples will use *psi=te*).

<sup>4</sup>Morphologically *yatte* is a demonstrative *yat*, ‘that (remote), Animate’, plus the emphatic *te*. In combination with *wen*, however, *yatte* apparently has no relation to a demonstrative, lacking deictic force and referentiality. The demonstrative part also usually does not inflect (for obviation).

- b. Mec=ote toke **msiw cihknaqc-ok** nemiya-htit wenil, nit=te=hc  
 even=Emph now all turtle-3P IC.see-3PConj someone-Obv then=Emph=Fut  
 '-cuwahpi-tep-oqon-essu-lti-ni-ya.  
 3-into.water-in?-heel?-move-Plural-N-3P  
 'Even today, **all turtles**, when they see someone, disappear into the water heels last.' (Mitchell 1921/1976d, 22)

(156) *psi=te* + indefinite

- a. Kehtaqs kahk **psi te tama** kisi yali-ye, peci te lampeq.  
 ghost Foc all Emph where able around-go.3, even Emph underwater  
 'A ghost can go **anywhere**—even under water.' (Newell 1979, 21)
- b. Tokec olu **msi=te keq** '-kiwacehtun.  
 now Top all=Emph something 3-make.lonely  
 'But now, he makes **everything** feel lonely.' (Mitchell 1921/1976c, 7)

With a plural NP, *psi=te* is probably best glossed as 'all (of the)', and usually denotes a group. However, it is possible to get distributive interpretations of such phrases, particularly when variables are involved (see below). As for *psi=te* + indefinite, these will be taken up below, where an analysis in terms of binding the variable of the indefinite will be proposed.

*Psi=te* or *psi(w)* can also occur alone, usually denoting a group:

- (157) Nit=te sonuciw **msiw** etoli-cip-hucu-lti-htit.  
 there=Emph along.edge all IC.there-scare(d)-stand?-Plural-3PConj  
 'There by the water's edge **they all** stand in a frightened posture.' (Mitchell 1921/1976c, 6)

D-quantifiers and A-quantifiers can co-occur:

- (158) Neke Koluskap nekoto-k skitkomiq, **nokka**-hpawol-a-sopon-ih  
 then.Past K. IC.leave-3Conj earth completely-scare-Dir-Pret-ObvP  
 cipi-naqsu-lti-li-c-ih **msi-wen-ih**.  
 evil-looking-appear-Plural-ObvS-3Conj-PartObvP **all-someone-ObvP**  
 'At the time when Koluskap left the earth, he had scared away all evil-looking creatures.' (Mitchell 1921/1976c, 4)

The quantifier *psi=te* is able to take a singular NP restriction, but only in a limited number of configurations. Chief among them is as subject of an intransitive verb, where it gives a distributed reading<sup>5</sup>

(159) WN8:5.9

- a. Psi=te wasis-ok kisi-ntu-htu-wok.  
 all=Emph child-3P Perf-sing-Plural-3P  
 'Every child sang.' (prefers group, but can be separately)

<sup>5</sup>The transitive verb 'hear' in 161 is also singular, but it is within a relative clause modifying the universally quantified subject of 'be happy'. Its subject is presumably a null relative operator, and not a universal quantifier. Note also that the NP 'every Indian who heard the news' appears to be left-dislocated, proving again that strong quantifiers are not barred from adjoined positions (the English translation makes the same point).

- b. Psi=te wasis kisi-ntu.  
all=Emph child Perf-sing.3  
'Every child sang.' (separately only)

(160) AH,SN 8:5.10

- a. Psi=te wasis kisi-pokomu.  
all=Emph child Perf-skate.3  
'Every child can skate.'
- b. Psi=te wasis-ok ali-pokomu-ltu-wok.  
all=Emph child-3P around-skate-Plural-3P  
'All the children skate.'

(161) Msiw skicin nuto-k akonutomakon, msiw wolitahasu.  
all Indian hear-3Conj report all be.happy.3  
'Every Indian who heard the news, every one was happy.' (Leavitt and Francis 1990, 53)

This does not appear to be possible with the subject of transitives; *yatte wen*, 'each', has to be used instead:

(162) WN8:5.9

- a. \*Psi=te muwin nuhsuhq-a-l mahtoqehsuw-ol.  
all=Emph bear chase-Dir-Obv rabbit-Obv  
'Every bear chased a rabbit.'
- b. Yatte wen muwin nuhsuhq-a-l mahtoqehsuw-ol.  
each someone bear chase-Dir-Obv rabbit-Obv  
'Each bear chased a rabbit.'

Nor is it possible with objects:

(163) WN8:5.9

- a. Mali kis-ewestuwam-a psi=te pomawsuwinu.  
M. Perf-talk.to-Dir.ObvP all=Emph person.ObvP  
'Mary spoke with every person.' (at once or separately)
- b. \*Mali kis-ewestuwam-a-l psi=te pomawsuwinuw-ol.  
M. Perf-talk.to-Dir-Obv all=Emph person-Obv  
'Mary spoke with every person.'
- c. Mali kis-ewestuwam-a-l yatte wen-il pomawsuwinuw-ol.  
M. Perf-talk.to-Dir-Obv each someone-Obv person-Obv  
'Mary spoke to each person (separately).'

(164) AH,SN 8:5.8

- a. Nt-api-wikuwamkom-a-k psi=te n-tutem-ok.  
1-go.and.back-visit-Dir-3P all=Emph 1-white.friend-3P  
'I went and visited all my friends (at once).'

- b. Nt-api-wikuwamkom-a yatte wen n-tutem.  
 1-go.and.back-visit-Dir each someone 1-white.friend  
 ‘I went and visited each of my friends (singly).’

This phenomenon may involve the notion of a “representative singular” (Phil LeSourd, p.c.), where a singular NP is used to stand for all the members of a group. Such sentences are often generic. Thus transitives would disallow the singular because they would usually involve particular individuals and events; in the pair in 162, for instance, a group of bears and rabbits salient in a context involving a particular situation. In fact, one informant reports that the subject of a transitive can marginally be singular, but only on a generic reading; and others permit singulars with generic statements in general:

- (165) ? Psi=te muwin nuhsuhq-a mahtoqehsu.  
 all=Emph bear chase-Dir.ObvP rabbit.ObvP  
 ‘Every bear chases rabbits.’ (generic) WN8:5.9
- (166) Psi=te ehpit ’-kosiciy-a-l nekom te nican-ol.  
 all=Emph woman 3-know.TA-Dir-Obv 3 Emph 3.child-Obv  
 ‘Every woman<sub>1</sub> knows her<sub>1</sub> own child.’ AH,SN 10:7.15

However, there is more to it than this. Subjects of AI+O verbs (verbs that take objects but are morphologically intransitive; see Chapter 1) can also be singular, patterning with intransitives, even in statements about particular events and individuals:

- (167) AH,SN 10:7.14
- a. Psi=te wasis ’-kis-ahka-n ponapsq.  
 all=Emph child 3-Perf-throw-N rock  
 ‘Every child threw a rock.’
- b. Psi=te wasis ’-kis-ahka-n-ol nisonu-l ponapsku-l.  
 all=Emph child 3-Perf-throw-N-InanP two-InanP rock-InanP  
 ‘Every child threw two rocks.’
- (168) Nit msiw kehs-uhkomiksi-t ’-pocitahka-n ’-putuwosuwin-um,  
 then all many-be.related.group-3Conj 3-send.AI+O-N.ObvP 3-councillor-Poss.ObvP  
 nisu kosona aqamok, naci wici-ht-aq-ik kci lakutuwakon, kci mawe  
 two.ObvP or more go.do together-make-3Conj-Part3P great kinship great joint  
 putuwosuwakon.  
 council  
 ‘Then every tribe<sub>1</sub> sent its<sub>1</sub> councillors, two or more, who would go and participate in making the great confederacy, a great joint council meeting.’ (Leavitt and Francis 1990, 53)

Most interestingly, the logical object of an Inverse may also be singular; this sentence contrasts minimally with those in 162:<sup>6</sup>

<sup>6</sup>This sentence is from informants different from the one who supplied 162, but they agreed with that judgement, disallowing *psite* + singular NP as the subject of a transitive.



- (169) Psi=te mahtoqehs nuhsuhka-ku-l muwinuw-ol.  
 all=Emph rabbit chase-Inv-Obv bear-Obv  
 ‘Every rabbit was chased by a bear.’ AH,SN 8:5.10

Unfortunately, I have been unable to fully explore this phenomenon, or the issue of distributivity in general. It will be important, however, in Chapter 5, where the fact that the subject of an intransitive verb can raise to a higher object position but still have the form *psite* + singular NP will be used as an argument for a movement analysis of raising to object.

*Psite* plus the indefinite *wen*, usually translated as ‘everyone’, generally takes singular agreement, as stated above. However, it can also take plural agreement; in such cases there appears to be a difference in distributivity (see below on group readings):

- (170) AH,SN 10:7.13
- a. Tama 't-iy-a-l psi=te wen-il 'tli-koti-nomiy-a-l?  
 where 3-say.to-Dir-**Obv** all=Emph someone-Obv 3-there-Fut-see-Dir-**Obv**  
 ‘Where did he tell everyone<sub>1</sub> he would meet him<sub>1</sub>?’ (possibly different locations for each person)
- b. Tama 't-iy-a psi=te wen-il 'tli-koti-nomiy-a?  
 where 3-say.to-Dir-**ObvP** all=Emph someone-Obv 3-there-Fut-see-Dir-**ObvP**  
 ‘Where did he tell *everyone* he would meet *them*?’ (all in the same location)
- c. Tama 't-iy-a psi=te wen-ihi 'tli-koti-nomiy-a?  
 where 3-say.to-Dir-**ObvP** all=Emph someone-**ObvP** 3-there-Fut-see-Dir-**ObvP**  
 ‘Where did he tell *everyone* he would meet *them*?’ (all in the same location)

*Psite wen* can also be plural, as in the third example; in this case it again refers to a group.

### 2.2.3 Distributive Quantifier *yatte wen*

There is also a quantifier that is always distributive, *yatte wen*. This quantifier appears to be composed of a demonstrative *yat* (‘that.Remote’) plus the emphatic *te*, but in general it does not inflect for obviation or number. *Wen* does inflect; it must also be animate (there does not appear to be an inanimate form with *keq*). *Yatte wen* can appear by itself or with an NP. When it co-occurs with an NP, this NP does not appear to form its restriction; instead *yatte wen* always has the syntax of a floated quantifier. Two examples from texts are the following:<sup>7</sup>

- (171) a. On yatte wen 't-oloqi-ya-n 't-utene-k.  
 then each someone 3-that.direction-go-N 3-village-Loc  
 ‘Then each one goes toward his own village.’ (Mitchell 1921/1976c, 18)
- b. Msi=te 'pawatom-uw-a-ni-ya 'peciya-li-n yatte wen w-ik-uwa-k.  
 all=Emph 3-want-App-Dir-N-3P 3-come-ObvS-N each someone 3-house-3P-Loc  
 ‘Each one desires him to visit at her wigwam.’ ([‘They all want him to come to each one’s house.’]) (Mitchell 1921/1976d, 5)

<sup>7</sup>Phil LeSourd (p.c.) notes that ‘house’ is almost always inflected for a non-singular possessor, even when the overtly expressed possessor is singular; this is consistent with *yatte wen* generally triggering singular agreement.

The NP that *yatte wen* occurs with can be either singular or plural. A common pattern is for a plural NP (possibly with *psite*, ‘all’) to appear first, followed by the floating *yatte wen* and singular agreement on the verb:

(172) AH7:4.5

- a. Muwinuw-ok yatte wen nokkahl-a-l mahtoqehsuw-ol.  
 bear-3P each one eat.up-Dir-Obv rabbit-Obv  
 ‘The bears each eat (Sg.) a rabbit.’
- b. Nilun yatte wen nokkahl-a-l mahtoqehsuw-ol.  
 1P each one eat.up-Dir-Obv rabbit-Obv  
 ‘Each of us (Excl.) ate (Sg.) a rabbit.’

(173) Psi=te muwinuw-ok yatte wen nuhsuhq-a-l mahtoqehsuw-ol.  
 all=Emph bear-3P each someone chase-Dir-Obv rabbit-Obv  
 ‘All the bears, each one chased a rabbit.’ AH,SN 8:5.8

*Yatte wen* can appear after the verb, but in this case verbal agreement is usually plural:

(174) AH,SN 8:5.8

- a. Psi=te muwinuw-ok yatte wen nuhsuhq-a-l mahtoqehsuw-ol.  
 all=Emph bear-3P each someone chase-Dir-Obv rabbit-Obv  
 ‘All the bears, each one chased a rabbit.’
- b. ?? Psi=te muwinuw-ok nuhsuhq-a-l yatte wen mahtoqehsuw-ol.  
 all=Emph bear-3P chase-Dir-Obv each someone rabbit-Obv  
 ‘All the bears, each one chased a rabbit.’
- c. On muwinuw-ok nuhsuhq-a-ni-ya yatte wen mahtoqehsuw-ol.  
 then bear-3P chase-Dir-N-3P each someone rabbit-Obv  
 ‘Then each bear chased a rabbit.’
- d. Muwinuw-ok on nuhsuhq-a-ni-ya yatte wen mahtoqehsuw-ol.  
 bear-3P then chase-Dir-N-3P each someone rabbit-Obv  
 ‘The bears, then each one chased a rabbit.’

I will assume that *yatte wen* when it occurs with an overt NP does not take that NP as its complement. Instead it always seems to have the syntax of a floated quantifier:<sup>8</sup>

*Yatte wen* can associate with either the subject or the object, but if it is the object (of a Direct clause), it cannot distribute over the subject:

(175) Mali kis-ewestuwam-a-l yatte wen-il pomawsuwiniw-ol.  
 M. Perf-talk.to-Dir-Obv each someone-Obv person-Obv  
 ‘Mary spoke to each person (separately).’ WN8:5.9

<sup>8</sup>When there is no NP—the only overt argument is *yatte wen*—it is unclear whether *yatte wen* is in argument position or again has the syntax of a floated quantifier. If the latter, it would have to be associated with a null pronoun in argument position.

- (176) Piluway taktal 't-ahtoluwestuwam-a-l yatte wen-il.  
 different doctor 3-keep.talking.to-Dir-Obv each someone-Obv  
 'A different doctor is talking to each one.' (\*each>a) AH,SN 3:9.27

As we will see, this follows the pattern of scope generally: the subject takes scope over the object, and not vice versa.

### 2.2.4 Negative Quantifiers

As in many other languages, negative quantifiers in Passamaquoddy appear to be negated existentials, translatable variably as such or as NPIs or negative quantifiers. However, the existential part (*wen*, *keq*, or *tama* again) usually (but not always) immediately follows negation, and the two together have properties that sentential negation by itself does not. For instance, they give rise to intervention effects with split NPs, in contrast with sentential negation:<sup>9</sup>

- (177) a. \**Ma=te wen psi=te* n-kisi-mil-a-w-on **atomupil-ol**.  
 Neg=Emph someone all=Emph 1-Perf-give-Dir-Neg-N car-InanP  
 'I didn't give anyone all the cars.' DD1:8.24
- b. Piel *ma=te psi=te* nonuw-a-wi **tokamonuhki**.  
 P. Neg=Emph all=Emph know-Dir-Neg.ObvP Canadian.ObvP  
 'Peter doesn't know every Canadian.' AH,SN 2:9.15 (Neg>every, \*every>Neg)

Bruening and Lin (2001) analyze this intervention as scopal intervention: a negative quantifier takes scope in its argument position, but sentential negation can take scope at various positions in the clause. When a quantifier is split, negation is forced to take scope above the quantifier; otherwise it would intervene between the quantifier and its restriction.

Some examples of negative quantifiers appear below:

- (178) a. Nit **ma te wen-il** nomiy-a-wi-wa-l, kis yaka Tiliye-wol api  
 then Neg Emph who-Obv see-Dir-Neg-3P-Obv already then.Fut Delia-Obv go.and.back  
 macepha-htit.  
 take.away-3PConj  
 'They didn't see anyone until after they had dropped Delia off.' (Newell 1979, 25)
- b. On saku kcihku-k [']t-oloqi-ya-ni-ya, weci **skat wen** nomiya-hq.  
 then therefore forest-Loc 3-that.way-go-N-3PSub so.that Neg someone see-3ConjNeg  
 'They therefore went that way through the forest, so that no one would see them.' (Newell 1974b, 5)
- c. **Kat=op keq** kt-ol-essi-w.  
 Neg=would something 2-thus-happen.to-Neg  
 'Nothing shall happen to you.' (Mitchell 1921/1976b, 11)

It does not appear to be possible to have a negative quantifier and a universal simultaneously:

<sup>9</sup>This may well follow from the binding that is necessary between the negative operator and the variable introduced by the indefinite in argument position, however, without the need to postulate a separate syntactic entity (a negative quantifier).

(179) AH8:5.6

- a. Ma=te wen '-kisi-tomh-a-wiy-il Piel-ol.  
Neg=Emph someone 3-Perf-beat-Dir-Neg-Obv P.-Obv  
'No one beat Peter.'
- b. \*Ma=te wen '-kisi-tomh-a-wiy-il psi=te wen-il.  
Neg=Emph someone 3-Perf-beat-Dir-Neg-Obv all=Emph someone-Obv  
'No one beat everyone.'

### 2.2.5 Indefinites

It will have been noticed above that the universal, distributive, and negative quantifiers all occur in construction with bare indefinites, *wen* 'someone', *keq(sey)*, 'something', and *tama* 'somewhere'. Like many other languages (see, e.g., Cheng 1991), Passamaquoddy possesses a full set of indefinite morphemes that are used as existential quantifiers, wh-expressions, universal quantifiers, and negative quantifiers:

(180) Existential Quantifiers

- a. Kesq yaq pemacqima-htit otuhk-ol, on **keq** nutom-oni-ya.  
while Quot drag-3PConj deer-Obv then something hear-N-3P  
'While they were dragging the deer they heard something.' (Newell 1974b, 5)
- b. On yaka wesuwi-yapasi-htit, wot yaq **wen** pemi sakhiya-t.  
then then.Fut going.back-walk-3PConj Dem Quot who IC.along come.into.view-3Conj  
'Then, on their way back, something came into sight.' (Newell 1979, 25)
- c. Keq nomihtuni-ya etoli-macetutomuwi-k kci ponapsku-k **tama** al  
something see.TI-3P IC.Prog-?-IIConj big rock-Loc somewhere Uncertain  
tekkapimok.  
as.far.as.one.can.see  
'They see something moving on a big rock near the horizon.' (Mitchell 1921/1976d, 22)

(181) WH-Words

- a. Ali yaq nit wiwn-uhse-t, ma yaq ote kosicihtu-w-on **keq** oc ol-luhke.  
around Quot there circle-walk-3Conj Neg Quot Emph know.TI-Neg-N what Fut thus-do.3  
'As he walked around in circles he didn't know what to do.' (Newell 1974b, 2)
- b. **Wen-il** Mali ito-k-il kisi-pinuwi-t wolaku?  
who-Obv M. say-3Conj-PartObv Perf-get.bingo-3Conj yesterday  
'Who did Mary say got bingo yesterday?' AN,SN 6:2.26
- c. Itom yaq, "**Tama** nil nt-i?  
say.to Quot where 1 1-be  
'He said, "Where am I?"' (Newell 1974b, 2)

(182) Universal Quantifiers

- a. **Msi=te=hc wen** nuto-k, wolsotomon.  
all=Emph=Fut someone hear-3Conj good.sound.TI.3  
'Everyone that hears it will like its sound.' (Mitchell 1921/1976c, 14)

- b. Tokec olu **msi=te keq** 'kiwacehtun.  
now Emph all=Emph something 3-make.lonely  
'But now, he makes everything feel lonely.' (Mitchell 1921/1976c, 7)
- c. Kehtaqs kahk **psi te tama** kisi yali-ye, peci te lampeq.  
ghost Foc all Emph somewhere able around-go.3, even Emph underwater  
'A ghost can go anywhere—even under water.' (Newell 1979, 21)

## (183) Negative Quantifiers

- a. On saku kcihku-k t-oloqi-ya-ni-ya, weci **skat wen** nomiya-hq.  
then therefore forest-Loc 3-that.way-go-N-3PSub so.that Neg someone see-3ConjNeg  
'They therefore went that way, so that no one would see them.' (Newell 1974b, 5)
- b. Ahtoli wikuwamke-t mamote **ma=te keq** n-kisi ol-luhke-w sepay.  
keep.on visit-3Conj finally Neg=Emph something 1-Perf thus-do-Neg morning  
'She kept visiting so I never did get anything done this morning.'
- c. [']T-iy-a-l yaq mahtoqehsw-ol, "**Ma=te tama** k-nomiya-w mahtoqehs yut  
3-say.to-Obv Quot rabbit-Obv Neg=Emph where 2-see-Neg rabbit here  
t[u]ciye-w?"  
go.by-Neg  
'He said to Rabbit, "Haven't you seen a rabbit anywhere going by here?"' (Newell 1974a, 3)

As an existential the indefinite can surface anywhere in the clause, but it usually appears (as noted in Chapter 1) in an immediately preverbal position, a position where split quantifiers and bare determiners usually appear. As *wh*-phrases these indefinites must be initial in the clause (*wh*-movement; see Chapter 3). As negative quantifiers they almost always immediately follow sentential negation, and can variably be translated as negative quantifiers, NPIs, and negated existentials.

These indefinites can also occur with the quantifier/*wh*-morpheme *tan*, to mean something like 'whoever' or 'anyone who...' (with *wen*), or occasionally 'each':

- (184) a. **Tan** kahk **wen** piluwitposi-t, nokomasi-tahatomon tahalu eli aceht-asi-k  
WH Emph someone have.power-3Conj easy-think.TI.3 like C change-Refl-IIConj  
loqtewakon-ol."  
clothing-InanP  
'He who possesses supernatural powers thinks it an easy task to change mere clothing.'  
(Mitchell 1921/1976d, 7)
- b. Nit **tan** te **wen** eli-wewi-phuwe-t: yat=te nekom pesq oloqi-ye, apc  
then WH Emph someone IC.thus-?-run-3Conj that=Emph 3 one thither-go.3 again  
kotok tetta.  
other that.direction  
'Then each one runs off on his own; that one goes one way and another that way.' (Mitchell 1921/1976c, 7)

The quantifier *tan* has many interesting uses; see LeSourd (2001) for some of these, and Chapter 4 for some of its uses in questions.

### 2.2.6 Analysis: Indefinites

The analysis of these indefinites that I will adopt is that of Chierchia for similar quantifiers in Chinese and Italian (Chierchia 1995a, 1995b, 2000), which permits a natural account of a pattern of repetition of indefinites below. On this theory, indefinites are existential quantifiers introducing a variable:

- (185) a.  $wen = \exists x [x \text{ is animate}]$   
 b.  $keq = \exists x [x \text{ is inanimate}]$

As in Discourse Representation Theory (e.g., Kamp and Reyle 1993), other operators can come to bind the variable introduced by the indefinite. They do so by effectively “wiping out” the existential quantifier, by the operation of Existential Disclosure. I will keep the discussion and implementation here very informal; see Dekker 1993 and the works cited above for the formalism.

Chierchia explains the operation of Existential Disclosure as follows. Starting with the interpretation for a sentence containing an indefinite like ‘a man is blond’, Existential Disclosure adds an equation of the form  $x = y$ , as in 186b. 186b is equivalent to 186c, which is equivalent to 186d. 186d, unlike the original sentence, lacks an existential quantifier; in its place is just a variable:

- (186) a.  $\exists x [x \text{ is a man \& } x \text{ is blond}]$   
 b.  $[\exists x [x \text{ is a man \& } x \text{ is blond}] \& x = y]$   
 c.  $\exists x [x \text{ is a man \& } x \text{ is blond \& } x = y]$   
 d.  $y \text{ is a man \& } y \text{ is blond}$

Through this operation, the variable introduced by *keq* or *wen* (or the locative *tama*) can come to be bound by some other quantifier. Thus *psi=te wen* and *psi=te keq* come to be equivalent to universal quantifiers:

- (187) a.  $psi=te wen = \forall x [x \text{ is animate}]$   
 b.  $psi=te keq = \forall x [x \text{ is inanimate}]$

For *wh*-phrases, I will assume that a question operator in C binds the indefinite. However, for purely formal reasons the indefinite can also be endowed with uninterpretable *wh*-features, which will force it to move to the [+*wh*] C:

- (188)  $[_{CP} \exists x^{[+wh]} C^{[+wh]} [ \dots t \dots ]]$

It is not just D-quantifiers like *psi=te*, sentential negation, and the question operator that can bind indefinites. They can also be bound by adverbs of quantification:

- (189) Mecimi=te wen ’-kis-apem-a-l Bobby-wol.  
 always=Emph someone 3-Perf-rely.on-Dir-Obv B.-Obv  
 ‘Everyone relies on Bobby.’ AH,SN 9:6.13

An operator can also bind more than one indefinite:

(190) AH,SN 8:5.6

- a. Keqsey ol-luhke-ss kisi-tokom-at pahtoliyas Rita-wol '-pahkam-ok ewehke-t opos?  
 what thus-do.3-Pret Perf-hit-3Conj priest Rita-Obv 3-back-Loc IC.use-3Conj stick  
 'What did she do when the priest hit Rita on the back with a stick?'
- b. Ma=te **keq** **wen** ol-luhke-w.  
 Neg=Emph something someone thus-do.3-Neg  
 'No one did anything.'

For such cases, I will assume that quantifiers can bind unselectively; that is, they can bind multiple variables that fall within their domain.

### 2.2.7 Other Quantifiers

Passamaquoddy possesses various other quantifiers, some of which share the property of appearing to be verbal in nature. These include some that can be used as *wh*-expressions, which will be relevant in subsequent chapters.

These quantifiers typically inflect like intransitive verbs, using Independent morphology, while what would be the main predicate in a language like English is inflected like a subordinate clause, using the Changed Conjunct. For example, 'few' and 'many' inflect like intransitive main verbs, while what would be the main predicate in English has the appearance of a relative clause modifying the subject of 'be few/many':

(191) AH,SN 7:4.6

- a. **Wahkehsu-wok** ehpic-ik *muhsal-ahtit* sakoma-l.  
 few-3P woman-3P like-3PConj governor-Obv  
 'Few women like the governor.' ['Few are the women who like the governor.']
- b. \* **Wahkehsu-wok** ehpic-ik *muhsal-a-wa-l* sakoma-l.  
 few-3P woman-3P like-Dir-3P-Obv governor-Obv  
 'Few women like the governor.' (\*Independent)

What would be the main clause in English is sometimes translated in texts as a relative clause:<sup>10</sup>

- (192) **Wahkehsu** ehpit skat *muhsal-ahq*.  
 few woman Neg like-3ConjNeg  
 'There are but few women who do not like him.' (Mitchell 1921/1976d, 5)

However, there are some indications that this type of quantifier can, at least, have the syntax of a D-quantifier, taking an NP restriction. For one thing, Conjunct morphology is not always necessary. With 'some', morphologically the numeral 'one' inflected like an intransitive verb to agree with a plural subject, the matrix verb usually appears in its Independent form:

<sup>10</sup>In Chapter 4, I suggest that focus, rendered in English as a cleft, uses the Changed Conjunct; this sentence would then be a focus construction, and not necessarily a relative clause in Passamaquoddy. The English translation is then entirely appropriate for the semantics of focus.

- (193) a. **Pesku-wok** (po)mawsuwinu-wok *ksinuhk-hotu-wok* matahk ksiciy-a-wiy-ik  
 some-3P person-3P be.sick-Plural-3P but.Neg Indef.know.TA-Dir-Neg-3P  
 wen-ik.  
 who-3P  
 ‘Some people are sick but it’s not known who.’ AH,SN 7:4.8
- b. **Pesku-wok** nucitqonkec-ik *n-kisi-tqon-ku-k*.  
 some-3P policeman-Part3P 1-Perf-arrest-Inv-3P  
 ‘Some of the policemen arrested me.’ AH,SN 6:2.21
- c. Ma=te n-wawitahatom-uw-on cipotu te Koluskap **pesqon-ol** ponapsku-l  
 Neg 1-remember.TI-Neg-N Maybe Emph K. some-InanP rock-InanP  
*n-kisi-tokom-okun-ol*.  
 1-Perf-hit-Inv-N-InanP  
 ‘I don’t remember if Koluskap threw some rocks at me.’ AH,SN 4:10.16

Similarly for the quantifier meaning ‘few’ above. In another text example, it appears with the verb meaning ‘be (located)’ inflected in the Independent; if ‘few’ itself were a matrix verb, there should be no need for ‘be (located)’:

- (194) Mec=ote ona *iyu wahkehsu* siki-motewolon kosona assok-apiyi-t skitap  
 still=Emph also be.3 few hard-motewolon or strange-?-3Conj man  
 keciciht-aq tan oli-pecipt-asu.  
 IC.know.TI-3Conj WH thus-bring-Refl.3  
 ‘There are now only a few fearsome *motewolons* or men with unusual powers who know how it is produced.’ (Mitchell 1921/1976c, 16–17)

Another indication comes from numeral quantifiers. These usually also have the appearance of matrix verbs, occurring with another verb inflected in the Changed Conjunct (The matrix verb can also appear in the Independent form, as in 196):<sup>11</sup>

- (195) Eci ’ci-peciya-t kcihku-k **nisu** nekkahl-ac-ihl wisawaqsi-licihl  
 when from.out-come-3Conj forest-Loc two.ObvP IC.eat.up-3Conj-PartObvP carrot-ObvP  
 naka **pesqon** eskotasossok.  
 and one.Inan cucumber  
 ‘When he comes out of the forest he eats up two carrots and one cucumber.’ AH7:4.5

Unlike quantifiers like ‘few’ and ‘many’ and ‘all’, numeral quantifiers are not shared by conjoined NPs:<sup>12</sup>

- (196) AH7:4.5
- a. Mahtoqehs nokkahl-a **nisu** wisawaqsi-licihl naka mehqaqsi-licl.  
 rabbit eat.up-Dir.ObvP two.ObvP carrot-ObvP and beet-ObvP  
 ‘Rabbit eats up two carrots and (some) beets.’

<sup>11</sup>We will see in Chapter 4 that these may involve a focus structure, which uses the same morphology as relative clauses (the participle form of the verb). There could thus often be an independent reason for the verb to be in the Changed Conjunct.

<sup>12</sup>The nouns meaning ‘carrot’ and ‘beet’ are participles formed from verbs; the ending glossed as “ObvP” is actually *-li-c-i(hi)*, ObvS-3Conj-PartObvP.



- b. Nomiya-k **nisu-wok** skitapiy-ik naka ehpic-ik.  
see-Dir-3P two-3P man-3P and woman-3P  
'I saw two men and (some) women.'
- (197) a. **Wahkehsu-wok** ehpic-ik naka wasis-ok muhsala-htit sakoma-l.  
few-3P woman-3P and child-3P like-3PConj governor-Obv  
'Few women and children like the governor.' AH,SN 7:4.6
- b. **Msi=te** skicinuw-ok naka weyossis-ok 't-oli-ya-ni-ya.  
all=Emph Indian-3P and animal-3P 3-there-be-N-3P  
'All the Indians and animals attend.' (Mitchell 1921/1976c, 5)

In 197a, both 'women' and 'children' are few; in 197b, all the Indians and all the animals attend. In contrast, 196a refers only to two carrots; the number of beets is not specified. Numeral quantifiers here pattern with numeral quantifiers in English: they too are not shared by conjoined NPs: *Rabbit ate two carrots and beets* ≠ *two carrots AND two beets*. If numeral quantifiers were verbal, just like 'few' in 197a, they should not differ from other verbal quantifiers like 'few'. In fact they would be expected to be shared across conjuncts: 'two are the carrots and beets which Rabbit eats up' means either that the carrots and beets add up to two, or there are two of each. It does not mean two carrots and some unspecified number of beets.

The numeral is still not shared when the main verb is in the Conjunct (here with a split numeral):

- (198) Eci 'ci-peciya-t kcihku-k **nisu** nekkahl-ac-ih i wisawaqsi-licih i  
when from.out-come-3Conj forest-Loc two.ObvP IC.eat.up-3Conj-PartObvP carrot-ObvP  
naka eskotasossoki-l.  
and cucumber-InanP  
'When he comes out of the forest he eats up two carrots and (some number of) cucumbers.'  
AH7:4.5

Another indication that apparently verbal quantifiers can be D-quantifiers comes from a comparison with one verb meaning 'many', which does seem to involve a relative clause. Here, however, it is the verb meaning 'be many' that is the relative clause—the matrix verb inflects like a matrix verb (using Independent morphology), but the verb meaning 'many' is in the Changed Conjunct, like a relative clause:

- (199) AH,SN 2:9.12
- a. N-koti-nomiya-k **kehceyawi-c-ik** weyossis-ok.  
1-Fut-see-Dir-3P IC.be.many-3Conj-Part3P animal-3P  
'I want to see a lot of animals.' ['I want to see animals that are many.']
- b. Ma=te n-koti-nomiya-wi-k **kehceyawi-c-ik** weyossis-ok.  
Neg 1-Fut-see-Dir-Neg-3P IC.be.many-3Conj-Part3P animal-3P  
'I don't want to see a lot of animals.'

This verb takes the full range of verbal morphology, including the preterite suffix.<sup>13</sup>

<sup>13</sup>A *motewolon* is a being with supernatural power. The culture hero Koluskap was a *motewolon*. In stories, real persons are sometimes attributed the powers of a *motewolon*. For discussion of this term and related notions, see LeSourd 2000a.

- (200) 'Sami pihce ktanaqsu-pon-ik motewolonuw-ok.  
 because long.ago be.many-Pret-3P motewolon-3P  
 'because there used to be a lot of *motewolonuwok*.' (Newell 1979, 3)

With negation, the negative verbal morphology can appear on the verb meaning 'many', not on what would be the main predicate in English:

- (201) Ma=te kceyaw-i-wiy-ik mawsuwinu-w-ok wik-ulti-c-ik utoqehki-k.  
 Neg=Emph be.many-Neg-3P person-3P live-Plural-3Conj-Part3P Grand.Lake-Loc  
 'Not many people live at Grand Lake.' ['Are not many, the people who live at G.L.'] AH,SN  
 10:7.14

This indicates that subordination is reversed in this example: 'many' is the matrix predicate, and 'live' is the verb of a relative clause. ('Many' is inflected in the Independent in 201, unlike the examples above.)

This does not hold with the quantifiers that are themselves in their Independent form—negation is always on what would be the matrix predicate in English:

- (202) a. Kenoq ma=te wen '-kistoh-a-wi nisu wapeyilic-ih-i muwinu.  
 however Neg=Emph someone 3-beat-Dir-Neg.ObvP two.ObvP white-PartObvP bear.ObvP  
 'But no one could beat two white bears.' AH8:5.6
- b. Ma tehpu *peskuw-ol* Piyel nonuw-a-wiy-il tokamonuhki-l nisu  
 Neg only one-Obv P. know-Dir-Neg-Obv Canadian-Obv two.ObvP  
 nenuw-ac-ih-i.  
 IC.know-3Conj-PartObvP  
 'Piyel doesn't know only one Canadian, he knows two.' AH,SN 2:9.15

It is even possible to have "negative concord": negative morphology on the verb in the complement clause of a perception verb, in agreement with higher negation:

- (203) Ma=te nomiy-a-w skitap kisi-nehpaha-hq nisu mahtoqehsu.  
 Neg=Emph see-Dir-Neg man Perf-kill-3ConjNeg two.ObvP rabbit.ObvP  
 'I didn't see the man kill two rabbits.' AH,SN 6:3.1

Even without negation, it is difficult to see how such examples could be analyzed as relative clauses. The following, for example, would be difficult to analyze as 'two were the rabbits which I didn't see the man kill' or 'I didn't see the man two were the rabbits he killed':

- (204) Ma=te nomiy-a-w skitap nisu kisi-nehpah-ac-ih-i mahtoqehsu.  
 Neg=Emph see-Dir-Neg man two.ObvP Perf-kill-3Conj-PartObvP rabbit.ObvP  
 'I didn't see the man kill two rabbits.' AH,SN 6:3.1

The negative concord in 203 indicates that the lower verb, inflected in the Conjunct, is truly the complement of 'see', which is itself Independent. The two together could not be part of a relative clause; the only possible parse is one where 'two' is a D-quantifier (even when split off of its restriction, as in 204).

We will see other indications of a D-quantifier analysis of such quantifiers as *wh*-phrases in Chapter 3. I will assume that both a D-quantifier analysis and a biclausal, relative clause structure are available in

principle for these types of quantifiers (not necessarily both for any given quantifier)<sup>14</sup> For instance, the parse of 201 would be something like the following:

(205) Neg **be many** [ people who live at Grand Lake]

While the structure of 203 would be more like the English:

(206) Neg see [ man kill [<sub>DP</sub> **two rabbits** ] ]

Quantifiers like ‘few’ and ‘many’ can also appear as preverbs on the matrix verb:

(207) **Kehsi**-koti-nomiy-uk weyossis-ok.  
many-Fut-see-1Conj animal-3P  
‘I want to see a lot of animals’ AH,SN 2:9.12

This pattern can also be used in wh-questions; the wh-phrase *tan* questions the amount:

(208) **Tan Pil kehsi**-cuwi-monuwo-k wikhikon-ol?  
WH Bill X.many-must-buy-3Conj book-InanP  
‘How many books does Bill have to buy?’ AH,SN 6:2.24

Having illustrated some of the properties of the quantifiers that will be used in this study, let us turn to examine their binding properties.

## 2.3 Variable Binding

Most of the quantifiers described above are able to bind pronominal variables in their domain. Some examples were already presented; they are repeated here:

- (209) a. Psi=te ehpit ’-kosiciy-a-l nekom te nican-ol.  
all=Emph woman 3-know.TA-Dir-Obv 3 Emph 3.child-Obv  
‘Every woman<sub>1</sub> knows her<sub>1</sub> own child.’ AH,SN 10:7.15
- b. Tama ’t-iy-a-l psi=te wen-il ’-tli-koti-nomiy-a-l?  
where 3-say.to-Dir-Obv all=Emph someone-Obv 3-there-Fut-see-Dir-Obv  
‘Where did he tell everyone<sub>1</sub> he would meet him<sub>1</sub>?’ AH,SN 10:7.13
- c. On yatte wen ’t-oloqi-ya-n ’t-utene-k.  
then each someone 3-that.direction-go-N 3-village-Loc  
‘Then each one<sub>1</sub> goes toward his<sub>1</sub> own village.’ (Mitchell 1921/1976c, 18)

### 2.3.1 Conditions on Binding

The binding of pronouns as variables is subject to very restrictive conditions in Passamaquoddy, as it is in many languages.

<sup>14</sup>It may be, however, that only the D-quantifier analysis is truly available, and that when the Changed Conjoint is used it is due to the focus-movement structure hypothesized in Chapter 4, and not to a relative clause parse. Deciding this issue must be delayed to a later date, however.

**Null Pronouns**

The first restriction is that only null pronouns can be bound variables. An overt plural pronoun can be used, but only referring to a group (coreference rather than binding; see below):

(210) AH7:3.20

- a. Litahasu psi=te wen n-musqitaham-a.  
think.3 all=Emph someone 1-hate-Dir  
'Everyone<sub>1</sub> thinks I hate him<sub>1</sub>.'
- b. Litahasu psi=te wen n-musqitaham-a nekom.  
think.3 all=Emph someone 1-hate-Dir 3  
'Everyone<sub>1</sub> thinks I hate him<sub>\*1</sub>.' (nekom ≠ psite wen)
- c. Psi=te wen litahasu n-musqitaham-a-k nekomaw.  
all=Emph someone think.3 1-hate-Dir-3P 3P  
'*Everyone* thinks I hate *them*.' (group)

(211) AH7:3.21

- a. Ma=te wen '-koscicy-a-wiy-il eli Maliw-ol muhsal-ih.  
Neg=Emph someone 3-know.TA-Dir-Neg-Obv C M.-Obv like-3ConjInv  
'No one<sub>1</sub> knows that Mary likes him<sub>1</sub>.'
- b. Ma=te wen '-koscicy-a-wiy-il eli Maliw-ol muhsal-ih nekom.  
Neg=Emph someone 3-know.TA-Dir-Neg-Obv C M.-Obv like-3ConjInv 3  
'No one<sub>1</sub> knows that Mary likes him<sub>\*1</sub>.' (nekom ≠ mate wen)

An overt pronoun can be used as a bound variable if it is a possessor and is emphatic (it is then usually explicitly marked with emphatic *te*):

(212) Ma=te wen '-komutonom-a-wiy-il **nekom te** mossis-ol.  
Neg=Emph someone 3-rob-Dir-Neg-Obv 3 Emph 3.younger.sis-Obv  
'No one<sub>1</sub> would steal from his<sub>1</sub> own sister.' AH8:5.6

Emphasis may not be the only factor. Like other pro-drop languages, Passamaquoddy generally only uses overt pronouns for emphasis or some other marked function. One would expect that if emphasis were all that was needed for an overt pronoun to be a bound variable, an overt pronoun would always be able to be a bound variable, since overt pronouns are only used for emphasis. Although I do not have enough data to say anything definitive, the examples that do not permit binding appear to involve arguments of verbs, while the emphatic pronouns that do permit binding occur as possessors. Such a difference might be a clue as to when an emphatic pronoun can be a bound variable: when it is not a direct argument of a verb.

An overt pronoun can be a bound variable when it is used in a copular function; it is obligatory in such contexts, however, independent of variable binding (213b):

(213) AH7:3.20

- a. Ma=te wen litahasi-w **nekom** mahtoqehs.  
 Neg=Emph someone think.3-Neg 3 rabbit  
 ‘No one<sub>1</sub> thinks he<sub>1</sub>’s a rabbit.’
- b. Susehp litahasu **nekom** mahtoqehs.  
 S. think.3 3 rabbit  
 ‘Susehp thinks he’s a rabbit.’

### Number Agreement

In cases where the quantifier doing the binding is itself singular, controlling singular agreement on the verb, the (null) pronoun is singular (as registered by agreement), but where the quantifier is plural, the pronoun is also plural, as in the following pair of examples:

- (214) a. On yatte wen ’t-oloqi-ya-n ’t-utene-k.  
 then each someone 3-that.direction-go-N 3-village-Loc  
 ‘Then each one<sub>1</sub> goes toward his<sub>1</sub> own village.’ (Mitchell 1921/1976c, 18) Singular
- b. Nit msite kehs-ihitit ehpic-ik ’-puna-n-iyā nican-sis-uwa sip-uk apc  
 then all many-3PConj woman-3P 3-put-N-3PSub child-Dim-3P river-Loc again  
 welaqiwik.  
 in.evening  
 ‘That night, every one of the women<sub>1</sub> puts her [their<sub>1</sub>] child[ren] into the river.’ (Mitchell 1921/1976a, 17) Plural

In such cases as 214b, the plural quantifier binds the plural pronoun, giving a distributive reading (as indicated by the English translation): every woman put *her own* child into the river. It is also possible to have a group interpretation (ruled out by the context), in which all the women together put all of their (collective) children into the river. This is a relation of *coreference* in Reinhart’s sense (Reinhart 1983a), rather than binding. Coreference need not obey the structural conditions on binding discussed below (c-command). Even singular quantifiers can take on a group interpretation and be coreferent with a plural pronoun; again, this coreference does not have to obey c-command. Thus, it can be difficult to distinguish real binding from coreference with plural quantifiers. With singular quantifiers, c-command is required for the binding of a singular pronoun, as will be shown below.

However, the difference between coreference and binding raises an important point, one that is worth making in the context of the Pronominal Argument Hypothesis (Jelinek 1984), argued against and dismissed in Chapter 1. As mentioned there, many researchers working on nonconfigurational languages, what they regard as “pronominal argument” languages, have claimed that nonreferential quantifiers are missing from the grammars of these languages. Jelinek (1995), for example, claims that *all* D-quantifiers should be missing from pronominal argument languages; Baker (1995, 1996) makes the more empirically maintainable claim that *nonreferential* quantifiers are absent (see also Reinholtz and Russell 1995 and Speas and Yazzie 1996; for arguments against Jelenik’s position, see Matthewson 1996). Baker attempts to distinguish “true” quantifiers, which are singular and bind singular pronouns, from group-denoting NPs and negated existentials (in the case

of negative quantifiers). Crucial to this distinction is the fact that group-denoting NPs can apparently “bind” plural pronouns that they do not c-command, disobeying all structural conditions on binding.

For instance, Baker claims that what look like universal quantifiers in Mohawk are actually more like English *all* than like *every*. As Vendler (1967) has shown, English *all* occurs with plural nouns and can only be coreferent with a plural pronoun, not a singular one; it also requires plural agreement. (In these examples I follow the convention of indicating (putative) coreference with italics, actual binding by subscripts.) In these respects it contrasts with English *every*:<sup>15</sup>

- (215) a. All college students/ \*All college student  
 b. All college students call *their* parents once a week. (\**calls*; \**his*, \**her*)
- (216) a. Every college student/ \*Every college students  
 b. Every college student calls *his/her* parents once a week. (\**call*)

The crucial fact about English *all* that Baker uses to justify the non-existence of “true” quantifiers in Mohawk is that coreference between *all* and a plural pronoun need not obey surface c-command in English (Reinhart 1983a):

- (217) a. [ The guy who read *all the books in the library*] says that *they* are boring.  
 b. *Their* readers expect *all critics* to be boring.

The second example is supposed to show that *all* does not give rise to weak crossover (WCO; Postal 1971, Wasow 1972); that is, standard constraints on binding do not apply to plural pronouns.

In other words, the relation between English *all* and a plural pronoun does not appear to be one of variable binding. Variable binding requires c-command and obeys the WCO constraint. Instead, a plural pronoun seems to simply *corefer* with *all*, in the same way that pronouns in general can corefer with definite descriptions, even across sentences:

- (218) a. *William* walked in. Then *he* sat down.  
 b. [ The guy who read *The Pathfinder*] said that *it* was boring.  
 c. *His* mother loves *the president* despite his shortcomings.

In fact, however, *all* does give rise to “real” quantificational and bound-variable readings. For example, Irene Heim (p.c.) points out examples like the following, where the group of candidates could not all be elected, and it is unlikely that all the delegates are from the same family (or went home to a big group of families):

- (219) a. All the candidates<sub>1</sub> thought that they<sub>1</sub> would be elected.  
 b. All of the delegates<sub>1</sub> finally went home to their<sub>1</sub> families.

<sup>15</sup>English *every* can also corefer with a plural pronoun: *Every college student calls their parents once a week.*

In 219a, for example, the pronoun *they* acts like a bound variable, being construed as each member of the set of candidates (i.e., each candidate thought that *she* would win the election). There is also a (pragmatically disfavored) reading in which all the candidates think that all the candidates as a group will win; this is the (co-)referential reading, which Baker assumes is the only one available to *all*-NPs.

It is important to note that the bound variable reading of *they* (coindexed with *all*) does obey standard constraints on variable binding. Thus it does not survive across sentences and requires c-command. For example, the following sentences only have the group reading of ‘they’:

- (220) a. # *All the candidates* were excited. The pundits had said that *they* would win.  
 b. # [ Before *all the candidates* did interviews] the party leaders thought that *they* would win.

Correspondingly, WCO appears with the bound-variable reading:

- (221) a. *Their* readers despise *all critics*. (Only: readers of critics despise all critics.)  
 b. *Their* campaign managers thought *all the candidates* would win. (Only: thought they would all win.)

Similarly, certain quantifiers in English like *most* require plural agreement and plural bound variable pronouns, yet they are fully nonreferential and require c-command in order to bind:

- (222) a. Most women<sub>1</sub> call their<sub>1</sub> mothers regularly./ \*Most woman call her mother regularly.  
 b. \* Their<sub>1</sub> mothers call most women<sub>1</sub> regularly.

In other words, a singular/non-singular agreement distinction is not relevant to variable binding. Structural conditions are. This fact can be seen quite clearly with *wh*-questions, where group readings are not available. In 223a, the sentence is grammatical because it has a group reading (coreference); the bound variable reading is absent due to WCO. With the *wh*-phrase in 223b, however, even a plural pronoun does not save WCO:

- (223) a. *Their* mothers love *all the boys*. (group reading, no WCO)  
 b. ?? Who<sub>1</sub> (all) do their<sub>1</sub> mothers love? (no group reading to avoid WCO)

There is no group reading on which 223b could be grammatical, even understanding ‘who’ as plural. If the singular/plural distinction were what voided WCO, 223b should be grammatical.

Now, it is clear that both Passamaquoddy and Mohawk permit real bound-variable readings with their versions of the quantifier *all*, construed with plural pronouns. For instance, Baker gives the following sentences:

- (224) Mohawk (Baker 1995, 24, 27)  
 a. Akwéku wa'-ti-shakoti-norukwányu-' ne raoti'-skare'.  
 all fact-dup-MpI/3II-kiss-punc NE MpP-friend  
 ‘All (of them) kissed their girlfriends.’

- b. Skátshu ne ron-úkwe' ne raotí-'sere' wa-hati-'sereht-óhare-'.  
 each NE Mp-person NE MpP-car fact-MpI-car-wash-punc  
 'Each of the men washed their car.'

It is clear from Baker's discussion that these examples have bound-variable readings: each person kissed *his* girlfriend, and each man washed his own car.

A Passamaquoddy example from a text is the one from above, repeated here, where each woman puts her own child into the river:

- (225) Nit **msi=te** **kehs-ihitit** **ehpic-ik** '-pun-a-ni-ya **nican-sis-uwa** sip-uk apc  
 then all=Emph many-3PConj woman-3P 3-put-Dir-N-3P 3.child-Dim-3P river-Loc again  
 welaqiwik.  
 in.evening  
 'That night, every one of the women<sub>1</sub> puts her<sub>1</sub> child into the river.' (Mitchell 1921/1976a, 17)

In this example, 'women', 'children', and the possessor marking on 'children' are all plural, but the reading is distributive: that is, the relation is one of binding.

Given the availability of the bound-pronoun reading with sentences involving the Mohawk equivalent of *all*, the fact that cross-sentential coreference and coreference in the absence of c-command is *possible* in Mohawk, as in the following examples, is irrelevant. What should be crucial is that the real bound pronoun reading is *not* available in these contexts (Baker does not give enough data to tell; further work on Mohawk is needed here).

- (226) Mohawk (Baker 1995, 26)
- a. R-átu akwéku rati-hnvy-és-us nónv v-shakó-kv-'.  
 MsI-say/hab all MpI-height-tall-plur when fut-MsI/3II-see-punc  
 'He says *all (of them)* are tall when he sees *them*.'
- b. Thíkv rúkwe akwéku kahure'-shú'a wa-ha-nvsko-', karh-áku  
 that man all gun-plur fact-MsI-steal-punc forest-in  
 y-a-ha-shet-á-nyu-'.  
 trans-fact-MsI-hide-Ø-dist-punc  
 'The man who stole *all the guns* hid *them* in the woods.'

Thus, real binding of plural pronouns, in languages for which we have the crucial data, obeys well-known structural conditions on variable binding. Group readings, in which the relation is coreference rather than binding, do not obey these same structural conditions. It follows that, in principle, binding of plural pronouns by plural quantificational NPs would be a useful test for c-command and structure. However, testing this requires subtle judgements about available readings, which are often difficult to elicit. Methodologically it is much easier to elicit judgements of grammaticality on a singular quantifier binding a singular pronoun. If binding is not available, informants will switch to plural pronouns, giving the group reading.

For this reason, in what follows I will mainly use singular *psite wen* 'everyone' and *mate wen* 'no one' and similar quantifiers, where binding of a singular pronoun is restricted to their c-command domain. When binding conditions are not met, informants switch to plural pronouns, indicating that binding is not possible (or they repeat the indefinite *wen*, as illustrated below).



**C-Command**

Using singular quantifiers with singular pronouns, it is easy to see that binding is perfectly grammatical in Passamaquoddy when c-command obtains, for instance across clause boundaries:

- (227) a. Psi=te wen litahasu [<sub>CP</sub> eli w-itapi woli-pomawsuwin-uw-ulti-htit ] .  
 all=Emph someone think.3 C 3-friend.ObvP good-person-be-Plural-3PConj  
 ‘Everyone<sub>1</sub> thinks his<sub>1</sub> friends are good people.’ AH7:3.18
- b. Ma=te wen litahasi-w [<sub>CP</sub> eli kisi-komutonom-uk ] .  
 Neg=Emph someone think.3-Neg C Perf-rob-1Conj  
 ‘No one<sub>1</sub> thinks that I robbed him<sub>1</sub>.’

A quantifier can even bind variables across multiple clauses, as in this example from a text:

- (228) Msi=te wen ksephuwe wik-ok, ’-taskuwahtun mehcina-n.  
 all=Emph someone run.in.3 3.house-Loc 3-wait.TI die.3-N  
 ‘Everyone goes into his house to wait for death.’ (Mitchell 1921/1976b, 15)

Unlike the English translation, the Passamaquoddy contains three tensed clauses, with singular pronominal subjects; the lower two are bound by the highest subject, *msi=te wen*.

Conversely, reversing the c-command relation results in the unavailability of the bound variable reading:

- (229) **W-itapih-il** litahasu [<sub>CP</sub> **ma=te wen** olomi-ye-w ] .  
 3-friend-Obv think.3 Neg=Emph someone away-go.3-Neg  
 ‘His<sub>\*1</sub> friend thinks no one<sub>1</sub> left.’ AH,SN 10:7.15

It appears, therefore, that variable binding obeys the same c-command condition in Passamaquoddy that it does in better-studied languages (Chomsky 1976, Higginbotham 1980, Hornstein and Weinberg 1990).

In other cases where c-command is clearly lacking, it is also impossible to have bound variable anaphora. This is important to establish, since the availability of the bound reading is crucial as a test for structural relations and movement throughout this study.

Some such cases are adjunct clauses. A quantifier contained within an adjunct cannot bind into a matrix clause, as shown by the impossibility of singular agreement:

- (230) AH,SN 8:5.7
- a. [ Kesq te pemi-qasqi-t Pil ] on ’-qastehsinon.  
 while Emph IC.along-run-3Conj Bill then 3-stumble  
 ‘While Bill was running he stumbled.’
- b. \* [ Kesq te pemi-qasqi-t psi=te wen ] on ’-qastehsinon.  
 while Emph IC.along-run-3Conj all=Emph someone then 3-stumble  
 ‘While everyone<sub>1</sub> was running he<sub>1</sub> stumbled.’
- c. [ Kesq te pemi-qask-ulti-htit psi=te wen ] on ’-qastehs-ulti-ni-ya.  
 while Emph IC.along-run-Plural-3PConj all=Emph someone then 3-stumble-Plural-N-3P  
 ‘While *everyone* were running *they* stumbled.’

(231) AH,SN 8:5.7

- a. Ipocol psi=te wen Sipayik k-nacitaham-oq, kt-oqeci=hc nehpuh-uku-k.  
because all=Emph someone S. 2-hate-Inv 2-try=Fut kill-Inv-3P  
'Because *everyone* at Sipayik hates you, *they* will try to kill you.'
- b. \*Ipocol psi=te wen Sipayik k-nacitaham-oq, kt-oqeci=hc nehpuh-uk.  
because all=Emph someone S. 2-hate-Inv 2-try=Fut kill-Inv  
'Because everyone at Sipayik<sub>1</sub> hates you, he<sub>1</sub> will try to kill you.'

Similarly, a quantifier in object position cannot bind into a 'because' clause:

(232) AH,SN 8:5.7

- a. Cu=al=lu kehtaqs nokkahl-a-l psi=te wen-il, 'sami  
surely=Uncertain=Emph ghost eat.up-Dir-Obv all=Emph someone-Obv because  
ma=te moskuw-a-wi-wa.  
Neg=Emph find-Dir-Neg-3P.ObvP  
'A ghost must have eaten *everyone*, since they didn't find *them*.'
- b. \*Cu=al=lu kehtaqs nokkahl-a-l psi=te wen-il, 'sami  
surely=Uncertain=Emph ghost eat.up-Dir-Obv all=Emph someone-Obv because  
ma=te moskuw-a-wi-wa-l.  
Neg=Emph find-Dir-Neg-3P-Obv  
'A ghost must have eaten everyone<sub>1</sub>, since they didn't find him<sub>1</sub>.'

(233) AH,SN 10:7.16

- a. N-kisi-ksomahka-n psi=te wen [ 'sami n-kisi-sasawim-ku-k ] .  
1-Perf-push-N all=Emph someone because 1-Perf-insult-Inv-3P  
'I pushed *everyone* down because *they* insulted me.'
- b. \*N-kisi-ksomahka-n psi=te wen [ 'sami n-kisi-sasawim-oq ] .  
1-Perf-push-N all=Emph someone because 1-Perf-insult-Inv  
'I pushed everyone<sub>1</sub> down because he<sub>1</sub> insulted me.'

Nor can an object quantifier bind into this temporal adjunct:

(234) AH,SN 10:7.16

- a. Piyel naka Petak '-koti-komutonom-a-wa-l psi=te wen-il [ qeni  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during  
macaha-woloti-htit ] .  
leave-Plural-3PConj  
'Piyel and Petak are going to rob *everyone* while *they*'re away.'
- b. \*Piyel naka Petak '-koti-komutonom-a-wa-l psi=te wen-il [ qeni macaha-t ] .  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during leave-3Conj  
'Piyel and Petak are going to rob everyone<sub>1</sub> while he<sub>1</sub>'s away.'

Hence, where c-command is missing, so is variable binding. Group readings are possible, but they require plurals. This is the relation of coreference described above, and is not binding.

Variable binding within a clause is more complicated, and turns out to reveal something about clause structure and A-movement processes. This is the topic of Section 2.4

When c-command fails there is also another option: repeating the indefinite *wen*.

### 2.3.2 Indefinite Pronouns as Variables

Passamaquoddy has a very interesting use of the indefinite *wen*, ‘someone’, in configurations where the structural conditions on binding are not met. Under such circumstances, speakers repeat the indefinite *wen*, giving a type of bound reading:

(235) AH,SN 10:7.16

- a. \* N-kisi-ksomahka-n **psi=te wen** 'sami n-kisi-sasawim-oq.  
1-Perf-push-N all=Emph someone because 1-Perf-insult-Inv  
'I pushed everyone<sub>1</sub> down because he<sub>1</sub> insulted me.'
- b. N-kisi-ksomahka-n **psi=te wen** 'sami **wen** n-kisi-sasawim-oq.  
1-Perf-push-N all=Emph someone because someone 1-Perf-insult-Inv  
'I pushed everyone<sub>1</sub> down because someone<sub>1</sub> insulted me.'

(236) AH,SN 10:7.16

- a. \* Piyel naka Petak '-koti-komutonom-a-wa-l **psi=te wen-il** [ qeni macaha-t ] .  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during leave-3Conj  
'Piyel and Petak are going to rob everyone<sub>1</sub> while he<sub>1</sub>'s away.'
- b. Piyel naka Petak '-koti-komutonom-a-wa-l **psi=te wen-il** [ qeni **wen**  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during someone  
macaha-t ] .  
leave-3Conj  
'Piyel and Petak are going to rob everyone<sub>1</sub> while someone<sub>1</sub> is away.'

(237) AH,SN 8:5.7

- a. Nil **psi=te wen** nomiy-a mesq **wen** esponsw-ehlosi-hq.  
1 all=Emph someone see-Dir not.yet someone raccoon-change.form-3ConjNeg  
'I saw everyone<sub>1</sub> before someone<sub>1</sub> changed into a raccoon.'
- b. Nil **ma=te wen** nomiy-a-w mesq **wen** esponsw-ehlosi-hq.  
1 Neg=Emph someone see-Dir-Neg not.yet someone raccoon-change.form-3ConjNeg  
'I saw no one<sub>1</sub> before someone<sub>1</sub> changed into a raccoon.'

This repetition occurs frequently in texts, mostly with indefinites and relative clauses (which give a type of universal quantification):

(238) Conditional:

- a. weci **wen** nehtaw ksinhaha-t, ska **wen** siktewoci-hq kosona  
 so.that person just.in.case be.lost-3Conj Neg person be.cold-3ConjNeg or  
 siktelami-hq.  
 starve-3ConjNeg  
 ‘so that, just in case someone gets lost, someone won’t get cold or starve.’ (Newell 1974b, 2)
- b. Ma te nit **wen** ’-kisi tuciya-w-on nipayiw, kosona **wen-il** ’-kosomahka-n-ol  
 Neg Emph there who 3-able go-Neg-N be.night or who-Obv 3-push-N-Obv  
 kehtaqs.  
 ghost  
 ‘You can’t go there at night or that ghost will push you.’ [lit. ‘Someone can’t go by there or that ghost will push someone.’] (Newell 1979, 10)
- c. Ehtahs te nit **wen** tuciya-t, cu **wen-il** ’-kisi pkikal-a-l.  
 every.time Emph there who go-3Conj surely who-Obv 3-Perf grab-Dir-Obv  
 ‘Every time you went by there, someone would grab you.’ [lit. ‘Every time someone went by there, it would grab someone.’] (Newell 1979, 11)

## (239) Relative Clause (free relative?)

- a. ’-Tiy-a-pon-ih, “Tan oc wot **wen** qiluwih-it, pesqon=c tan  
 3-tell-Dir-Pret-ObvP WH Fut this.An someone search.for-1ConjInv one.Inan=Fut WH  
**wen** eli-pawato-k nt-oli-mil-a-n pskuw-it, tan tehpu keq.  
 someone IC.thus-want-3Conj 1-thus-give-Dir-N find-1ConjInv whatever something  
 ‘He had told them, “Whoever seeks me, I shall give one thing that he wants when he finds me, whatever it may be.’ (Mitchell 1921/1976c, 10)
- b. Tan te keq **wen-il** ptewolon yah-at, nit te=hc **wen**  
 WH Emph something someone-Obv motewolon tell-3Conj, that.Inan Emph=Fut something  
 elessi-t.  
 IC.happen.to-3Conj  
 ‘Whatever a *motewolon* tells you—that’s what happens to you.’ [lit. ‘Whatever a *motewolon* tells someone, it happens to someone.’] (Newell 1979, 5)

These indefinites have the characteristics of Chierchia’s (1995b, 2000) indefinite pronouns (see also Cheng and Huang 1996). The relevant properties of these indefinites is that they must come in pairs, and they may not c-command each other. Their basic meaning is an indefinite ranging over humans; in the Passamaquoddy case, over animates.

Chierchia hypothesizes that the same operation of Existential Disclosure discussed above can account for these indefinites. Basically, a quantificational operator is able to bind the variable introduced by each of a pair of indefinites, on the following schema:

(240) [ if  $x_1$  is happy ] usually<sub>1</sub> [  $x_1$  sings ]

The first occurrence of  $x_1$  will get its quantificational force from the Q-adverb, while the second will be anaphoric to the first.

The way this works is that Q-adverbs like *usually* come with a pair of  $\lambda$  operators:

(241) usually<sub>1</sub> = MOST  $\lambda x_1 [A] \lambda x_1 [B]$

The operator will take the two partitions of a sentence such as the conditional in 240 as its arguments:

(242) MOST ( $\lambda x_1 \exists x_1 [x_1 \text{ is happy}]$ ,  $\lambda x_1 \exists x_1 [x_1 \text{ sings}]$ )

By Existential Disclosure, the two existential operators are wiped out, giving the following:

(243) MOST ( $\lambda x_1 [x_1 \text{ is happy}]$ ,  $\lambda x_1 [x_1 \text{ sings}]$ )

This sentence can be rendered as something like ‘most people (animates) that are happy are people (animates) that are happy and sing’. See Chierchia (1995b, 2000) for details.

In the Passamaquoddy examples above, the first *wen* is bound by an operator like *psi=te*, negation, or the quantifier *tan*, while the second will be anaphoric to the first:

(244) ’-Tiy-a-pon-ihī, “Tan oc wot **wen** qiluwih-it, pesqon=c tan **wen**  
 3-tell-Dir-Pret-ObvP WH Fut this.An someone search.for-1ConjInv one.Inan=Fut WH someone  
 eli-pawato-k nt-oli-mil-a-n pskuw-it, tan tehpu keq.  
 IC.thus-want-3Conj 1-thus-give-Dir-N find-1ConjInv whatever something  
 ‘He had told them, “Whoever seeks me, I shall give one thing that he wants when he finds me,  
 whatever it may be.’ (Mitchell 1921/1976c, 10)

Assume that *tan* is a universal quantifier:

(245)  $\forall (\lambda x_1 \exists x_1 [x_1 \text{ seeks me}], \lambda x_1 \exists x_1 [I \text{ will give } x_1 \text{ one thing}])$

Through Existential Disclosure, the existential operators are removed, and the sentence will end up meaning something like ‘all people (animates) who seek me are people who seek me and will be given one thing by me’.<sup>16</sup>

<sup>16</sup>Passamaquoddy’s indefinite pronouns might diverge from those Chierchia discusses, in that it might be possible to have a repeated *wen* even when binding *pro* is fine:

(i) AH,SN 9:6.14

- a. Wen wikuwoss-ol elitahasi-t keselm-at Maliw-ol?  
 who 3.mother-Obv IC.think-3Conj IC.love-3Conj M.-Obv  
 ‘Whose<sub>1</sub> mother thinks he<sub>1</sub> loves Mary?’
- b. Wen wikuwoss-ol elitahasi-t wen keselm-at Maliw-ol?  
 who 3.mother-Obv IC.think-3Conj someone IC.love-3Conj M.-Obv  
 ‘Whose<sub>1</sub> mother thinks someone<sub>1</sub> loves Mary?’

(ii) AH,SN 10:7.13

- a. Ma=te wen ’-koscicy-a-wiy-il tan wen ’t-oli-pson-a-n.  
 Neg=Emph someone 3-know.TA-Dir-Neg-Obv WH someone 3-thus-find-Dir-N  
 ‘No one<sub>1</sub> knows how someone<sub>1</sub> catches it.’ (=‘No one knows how to catch it’)
- b. Nihtol nit otuhk-ol skat wen kesicy-ahq kisi-pson-ahq.  
 that.Obv that deer-Obv Neg someone IC.know.TA-3ConjNeg Perf-catch-3ConjNeg  
 ‘That’s the deer that no one<sub>1</sub> knows how to catch.’

However, there could be other factors at work in these examples; for instance, (ib) could be an instance of partial copy (similar to wh-scope marking).

## 2.4 Scope and A-Binding

Variable binding, as shown in the last section, obeys strict conditions, conditions that are familiar from better-studied languages such as English. In particular, variable binding requires c-command, and hence will be an important test for hierarchical relations.

This section turns to scope relations within clauses, and any evidence for scope-taking movement which would enable variable binding. As we will see, changing word order does not set up new binding or scope possibilities. Instead scope and binding are rigidly determined by argument positions. There is exactly one operation of A-movement, what I will call the Inverse (the syntactic phenomenon correlates with the morphological Direct-Inverse opposition), which reverses the scope of a subject and object. I will suggest in Section 2.5 that some word-order variations are due to A-bar movement, which necessarily reconstructs as far as scope is concerned.

Scope, we will see, goes right along with variable binding (as expected, given the fact that quantifiers can only bind variables within their scope; Higginbotham 1980, May 1985). For example, we saw above that a quantifier in a complement clause could not bind a pronoun in the matrix clause; similarly, inverse scope is unavailable across clause boundaries:<sup>17</sup>

- (246) Piluwey taktal ' -kosicihtun [ <sub>CP</sub> eli-kikah-at            yatte wen-il            ] .  
 different doctor 3-know.TI            IC.thus-cure-3Conj each someone-Obv  
 'A different doctor knows how to cure each one.' (\*each>a) AH,SN 3:9.27

Scope and variable binding become more interesting within a single clause.

### 2.4.1 Scope in Transitives

In a simple transitive clause, subjects easily take scope over objects:

- (247) Subject > Object
- a. Katolu psi=te wen wikahtomon keqsey piluwey.  
 of.course all=Emph someone like.taste.TI something different  
 'Of course everyone likes something different.' AH,SN 8:5.8
  - b. Yatte wen muwin nuhsuhq-a-l mahtoqehsuhw-ol.  
 each someone bear chase-Dir-Obv rabbit-Obv  
 'Each bear chased a (different) rabbit.' AH,SN 8:5.8

In contrast, it appears to be impossible for an object to take scope over a subject:<sup>18</sup>

- (248) \*Object > Subject

<sup>17</sup>The fact that the English translation contains a *wh*-island is irrelevant to the Passamaquoddy. Clauses like this without an overt *wh*-phrase do not form barriers to movement (see Chapter 3).

<sup>18</sup>In 248a, *yatte wen-il* 'each one (Obv)' would be expected for *yatte wen*. For some reason this informant (DD) often uses the proximate form where the obviative is expected (again in 315). I do not believe, however, that this affects the scope judgement indicated.

- a. *Kinaq op pesq pilsqehsis* nomiy-at-sopon **yatte wen**.  
at.least Emph one girl see-3Conj-Pret each someone  
'At least one girl saw each person.' DD1:9.6 (\*each>at least one)
- b. *Piluwey apikcilu* nuhsuhq-a-l **psi=te kiwonik-ih**i.  
different skunk chase-Dir-Obv all=Emph otter-ObvP  
'A different skunk is chasing all the otters.' AH,SN 3:9.26 (\*all>a)
- c. N-pawatomon [<sub>CP</sub> *nisuwok nucitqonkec-ik* 't-ankeyutomo-ni-ya **psite khakon-ol**] .  
1-want two.3P policeman-Part3P 3-take.care.of-N-3PSub all door-InanP  
'I want two policemen guarding all the doors.' AH,SN 6:2.27 (\*all>two)

In 248b, for example, skunks do not vary with otters, despite the presence of the adjective 'different', which makes the inverse scope reading salient in the English translation. Instead there is only one skunk, and its differentness must be evaluated contextually—either different from some other contextually salient skunk or set of skunks, or different in some way from skunks in general.

Unfortunately I do not have many minimal pairs regarding scope (without variable binding). The clear examples of subjects taking scope over objects involve *yatte wen* and *psite wen*, while the examples intended to illustrate the lack of inverse scope involve *psite* + *Plural NP*, which may not be able to distribute even in subject position; *yatte wen* has to be used instead:

(249) AH,SN 8:5.8

- a. **Psi=te** muwinuw-ok nuhsuhq-a-wa-l mahtoqehsuw-ol.  
all=Emph bear-3P chase-Dir-3P-Obv rabbit-Obv  
'Every bear chased a rabbit.' (all chased same one)
- b. **Yatte wen** muwin nuhsuhq-a-l mahtoqehsuw-ol.  
each someone bear chase-Dir-Obv rabbit-Obv  
'Each bear chased a rabbit.' (chased different rabbits each)

If *psi=te* + NP is unable to distribute over another argument even in subject position, then only 248a indicates that inverse scope is not possible.

However, when we turn to variable binding, there is clear evidence that the subject takes scope over the object and not vice versa. A subject quantifier is able to bind a variable in the object:

- (250) a. *Yatte wen* nomiy-a-l **skitapiy-il nenuw-ac-il**.  
each someone see-Dir-Obv man-Obv IC.know-3Conj-PartObv  
'Each person<sub>1</sub> saw the man he<sub>1</sub> knows.' AH,SN 4:10.20
- b. *Kat=op wen* nokol-okuw-hil **woli-witapihi-l**.  
Neg=would someone leave-Inv-Neg-Obv 3.good-friend-Obv  
'No one<sub>1</sub> would abandon his<sub>1</sub> best friend.' AH,SN 6:3.2
- c. *Katolu psi=te wen* 'koselom-a-l **wikuwoss-ol**.  
of.course all=Emph someone 3-love-Dir-Obv 3.mother-Obv  
'Of course everyone<sub>1</sub> loves his<sub>1</sub> mother.' AH8:5.3

In contrast, an object quantifier cannot bind a variable in the subject:

- (251) a. **Wen wikahto-k** 'cuwi-micin *psi=te keq.*  
 someone like.taste-3Conj 3-must-eat all=Emph something  
 'Whoever likes it has to eat everything.' AH,SN 8:5.8 (group reading only)
- b. **Skitap musqitaham-ac-il** 'koti-tqon-a-l *psi=te wen-il.*  
 man hate-3Conj-PartObv 3-Fut-arrest-Dir-Obv all=Emph someone-Obv  
 'A man that he<sub>\*1</sub> hates will arrest everyone<sub>1</sub>.' AH,SN 10:7.15

251a, for example, only has a group interpretation: if there is someone who likes all the dishes served, he/she has to eat all of them. The reading where each dish gets eaten by a different person (a person who likes that dish) is missing. Similarly, in 251b, the man must be hated by someone other than everyone who is arrested (and there is only one man, not a different man for each person arrested).

Importantly, changing word order does not create a new scope possibility:

- (252) a. **Psite kesinuhk-hoti-c-ik** *taktal 't-ankeyuw-à.*  
 all IC.be.sick-Plural-3Conj-3P doctor 3-care.for-Dir.ObvP  
 'A doctor is taking care of **all of the sick people.**' (\*all>a)
- b. **Psi=te khakon-ol pesq** '(to)toli-tpinomon-ol *nucitqonket.*  
 all=Emph door-InanP one 3-Prog-guard-InanP policeman  
 'One policeman is guarding **every door.**' AH,SN 6:2.27 (\*every>one)

Unfortunately these examples suffer from the same problem suggested above: *psite* + *Plural NP* may not be able to distribute in any position. While I do not have (unproblematic) examples to prove this point, I believe that it does hold: varying word order does not change scope and binding possibilities. (The only thing that does is the Inverse, as illustrated below.)

I do have examples illustrating this point with raising to object, which will be repeated and analyzed in Chapter 5. Here, raising an object to a higher position does not enable it to bind a variable in the subject.<sup>19</sup>

- (253) \* N-kosiciy-a **psi=te wen-il** tama wikuwoss-ol n-kisi-kat-a-ku-n *t.*  
 1-know.TA all=Emph someone-Obv where 3.mother-Obv 1-Perf-hide-App-Inv-N  
 'I know about everyone<sub>1</sub> where his<sub>1</sub> mother hid *t*<sub>1</sub> from me.'

If any variation in word order would be expected to change scope and binding possibilities, raising to object would be. (In Chapter 5, I argue that raising to object in examples like this is A-bar movement, which necessarily reconstructs for scope and binding.)

Word order variations also do not remove the possibility of binding (except in the case of a negative quantifier, discussed below):

- (254) a. Wikuwoss-ol 'kisi-messunom-uw-a-n-ol *yatte wen pilsqehsis nican-ol.*  
 3.mother-Obv 3-Perf-show-App-Dir-N-Obv each someone girl 3.child-Obv  
 'Each girl<sub>1</sub> showed her<sub>1</sub> mother **her<sub>1</sub> child.**'
- b. **Wikuwoss-ol** *psi=te wen 'koselom-a-l.*  
 3.mother-Obv all=Emph someone 3-love-Dir-Obv  
 'Everyone<sub>1</sub> loves **his<sub>1</sub> mother.**' AH8:5.3

<sup>19</sup>This example may also be problematic: it is unclear whether an obviative can be construed as the possessor of another argument.



- c. **'T-akoma-l** ma=te psi=te wen ' -kisi-wolehl-a-wiy-il.  
 3-snowshoe-Obv Neg=Emph all=Emph someone 3-Perf-fix-Dir-Neg-Obv  
 'Everyone<sub>1</sub> didn't fix his<sub>1</sub> snowshoe.' AH,SN 8:5.4

### 2.4.2 Weak Crossover

Weak crossover (WCO; Postal 1971, Wasow 1972) arises when an operator that should be able to take scope over and hence bind a pronoun is unable to, due (in a purely descriptive sense) to the fact that it has crossed over the pronoun in its scope-taking movement. For example, in English wh-phrases take scope over the entire clause, but an object wh-phrase nevertheless cannot bind a variable contained in the subject; in contrast, a subject wh-phrase can bind a variable contained in the object:

- (255) a. \* [CP Who<sub>1</sub> does his<sub>1</sub> mother love *t* ] ?  
           ↑  
           └──────────────────────────────────┘  
 b. [CP Who<sub>1</sub> *t* loves his<sub>1</sub> mother ] ?  
       ↑  
       └──────────┘

This asymmetry is usually ascribed to some principle or principles with the following descriptive force:

- (256) Weak Crossover: A pronoun interpreted as a variable bound by an operator *Op* must be c-commanded by the trace of *Op*.

Or, a quantifier must A-bind a pronoun in order to bind it as a variable; wh-movement is A-bar movement, to an A-bar position, a position which does not enable new A-binding possibilities. Thus, in the examples above, the trace of a subject wh-phrase (in an A-position) c-commands the object, but the trace of an object wh-phrase (in an A-position) does not c-command the subject.

In Passamaquoddy, it is easy to see the effects of WCO in long-distance wh-movement, just as it was easy to see the lack of inverse scope and variable binding across clause boundaries. A wh-phrase that moves out of an embedded clause to take matrix scope is unable to bind a variable in the matrix clause:

- (257) WN8:5.9
- a. \* [CP Wen<sub>1</sub> elitahasi-t wikuwoss-ol [CP eli kselm-ot *t*<sub>1</sub> ] ] ?  
       who IC.think-3Conj 3.mother-Obv C love-2Conj  
       'Who<sub>1</sub> does his<sub>1</sub> mother think you love *t*?'  
 b. [CP Wen<sub>1</sub> elitahasi-t k-ikuwoss [CP op keselm-ot *t*<sub>1</sub> ] ] ?  
       who IC.think-3Conj 2-mother would IC.love-2Conj  
       'Who<sub>1</sub> does your mother think you love *t*<sub>1</sub>?'  
 (258) [CP Wen-il<sub>1</sub> elitahasi-t wikuwoss-ol [CP eli Mali kselm-at/c-il *t*<sub>1</sub> ] ] ?  
       who-Obv IC.think-3Conj 3.mother-Obv C M. love-3Conj-(PartObv)  
       'Who<sub>1</sub> does his<sub>\*1</sub> mother think Mary loves *t*<sub>1</sub>?'

Turning to single clauses, we saw that subjects always take scope over objects, and never vice versa. We should expect WCO to appear, then, whenever an object is questioned. However, things become more com-

plicated, as mentioned in the first chapter. At first sight WCO is simply absent from Algonquian languages, as illustrated here for Passamaquoddy and as claimed by Dahlstrom (1986) for Cree.<sup>20</sup>

(259) Passamaquoddy

- a. Wen pihce w-itapihi-l nekol-iht kcihku-k?  
 who long.ago 3-friend-Obv IC.leave-3ConjInv forest-Loc  
 ‘Who<sub>1</sub> did his<sub>1</sub> friend abandon in the forest a long time ago?’ AH,SN 8:5.8
- b. Wen pihce wenitaham-iht ’-qoss-ol?  
 who long.ago IC.forget.about-3ConjInv 3-son-Obv  
 ‘Who<sub>1</sub> did his<sub>1</sub> son forget about long ago?’ AH,SN 8:5.8

(260) Cree (Dahlstrom 1986, 56–57)

- a. namo-ya awiyak wanikiskisitota·k otawa·simisa  
 no one forget.Obv/3[Inverse] his.child.Obv  
 ‘His<sub>1</sub> (Prox) children (Obv) forget no one<sub>1</sub> (Prox)’
- b. awi-na e--sa·kihikot oma·ma·wa?  
 who love.Obv/3[Inverse] his.mother.Obv  
 ‘Who<sub>1</sub> (Prox) does his<sub>1</sub> (Prox) mother (Obv) love?’

This is quite surprising, given what we have seen so far: if an object cannot take scope over a subject in a declarative clause, there should be no possibility of variable binding in a question, either. If the object cannot independently A-bind the subject (as would be shown by scope and variable binding), A-bar movement in the form of wh-movement should give rise to WCO.

There is another factor at work in these examples, however. They are all in the Inverse Voice, as opposed to the Direct Voice that was used in all of the examples above (if the morpheme-by-morpheme gloss specifies neither Dir nor Inv, it means that the Direct Voice—the unmarked category—is being used)<sup>21</sup> In fact when the Inverse Voice is used we find, as Dahlstrom claimed for Cree, that WCO appears to be absent even in declarative clauses (i.e., an object quantifier can bind a variable in the subject), contradicting the data presented above:

- (261) a. Kat=op wen nokol-**oku**-hi-l woli-witapihi-l.  
 Neg=would someone-Obv leave-**Inv**-Neg-Obv 3.good-friend-Obv  
 ‘His<sub>1</sub> best friend would abandon no one<sub>1</sub>.’ AH,SN 6:3.2

<sup>20</sup>Brittain (1999), noting that the obviation system of Algonquian languages forces certain structures to be used, speculates that WCO would be present if it were not obscured by other factors. As will be shown below, obviation and the Inverse Voice are exactly what leads to the conclusion that WCO is absent.

<sup>21</sup>Phil LeSourd (p.c.) points out that the Direct-Inverse opposition is usually considered a *morphological* distinction, one that is made by the Theme Signs in the Independent Order. In wh-questions such as these, where the Conjunct Order is used, there is no morphological Direct-Inverse opposition, since the Theme Signs are not present. However, the Direct-Inverse opposition is also sometimes considered to be a mapping or linking phenomenon reflected (directly or indirectly) in the morphology (e.g., Aissen 1997). In this sense the Inverse describes the state of affairs where the object outranks the subject on the participant hierarchy. It is in this sense that I am using the term Inverse, which receives support from the fact that scope and binding works the same way in both the Independent and the Conjunct Orders in Passamaquoddy. There is also precedence for this use in the study of Passamaquoddy: Leavitt and Francis (1983), for example, group all the forms in the verb paradigms where the object outranks the subject under the heading “Inverse,” whether the Direct or Inverse theme signs are present or not. I am following this practice in glossing these morphemes as, for example, “3ConjInv” in 259. See Chapter 1. Moreover, the Conjunct endings only make number distinctions for the proximate argument, whether that is subject or object. In this way the Conjunct does indicate Inversion morphologically.

- b. Yatte wen pilsqehsis ' -kis-cem-**ku**-l w-ikuwoss-ol.  
 each someone girl 3-Perf-kiss-**Inv**-Obv 3-mother-Obv  
 'Her<sub>1</sub> mother kissed each girl<sub>1</sub>.' WN1:9.8

As will be seen, the Inverse, as its name implies, inverts the subject and object. This inversion has the properties of A-movement: it changes scope, enables variable binding, and thereby circumvents WCO. When it is not used—that is, when the Direct Voice is used instead—weak crossover results:

(262) WN5:11.15

- a. [<sub>NP</sub> Not kis-uwikho-k ] ' -pott-aqosomon 't-ahtwikhikon.  
 Dem Perf-write-3ConjTI 3-accidentally-burn 3-book  
 'The one who wrote it accidentally burned his book.'
- b. \* Keqsey<sub>1</sub> pett-aqoso-k [<sub>NP</sub> not kis-uwikho-k ] t<sub>1</sub>?  
 what IC.accidentally-burn-3ConjTI Dem Perf-write-3ConjTI  
 'What<sub>1</sub> did the one who wrote it<sub>1</sub> accidentally burn?' (Echo question only)

### 2.4.3 The Inverse

The Inverse Voice, as will be recalled from Chapter 1, is used when the object outranks the subject on a participant hierarchy, shown below:

(263) The Participant Hierarchy:

1,2 > 3 (Proximate) > Obviative > Inanimate (Goddard and Bragdon 1988)

Proximate and Obviative are two categories of animate third persons: the proximate third person is the unmarked case, the category a third person in isolation belongs to. When there is more than one third person within a certain domain (usually equivalent to a clause), one third person is picked out as proximate and the others must be obviative. The proximate is usually described as the “topic” or the character whose point of view is being taken, or with whom the speaker (and hearer) are to empathize (e.g., Goddard 1984). Obviatives are marked with suffixes (pitch accents and the absence of final truncation if plural) and in agreement on the verb.

When the subject outranks the object, presumably the unmarked case, the Direct Voice is used. The distinction between the Direct and the Inverse is registered by a morpheme on the verb in the Independent Order:

- (264) a. ' -Tiy-**a**-l yaq mamam-ol, ...  
 3-say.to-**Dir**-Obv Quot 3.mother-Obv  
 'She (Prox) said to her mother (Obv),...' (constructed) 3/Obv, DIRECT
- b. ' -Tiy-**uku**-l yaq mamam-ol, ...  
 3-say.to-**Inv**-Obv Quot 3.mother-Obv  
 'Her mother (Obv) said to her (Prox),...' (Newell 1979, 9) Obv/3, INVERSE

Note that morphology registering agreement with the arguments of the verb does not change: the higher ranking argument always takes the same agreement slot, whether it is subject or object, and the lower-ranking takes a different slot (in the Independent Order). In 264, the proximate argument agrees in a prefix position, while the obviative argument agrees via a final suffix. The choice of the Direct or Inverse marker (called a *Theme Sign* in traditional Algonquian linguistics) indicates which is subject and which is object. The morphology can be seen even more clearly in examples involving first or second persons:

- (265) a. **N**-kisi-tokom-**a** skitap.  
**1**-Perf-hit-**Dir** man  
 ‘I hit the man.’ (constructed)
- b. Skitap **n**-kisi-tokom-**oq**.  
 man **1**-Perf-hit-**Inv**  
 ‘The man hit me.’ (constructed)

For our purposes, this pattern can be described as follows: in the Inverse, the object agrees as though it were the subject. In the examples above, the first person subject agrees as the prefix /n-/ on the verb; and a first person object takes the same prefix, in the Inverse Voice. It is also striking that word order seems to invert as well: in the Direct Voice informants will generally put the subject first, but in the Inverse they will often put the object first. (The counts of texts in Chapter 1 were unfortunately unable to corroborate this word order preference, due to a dearth of Inverse examples with overt NPs.)

In the Conjunct Order, the Direct and the Inverse are not marked in the same way as in the Independent. Some of the Conjunct endings look as if they have the Direct theme sign -a-, but this is missing from other endings (Goddard and Bragdon 1988 suggest that it is deleted before vowel-initial suffixes, but there is no independent evidence for this, and no more general process that might lead to this deletion). The endings that would correspond to the Inverse—indexing Obv/3, 3/1, 3/2—do not have anything recognizable as the Inverse theme sign.<sup>22</sup> However, as far as I have been able to determine, the syntactic binding and scope facts hold in the Conjunct just as they do in the Independent, meaning that the syntax of the two orders is the same—it is just realized differently in the morphology. (Moreover, number distinctions in the Conjunct are only made for the proximate argument: the subject in the Direct, and the object in the Inverse. In this sense the Conjunct endings do reflect inversion.)

Similarly, with TI and AI+O verbs, where there is no voice morphology (no Direct-Inverse distinction is made), agreement appears as it does in the Direct Voice with TA verbs: the prefix indexes the subject, not the object, and the Conjunct endings are the same as the Conjunct Direct endings of the TA series. I will refer to these verbal types as Direct as well, even though there is no morphological Direct-Inverse opposition, on the theory that the Direct is the unmarked case, used whenever the subject outranks the object (always, in the case of TI and AI+O verbs), while the Inverse is the marked case, able to be used only with TA verbs.

<sup>22</sup>Goddard and Bragdon 1988 note that, in addition to Conjunct endings that *do* use the Inverse theme sign, the related language Wampanoag has endings that are similar to those of Passamaquoddy; these they suggest use the theme sign that indicates 2/1, -i-).

### 2.4.4 Scope and Binding in the Inverse

When the Inverse is used—where the object outranks the subject on the participant hierarchy—the object takes scope over the subject, as indicated by the gloss of the following as a passive:<sup>23</sup>

- (266) Yatte wen 'kisi-tqon-ku-l piluweya-l nucitqonkelic-il.  
 each someone 3-Perf-arrest-Inv-Obv different-Obv policeman-PartObv  
 'Each one was arrested by a different policeman.' AH,SN 5:11.9 (each>a)

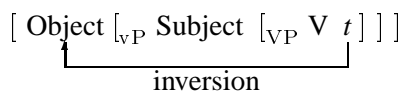
The object can also bind a variable in the subject, as shown by the examples above and by the following:<sup>24</sup>

- (267) a. Katolu psi=te wen 'koscicy-uku-l wikuwoss-ol.  
 of.course all=Emph someone 3-know.TA-Inv-Obv 3.mother-Obv  
 'Of course his<sub>1</sub> mother knows about everyone<sub>1</sub>.' AH8:5.3
- b. Psi=te pilsqehsis-ok wikuwoss-uwa 'kis-cem-ku-wa.  
 all=Emph girl-3P 3.mother-3P.ObvP 3-Perf-kiss-Inv-3P.ObvP  
 'Their<sub>1</sub> mothers kissed all the girls<sub>1</sub>.' WN1:9.8

Given the possibility of variable binding with quantifiers, it is not surprising that WCO does not appear in *wh*-questions that are in the Inverse Voice. The object can bind a variable in the subject even before *wh*-movement (A-binding), so there is no crossover.

We can explain the scopal properties of the Inverse, as well as its morphology and word order, by hypothesizing that the Inverse involves an A-movement operation that raises the object to a position c-commanding the subject:<sup>25</sup>

- (268) The Inverse: Syntactic inversion (A-movement) in the Inverse:



### 2.4.5 Analysis

I will formalize an analysis of the Inverse in a way that will prove to be useful when we examine raising to object structures in Chapter 5. I believe that it is independently motivated, and an entirely natural way of thinking about the grammar of obviation. It attempts to implement the idea that the proximate-obviative distinction is a reflex of the same sort of relation as Case—a purely formal requirement on NPs—, while permitting a free—but structurally constrained—choice of which NP will be proximate. Thus obviation is crucially syntactic, in that it is subject to purely grammatical constraints and it interacts with movement and agreement, but it has some freedom for manipulation to discourse effect.

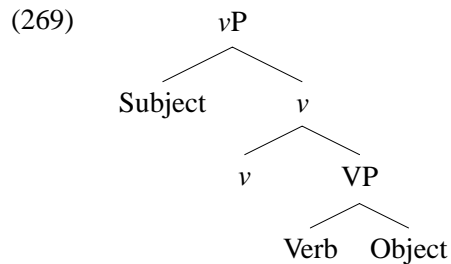
<sup>23</sup>The easiest way to elicit such sentences is with English passives, suggesting that the Inverse is like a passive in reversing the hierarchical positions of the two arguments. Informants will generally translate Inverse sentences as passives when translating into English as well.

<sup>24</sup>Regarding 267b, recall the discussion above, that the singular/plural distinction is irrelevant for bound variable readings. Note that the English translation does not have the bound reading (WCO; it does have a group reading), but the corresponding passive does: 'All the girls<sub>1</sub> were kissed by their<sub>1</sub> mothers.'

<sup>25</sup>There has been a long debate in the Algonquian syntactic literature over whether the inverse involves syntactic inversion. For an overview see McGinnis 1998. The evidence presented here argues not only that the inverse with third persons involves syntactic movement, but first and second person interactions also do. See Chapter 5.

### Feature Checking

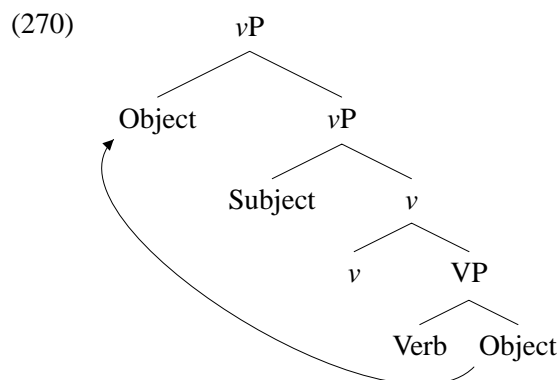
Let us consider the case of a simple transitive clause. I will assume that the object is introduced as the complement of the verb, while the subject is introduced by a “light” verb  $v$  dominating the verb (Hale and Keyser 1993, Chomsky 1995, Kratzer 1996, Marantz 1997, among others):



Both the subject and the object are inserted with uninterpretable features; these are standardly called Case. Let us suppose, with Chomsky (1998), that it is the presence of these features which renders each NP’s interpretable  $\phi$  features syntactically active, that is, visible to other elements (this hypothesis will be important in Chapter 5).  $\phi$  features on nouns are interpretable at the interface; but they are not accessible to syntactic relations (in particular agreement) unless the NP itself has uninterpretable features.

$v$  is also inserted with uninterpretable features; call these  $\phi$  (interpretable on NPs but uninterpretable on functional heads). Following, among others, Chomsky (1995), Richards (1997), let us suppose that it is  $v$  that checks object Case. It does this by entering an abstract Agree relation (Chomsky 1998) with the object and the subject, whereby it checks the Case features of the object and values its own  $\phi$  features at the same time. These  $\phi$  features spelled out as morphological agreement on the verb. In Algonquian languages,  $v$  registers both subject and object agreement, in the form of the Theme Sign. The morphological form this agreement takes is dependent on both the subject and object simultaneously. Therefore there must be some head that Agrees with both. Following Richards (1997) (and others), I will hypothesize that  $v$  Agrees with both the object and the subject. (Agree with the object will also be necessary to permit it to move further; see below.)

Also following Chomsky, let us suppose that  $v$  permits an additional specifier, into which the Agreeing object is permitted to move:



This movement may take place or it may not. Whether it does or not depends on whether the requirements of the object have been satisfied.

Here we enter into a particularly Algonquian property. What follows will be somewhat stipulative, but it is simply a fact that Algonquian languages rank discourse participants, and that that ranking is syntactically relevant. Here I simply attempt to capture this fact in a theory of uninterpretable features—a theory of what “syntactically relevant” means: having featural requirements.

Let us suppose that there is a syntactic feature in Algonquian languages, call it *Proximate* ([P]), which is a feature of NPs. First and second persons are inherently valued for this feature; they are [+P]. Third persons are not inherently valued (except for inanimates, which cannot be [+P]); they derive a value only from context, and only through opposition between NPs. If two NPs occur in the same local domain (to be defined below), one will always become [+P], while the other will remain unvalued. Which does which is entirely free; speakers can choose to assign any of two locally co-occurring NPs [+P]. There is one restriction: any animate co-occurring with an inanimate will always become [+P]. This follows from the stipulation that inanimates cannot be [+P]; if one of two third persons must become [+P], it will have to be the animate one.

For the moment we will only consider the interaction between subjects and primary objects; see below for the case of secondary objects and relative roots, and possessed NPs.

The feature [P] is uninterpretable on NPs and must be checked off by the end of the derivation. Unvalued [P] is checked off by *v*. However, a [+P]-marked NP must check off its [+P] feature against a higher head, which I will call H. That is, *v* is unable to check the feature [+P], leaving an NP bearing this value with unfulfilled requirements. These will have to be satisfied somewhere higher in the tree—here, by the head H.

Following Chomsky (1998), as explained in Chapter 1, the derivation is divided into *phases*, at *vP* and CP. Each phase is spelled out upon completion, rendering all elements within it syntactically inert—invisible to higher operations. Only the edge of the phase—the head and its specifiers—are not spelled out, and continue to be active syntactically. It follows that if an element is to move to a position in a higher phase in order to check uninterpretable features, it must first move to the edge of the current phase. This derives the successive-cyclic nature of movement.

In the present context, this means that any NP bearing the feature [+P] must move to the specifier of *vP* (if it is not already there, as in the case of a subject). [+P] can only be checked off by a head outside the *vP* phase; this means that an NP that Agrees with *v* but does not have its [+P] feature checked must move to the specifier *vP* makes available. This is the movement shown in 270.

There are five cases to consider. In the first, first and second persons co-occur as subject and object. Both are inherently [+P]; hence whichever is object must move to *vP*:

$$(271) \quad [{}_{vP} 1/2^{[+P]} \underbrace{[{}_{vP} 1/2^{[+P]} [{}_v v [{}_{VP} \text{Verb } t_{Obj} ] ] ]}_{\text{1st AND 2nd}} ] ]$$

In the second case, a first or a second person subject co-occurs with a third-person object. Here the subject is inherently [+P]. The third person is not in a local competition with another third person, hence its [P] feature is simply not valued. It has no requirement that it move to *vP*:

$$(272) \quad [{}_{vP} 1/2^{[+P]} [{}_v v [{}_{VP} \text{Verb } 3^{[P]} ] ] ] \quad \text{1/2Subj, 3Obj}$$

Third, the grammatical relations are reversed, with a third person subject and first or second person object. Here the object is [+P], so it must move to  $vP$ ; again, the third person is not in competition with another third person, and its [P] feature remains unvalued:

$$(273) \quad [{}_{vP} 1/2^{[+P]} [{}_{vP} 3^{[P]} [{}_v v [{}_{VP} \text{Verb } t_{Obj} ] ] ] ] \quad 3\text{Subj}, 1/2\text{Obj}$$

The two cases of third persons are more complex. When two third persons co-occur, one will become [+P]. With a third person subject and third person object, either the subject can be [+P] and the object unvalued [P], or vice versa; the choice is free. If the object is [+P], however, it will have to move to  $vP$  (274b); if it is unvalued [P], it will not (274a).

$$(274) \quad \begin{array}{ll} \text{a.} & [{}_{vP} 3^{[+P]} [{}_v v [{}_{VP} \text{Verb } 3^{[P]} ] ] ] \quad 3\text{Subj}, 3\text{Obj} \\ \text{b.} & [{}_{vP} 3^{[+P]} [{}_{vP} 3^{[P]} [{}_v v [{}_{VP} \text{Verb } t_{Obj} ] ] ] ] \quad 3\text{Subj}, 3\text{Obj} \end{array}$$

Something additional must take place in the case of two third persons. One becomes [+P], as described above; this is the proximate category. In addition, the third person that does not become [+P] will be assigned an additional feature, call it [Obv]. This feature will be assigned on top of its [P] feature, and will eventually be spelled out as an obviative suffix.

Let us return to the uninterpretable features on NPs that are assumed to make their  $\phi$  features syntactically active or visible. Above these were discussed under the name they are usually called, Case. But note that the [P] feature hypothesized here fulfills the same role. What makes an NP's  $\phi$  features syntactically active in Algonquian languages is the presence of the uninterpretable [P] feature. This puts obviation (on the current theory, the principles for valuing [P]) in the same family of phenomena as Case. What is particular to Algonquian languages is the dependent means of valuing the uninterpretable feature—by context, and by person features.<sup>26</sup> This is the way that the participant hierarchy is encoded in the grammar: in the particular relation between person features and values of the feature [+P]. There is a straightforward mapping between first and second persons and inanimates and the value for [P]: first and second persons are inherently [+P], while inanimates may not be [+P]. Certain third persons in opposition to another third person may be distinguished by giving them the same [+P] value (proximate third persons pattern with first and second persons in agreement morphology). On this theory there is no need for an independent hierarchy of uncertain grammatical status, no need for ranking of violable constraints (e.g., Aissen 1997), or any other mechanism. There is only the fact that certain persons are inherently valued for [P], while others become valued through pairwise opposition.

What this means is that the proximate-obviative distinction is basically the same sort of distinction as nominative versus accusative Case. That is, what is spelled out as a proximate-obviative distinction and is manipulated by speakers to indicate coreference and disjoint reference is essentially a formal licensing property of NPs. As such it interacts crucially with the grammar in agreement, A-movement, and syntactic

<sup>26</sup>Theories of Dependent Case have been proposed—e.g., by Massam (1985), Yip, Maling, and Jackendoff (1987), Marantz (1991), Bobaljik (1993), and Harley (1995)—in which a Case value is also determined by competition with other NPs. Clearly a comprehensive theory of Case and syntactic licensing that unites Case in general and the Algonquian phenomenon is desirable.



licensing.<sup>27</sup>

As for *checking* the feature [P], *v* checks, via Agree, unvalued [P] features. That is, in 272 and 274a, *v* checks the object's features but not the subject's; in 273 and 274b, it checks the subject's but not the object's. It enters into Agree relations with both arguments, however, which are spelled out as subject and object agreement. In 271, *v* checks neither the subject's nor the object's features; they will have to be checked later in the derivation, by the higher head (H). Agreeing with both of these NPs *will* check all of *v*'s features, however, and result in morphological agreement on the verb.

The unvalued [P] argument having had its features checked by *v*, it will be spelled out within the *v*P phase (unless it is to move further for some independent reason, such as *wh*-movement). We are now in a position to spell out the features of this argument. Whether subject or object, if it is unvalued for the feature [P], it will be spelled out as a bare NP; this is the case for first and second persons interacting with third persons, in which no obviative suffix appears on the third person NP (275a). However, when two third persons are opposed, one becomes [+P], and the other is assigned another feature, [Obv]. This is spelled out as the obviative suffix *-ol* (275b):

(275) AH,SN 8:5.5

- a. Cuqahk=al            cuw=op        n-wicuhkem-a **n-itap**.  
of.course=Uncertain surely=would 1-help-Dir    1-friend  
‘Of course I would help my friend.’
- b. Cuqahk=al            cuw=op        pahtoliyas wicuhkem-a-l **w-itapih-il**.  
of.course=Uncertain surely=would priest        help-Dir-Obv 3-friend-Obv  
‘Of course a priest would help his friend.’

In the case of an intransitive, there will only be one third person, and no other third person to value its [P] feature. It will remain unvalued, just as in first-third and second-third interaction. Hence the NP will be spelled out without an obviative suffix:

(276) On **apiqsehs-is** sikelomi-n, . . . .  
then rat-Dim    smile.3-N  
‘Then the rat smiles; . . .’ (Anonymous 1974, 8)

Continuing on above the *v*P phase, there must be some higher head that will check the features of [+P] NPs. This is the head that will be responsible for the Direct-Inverse opposition. I will call this H, without committing to identifying it with any head that has been posited in the literature, but recognize that it is reminiscent of various theories about movement to T(ense) (e.g., Miyagawa 2001). This head, H, also has uninterpretable features that need to be checked off; call these  $\phi$  again:

(277)  $[_{HP} H^{[\phi]} [_{vP} \text{Subject } [_v v [_{VP} \text{Verb Object } ] ] ] ] ]$

<sup>27</sup>There are also some differences between obviation and Case, which will emerge as we proceed. One is that obviation values can change through A-bar movement, usually in the direction of the default. Case marking on NPs generally does not do this. Another is that obviation is relational, so that an NP marked with an obviative suffix can be proximate with respect to another obviative; that is, it will be [+P] and move to HP. This arises with two possessed nouns, for instance. On the theory outlined here, such an NP will be assigned one value for [P] within the DP phase, and another value will be assigned to the entire DP within the *v*P phase. See Section 2.4.5.

H will seek in its c-command domain for any NP with the feature [+P], and enter into an Agree relation with it. Like *v*, H can enter into multiple Agree relations. In the case where the object has moved to *v*P, due to its own [+P] feature, H will agree with that object (if a [+P] object has not moved to *v*P, the derivation will crash; the object will have been spelled out—with the rest of the *v*P phase—with an uninterpretable feature). If the subject is [+P], H will agree with it. If both the object and the subject are [+P], H will Agree with both. The latter is the case where both NPs are first or second person and inherently [+P].

In addition to Agree, H permits movement to its specifier:<sup>28</sup>

- (278) a.  $[_{\text{HP}} \text{Subject}^{[+P]} \text{H}^{[\phi]} [_{\text{vP}} t \text{ } [_{\text{v}} \text{v} [_{\text{VP}} \text{Verb Object} ] ] ] ]$  Direct
- b.  $[_{\text{HP}} \text{Object}^{[+P]} \text{H}^{[\phi]} [_{\text{vP}} t [_{\text{vP}} \text{Subject} [_{\text{v}} \text{v} [_{\text{VP}} \text{Verb } t ] ] ] ] ]$  Inverse
- c.  $[_{\text{HP}} \text{Object}^{[+P]} [_{\text{HP}} \text{Subject}^{[+P]} \text{H}^{[\phi]} [_{\text{vP}} t [_{\text{vP}} t \text{ } [_{\text{v}} \text{v} [_{\text{VP}} \text{Verb } t ] ] ] ] ]$  First/Second

As shown, the subject will move to HP whenever it is [+P]; if it is the only NP that does, this will be the Direct. The object will move to HP whenever it is [+P]; if it is the only NP that does, this will be the Inverse. If both NPs move to HP, it will be a case of first and second person interaction.

We can now finish spelling out the morphology. Any NP that ends up in HP will be unmarked for obviation; that is, it will be proximate (unless it is a possessed NP; see below). As for the verbal morphology, the prefix in the Independent Order will agree with any NP(s) in HP, while the Theme Sign will spell out the features of the logical subject and object together. The prefix we might suppose to be spellout of agreement on H,<sup>29</sup> while the Theme Sign is the spellout of agreement on *v*:<sup>30</sup>

(279) Prefix

- k- ⇔ [+2]  
 n- ⇔ [+1]  
 '- ⇔ [ ]

(280) Theme Sign

- i- ⇔ [2Subj,1Obj] (2/1)  
 -ol- ⇔ [1Subj,2Obj] (1/2)  
 -oku- ⇔ [+P Obj] (Inverse)  
 -a- ⇔ [ ] (Direct)

<sup>28</sup>In the text I will act as though this movement is required, but in fact it is not; Agree is sufficient to check the features of both the NP and H. Movement to *v*P is required; otherwise the NP would not be visible to H.

<sup>29</sup>The Central Endings agree with the same argument as the prefix (the one in HP); I do not spell out their values here (two items are given in 286 below). In the disjunctive list of prefixes, I stipulate that the second person prefix is inserted prior to the first person prefix. This is correct empirically, but there are other ways to capture the preference. For instance, if first person is universally ranked above second person (Noyer 1992), the first person prefix might be specified to be [-2] as well as [+1].

<sup>30</sup>Note that the form of the Theme Sign depends on the subject and object together. This possibility is captured in the present system by the fact that *v* Agrees with both simultaneously. At the same time, the Final that determines the transitivity and gender selection of a verb has properties one might associate with *v*; it is then not surprising that the Theme Sign is immediately adjacent to the Final. (Suppose that Agr heads are adjoined to functional heads in a post-syntactic morphological component, as in Halle and Marantz 1993; then the Theme Sign is an Agr head adjoined to *v*.)

These pieces of inflection are arranged in a disjunctive hierarchy, such that the first element on the list that is compatible with the syntactic features of the environment will be inserted (Kiparsky 1973, Anderson 1992, Halle and Marantz 1993). The empty brackets indicate a default; if nothing else is compatible, that element will be inserted.

For example, in the sentence in 281, both subject and object are third person. The subject, *Koluskap*, is chosen to be valued [+P] in opposition to the object *skicinu*, which remains unvalued and is assigned the feature [Obv]. This means that the subject raises to HP, while the object remains within vP. The prefix on the verb is spelled out as /'-/, for a third person in HP. The object, being [Obv], is marked as an obviative; here, an obviative plural, indicated by a pitch accent and the lack of final truncation (the citation form of 'Indian' is *skicin*; for details of the accentuation of obviatives and truncation, see LeSourd 1993a). As for the theme sign, it does not match any of the specifications in 280, and so is spelled out as the Direct morpheme /-a-/:

- (281) ... on Koluskap 'toqet-okehkim-a-n skicinu...  
 then K. 3-try-teach-Dir-N Indian.ObvP  
 '... Koluskap (Prox) tries to teach the Indians (Obv)...' (Mitchell 1921/1976c, 5)

In contrast, in an Inverse clause it is the object that moves to HP and determines the spellout of the prefix; in 282 it is again a third person (the prefix /'-/ is phonologically null before /u/). However, the logical object is now [+P], requiring the Inverse theme sign /-oku-/:

- (282) Ipa, Mali San nit uci-nuhshuka-ku-n wen-il.  
 hey Mary Jane then 3.from-chase-Inv-N who-Obv.  
 'Well, something chased after Mary Jane.' (Newell 1979, 8)

The logical object, *Mali San*, which is [+P], does not receive an obviative suffix, but the logical subject, *wen-il*, which is marked [Obv] by being opposed to a [+P] third person coargument, does.

Thus, in the Independent Order, the logical object of the Inverse and the subject of the Direct pattern together in agreement. This is because they are alike in being [+P] and moving to HP. In all orders, the two pattern together in scope and binding. This is due to the same fact: they are the NPs that undergo A-movement to HP. This analysis derives both facts. There is a purely formal feature, [+P], driving movement of either the subject or the object to HP. (In the Conjunct Order, rules spelling out the morphology will be slightly more complicated; for example, when there are two third persons, if it is the subject that raises to H, the ending will be spelled out as /-at/; while if it is the object that raises, the ending will be spelled out as /-iht/. I will not attempt to spell out the featural makeup of the Conjunct Endings here.)

Scope and variable binding, on this theory, pattern with the morphology. For instance, in 267a, repeated below, the quantifier 'everyone' is the logical object, but is assigned [+P] in opposition to the third person subject 'his mother' (see below on possessed NPs). It therefore moves to HP, crossing over the subject. From its new position in Spec-HP, it is able to A-bind the subject:

- (283) Katolu psi=te wen 'koscicy-uku-l wikuwoss-ol.  
 of.course all=Emph someone 3-know.TA-Inv-Obv 3.mother-Obv  
 'Of course his<sub>1</sub> mother knows about everyone<sub>1</sub>.' AH8:5.3

At the same time, the third person in HP determines the third person prefix, and a [+P] logical object determines that the Theme Sign will be /-oku-/ (Inverse). ‘His mother’ is assigned the feature [Obv], and is spelled out with an obviative suffix.

As for the feature [Obv], I will remain vague about its nature. It will play no role in syntactic derivations, and might therefore be regarded as an interpretable rather than uninterpretable (or formal) feature. Its role is to give rise to the morphological obviative ending; this is used by speakers to track coreference, which might suggest that the feature underlying it is interpretable. The feature [Obv] must be separate from the formal feature [P] because of the fact that it can be assigned to an NP that already has a value for [P]. For example, in Chapter 5 we will see that an NP that is proximate in a lower clause, that is, is [+P], will be marked as an obviative if it raises to object position of a verb with a third person subject. Similar changes in obviation status are possible across a derivation. Moreover, a transitive verb can have two arguments marked as obviative, but one will always fill the role of a proximate (i.e., will be [+P] and move to HP). This means that the obviative suffix and the feature that underlies it are assigned on top of the feature that underlies A-movement and the Direct-Inverse opposition. That is, [Obv] is distinct from [P]. Finally, obviative NPs occasionally lose their obviative endings through long-distance A-bar movement. We might suppose that this is deletion of interpretable features that is permitted by recoverability: the obviative status of the NP can be recovered from the verbal morphology (and the morphology of coargument NPs).

### First and Second Persons

The theory presented above claims that both first and second persons are [+P] and move to HP, even when they co-occur. This means that H can enter into multiple Agree relations and check the features of multiple NPs. It is worth spelling out why this must be the case.

The first/second person Independent Subordinative paradigm of the TA verb meaning ‘to listen to’ is given below:

(284)

Subject	Object	
	1	1P
2	k-ciksotuw-i-n	k-ciksotuw-i-ne-n
2P	k-ciksotuw-i-ni-ya	k-ciksotuw-i-ne-n
	2	2P
1	k-ciksotu-l-on	k-ciksotu-l-oni-ya
1P	k-ciksotu-l-one-n	k-ciksotu-l-one-n

The thing to note about this paradigm is that the first person plural suffix /-n/ always overrules any other suffix, and the second person prefix overrules any other prefix. The simplest way to capture these two facts is to say that both arguments are competing for the same agreement slots.

The values for the prefixes are repeated below:

- (285) Prefix  
 k- ⇔ [+2]  
 n- ⇔ [+1]  
 '- ⇔ [ ]

If the prefix agrees with both arguments, it will have the features [+2,+1]. Moving down the list in 285, the first item that is compatible is /k-/. This will be inserted without ever getting to /n-/, which is also compatible with these features.

As for the suffixes, they will have the following values (this is only a partial list of the suffixes that fit into this agreement slot):

- (286) Central Endings (Partial)  
 -n ⇔ [1Plural]  
 -ya ⇔ [Plural]

Consider the case of a 2P acting on 1P. The features of the two arguments together will be [2Plural,1Plural]. Looking at the list in 286, /-n/ will be inserted. The less specified second person plural suffix /-ya/ can never be inserted if there is a 1P argument around. Only when the first person is singular can it be inserted (the features will be [2Plural,1]).

That the ending /-ya/ is more general can be seen from the fact that it is also used with third person plurals:

- (287) '-ciksotuw-a-ni-ya  
 3-listen.to-Dir-N-3P  
 'they listen to him/her/them'

The morphology thus falls out if we regard first and second persons as both moving to the same position and competing for the same agreement slots. In Chapter 5, we will see that first-second person interaction patterns with the Inverse in raising to object as A-movement.

### Intransitives

In intransitives, first and second persons agree on the verb as subjects of transitives, but third persons agree like objects. This fact will fall out from the present theory, with one addition.

This is that HP in an intransitive must behave differently from a transitive clause. There can be only one third person, the subject, in an intransitive clause; there will be no other third person to value its [P] feature. It will therefore remain unvalued, as [P]. Now, since the head H can only check its features against a [+P] NP, the derivation will crash. In an intransitive, then, the head H must be featurally different from when it occurs in transitives. In intransitives, H must not require a [+P] argument to check it; it simply has no requirements, and forces no NP to move to its specifier (cf. Chomsky's "defective" *v*).

What this means for the morphology is that there will be no prefix in the case of a third person, because an unvalued [P] subject will not need to be checked by H, and by economy will not move to HP. It will be checked by *v* instead, and remain within *v*P (barring other reasons for it to move). However, a first or second

person subject, which is inherently [+P], will still have to move to H in order to check its [+P] feature; this is permitted, even though H has no requirements of its own that are checked by this operation. Thus we derive the fact that third persons in intransitives agree like objects of transitives, but first and second persons agree like subjects:

- (288) a.    nt-op  
          1-sit  
          ‘I sit’
- b.    kt-op  
          2-sit  
          ‘you sit’
- c.    opu-**wok** (cf. n-tokom-a-k)  
          sit-**3P**       1-hit-Dir-**3P**  
          ‘they sit’ (cf. ‘I hit them’)

There is one more point to make about intransitives. They do not license objects, meaning that in the general case they cannot check the features of an unvalued [P] object. However, they are able to check the features of an unvalued [P] *subject*. I will assume that this follows from a cross-linguistic difference between subjects and objects: objects must be licensed via Agree with  $v$ , which checks the features of that object. However, subjects, unless they have other requirements that force them to look elsewhere, can always be licensed (i.e., have their features checked) simply by being projected by (non-defective)  $v$ . For instance, they are licensed even when an expletive occupies the highest subject position. This will prove to be important in Chapter 5.

### Indefinite Subject Forms

There are also indefinite subject or passive forms in Passamaquoddy, which are transitives that use the Theme Sign -a- in the Independent but no prefix. These forms will fall out from the present analysis if H is like an intransitive in not requiring a [+P] NP, but like a transitive in requiring the Theme Sign. Some examples from Chapter 1 are repeated below:

- (289) a.    Ipa, wot pesq pskuw-a.  
          well, Dem one Indef.find-Dir  
          ‘Just one of them was found.’ (Newell 1979, 20)
- b.    nt-uwikhu-ke-pon  
          1-make.picture-Indef-1P  
          ‘our pictures were taken’

Consider first 289a, involving a third person object. This object is not opposed to another third person (there is no logical subject), and will remain unvalued ([P]). It will not move to HP, meaning that there will be no spellout of the prefix. The Theme Sign will have to be spelled out as the default Direct; no other item will match the features:

- (290) Theme Sign
- |       |   |              |           |
|-------|---|--------------|-----------|
| -i-   | ⇔ | [2Subj,1Obj] | (2/1)     |
| -ol-  | ⇔ | [1Subj,2Obj] | (1/2)     |
| -oku- | ⇔ | [+P Obj]     | (Inverse) |
| -a-   | ⇔ | [ ]          | (Direct)  |

For first and second forms we will have to add another spellout of the Theme Sign:

- (291) -oke- ⇔ [IndefSubj,+P Obj]

First and second person are inherently [+P], and will therefore move to HP, just as in an intransitive. They will therefore require a prefix, as in 289b.

### Inanimate Subject and Object

It is absolutely impossible for two inanimates to co-occur as subject and object in Passamaquoddy. Objects by themselves can be inanimate; they occur with TI verbs:

- (292) Tokec olu **msi=te keq** 'kiwacehtun.  
 now Top all=Emph something 3-make.lonely  
 'But now, he makes everything feel lonely.' (Mitchell 1921/1976c, 7)

Inanimates cannot be [+P]; therefore, when an animate third person co-occurs with an inanimate, the animate must take on the value [+P] (one member of a pair always has to). Hence the pronominal subject in the above example must move to HP, and determines the form of the prefix on the verb.

Inanimates can also be subjects, in which case they always give rise to the Inverse:<sup>31</sup>

- (293) a. **Nit** nahtokahtuh-**uku**-ni-ya.  
 that.Inan carry.to.shore-**Inv**-N-3P  
 'That (motion) carries them back to the shore.' (Mitchell 1921/1976b, 7)
- b. N-ikuwoss siki mocik-it-s-opon, nit tehp **nit** nehpuh-**uku**-n Mali Pokomk  
 1-mother hard be.evil-3ConjAI-Dub-Pret, then only that.Inan kill-**Inv**-N M. P.  
 '-sisoq.  
 3-eye  
 'If my mother had been really wicked, Mary Pokomk's eye would have killed her.' (Newell 1979, 17)
- c. 'petka-**ku**-n el-sonuwi-k motewolon-uwi wecopahkik mil-ut-pon.  
 3-arrive.TA-**Inv**-N IC.thus-be.strong-**I**Conj motewolon-Adj root give-**Indef**/3-Pret  
 'the strength of the magic root that he was given comes upon him.' (Mitchell 1921/1976c, 22)

The inanimate subject values the object as [+P]; the latter must then move to HP, resulting in the Inverse.

However, it is absolutely impossible to have inanimates as both subject and object. Speakers will use circumlocutions or other means to avoid such situations; if asked directly, they will think up some other way

<sup>31</sup>They also require the use of the Subordinative, which I will not attempt to explain here.

to say what is asked. The impossibility of this co-occurrence follows from the theory: if neither NP can be [+P], nothing will check the features of H, and the derivation will crash. H in a transitive clause *requires* checking; it is only in an intransitive where it does not.

The theory outlined here, then, is able to explain the otherwise puzzling restriction against two inanimates.

### Summary

At this point a summary of the main ingredients of the analysis might be useful. They are listed in 294:

(294) Direct vs. Inverse, Proximate vs. Obviative:

- a. The uninterpretable feature of NPs that makes them syntactically active is [P] in Algonquian.
- b. [P] is valued on first and second persons ([+P]); unvalued on third persons (inanimates may not be [+P]).
- c. [P] becomes valued on third persons in pairs: one is [+P], the other unvalued [P].
- d. A third person opposed to a [+P] third person will be assigned the (interpretable) feature [Obv].
- e. [+P] is *not* checked by *v*; a [+P] NP must move to *v*P in order to move to HP.
- f. The head H checks [+P] and is responsible for the Direct-Inverse opposition.
- g. [+P] and unvalued [P] are unmarked morphologically; [Obv] receives the obviative suffix.

This theory makes a particular claim about the way uninterpretable features on nouns work in Algonquian languages, one that is warranted by the facts (the ranking of persons, reflected here in how values for [P] are assigned). Beyond that, it is similar to theories of feature checking and Case generally in languages of the world: [+P] is like nominative Case, usually said to be checked by a head higher than *v* (T); unvalued [P] is like accusative Case, checked by *v*. (In terms of markedness, a better analogy would be with ergative-absolutive case systems: the marked value [+P] is like ergative Case, while the unmarked value is like absolutive Case.) There is nothing radically different from any other language here. Only the means of valuing uninterpretable features on nouns is language-particular, instantiating (in a very minimal way) the participant hierarchy that is usually invoked in describing these languages. (Under the current theory, there is no need to refer to actual hierarchies, linking rules, or optimality-theoretic ranking of constraints, as in some recent theories of obviation, e.g. Aissen 1997.)

### Possessed NPs

There is one final structural fact about proximates and obviatives in Algonquian languages that must be explained: the relation between possessor and possessed. This is one part of the grammar in which there simply is no choice concerning which NP is proximate and which obviative. (There will be other constraints below, involving secondary objects of ditransitives and AI+O verbs.) The fact is that the possessor is always proximate and the possessed NP obviative:



- (295) Husa '-qoss-ol  
 H. 3-son-Obv  
 'Husa (Prox)'s son (Obv)'

We can capture this fact with the analogy between clausal structure and NP structure first hypothesized by Abney (1987). Abney claims that just as there is a functional head (I or T) dominating VP (or  $vP$  in the current theory), there is a functional head dominating NP, which he called D (for Determiner). Now, just as H dominating  $vP$  checks [+P] in the clause, we might suppose that D checks [+P] in the determiner phrase:<sup>32</sup>

- (296)
- 
- ```

graph TD
  DP --> NP1[NP[+P]]
  DP --> D1[D]
  D1 --> D2[D]
  D1 --> NP2[NP[P]]
  
```

Assuming that an NP cannot move from the complement position of D to its specifier (this would be a reflexive possessive), there is only one option: for the possessor in Spec-DP to be [+P], and the possessed NP to be unvalued [P] and assigned the feature [Obv]. If the possessor is first or second person, the possessed NP will simply be unvalued—the correct result, where it is not assigned the obviative suffix:

- (297) n-qoss  
 1-son  
 'my son'

Now, if we put a possessed NP into a transitive clause, where its possessor is coreferent with another argument, there is again only one option. In general, coreferent NPs within the same domain must have identical values for the feature [P]. In particular, an argument coreferent with the possessor of a co-argument must be [+P], while the possessed NP is unvalued [P] (and [Obv]):

- (298)
- 
- ```

graph TD
  vP --> DP[DP[P]]
  vP --> VP[VP]
  DP --> NP1_1[NP1[+P]]
  DP --> D1[D]
  D1 --> D2[D]
  D1 --> NP2[NP[P]]
  VP --> Verb[Verb]
  VP --> NP1_2[NP1[+P]]
  
```

One argument of the verb has its value fixed, then; and the other argument, the entire possessed DP, must take on the opposite value: unvalued [P] (and [Obv]).<sup>33</sup>

It follows that we will necessarily derive an Inverse if the possessed NP is the logical subject:

<sup>32</sup>The possessor will actually itself be a DP; I write it as NP simply for consistency with what has preceded, where I have abstracted away from the DP hypothesis.

<sup>33</sup>If the co-argument of the possessed NP is not coreferent with the possessor, the speaker will have a choice again of which NP to make [+P]. The possessed NP will always be morphologically marked obviative, though, even if it ends up [+P] and moving to HP. This situation usually only arises if both arguments are possessed NPs.

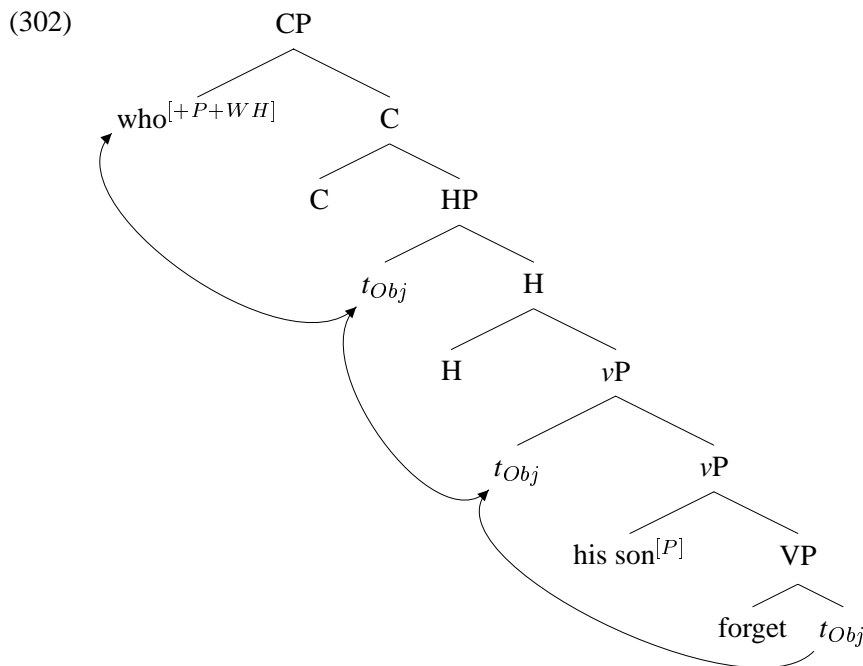
(299)  $[\text{HP Object}_1^{[+P]} \text{H}^{[\phi]} [\text{vP } t [\text{vP} [\text{DP NP}_1^{[+P]} \text{D NP}^{[P]}] [\text{v } \nu [\text{VP Verb } t ] ] ] ] ]$  Inverse

(300) Susehp '-kisi-pokehl-oku-l '-temis-ol.  
 S. 3-Perf-bite-Inv-Obv 3-dog-Obv  
 'His dog bit Susehp.' AH,SN 8:5.5

The logical object here, *Susehp*, is coreferent with the possessor of the logical subject. The possessor must always be proximate with respect to the possessed; therefore *Susehp* must be the one that is [+P]. It will therefore move to HP, while the logical subject, 'his dog', remains in vP.

It is now easy to see why WCO was overlooked for so long in Algonquian languages: most examples where WCO arises involve a possessed subject like 'her mother', where the possessor must be coreferent with (bound by) the object. Such a configuration almost always gives rise to the Inverse, as diagrammed above and illustrated below with a Passamaquoddy example involving wh-movement. The lack of WCO in the Inverse itself follows automatically from the theory: prior to wh-movement, the object undergoes A-movement to the head H, a position from which it A-binds the subject, due to its [+P] feature. A-bar movement (wh-movement) takes place from this position, meaning that there is no crossover involved:

(301) Wen pihce wenitaham-iht '-qoss-ol?  
 who long.ago IC.forget.about-3ConjInv 3-son-Obv  
 'Who<sub>1</sub> did his<sub>1</sub> son forget about long ago?' AH,SN 8:5.8



The lack of WCO in the Inverse follows from the structure: the wh-phrase A-binds the subject from its position in Spec-HP, prior to wh-movement.

### Movement Vs. Linking: Ambiguity

Rather than postulating movement, as the theory outlined above does, one might instead hypothesize that in the Inverse, subject and object are generated in the opposite hierarchical order from the Direct, and the Inverse morphology indicates that the theta roles of the predicate are assigned in the opposite way from in the Direct.

There are two arguments against this. One is conceptual: there is some reason to believe in a configurational approach to theta roles (e.g., Hale and Keyser 1993), or in some version of the Uniformity of Theta-role Assignment Hypothesis (UTAH; Baker 1988b; also the UAH of Perlmutter and Postal 1984); on such a view, there could be no such possibility as generating the object higher than the subject, and linking theta-roles inversely.

The second, empirical, argument is that the Inverse does not just lead to inverse scope, it is actually ambiguous. The object can take scope over and bind a variable in the subject in the Inverse, but the reverse is also possible:

- (303) a. Ma=te keq utomeya-ku-w-on [NP tepelto-k ] .  
 Neg=Emph something 3.bother-Inv-Neg-N IC.own-3Conj  
 ‘Nothing<sub>1</sub> bothers the one that owns it<sub>1</sub>.’ AH,SN 8:5.8
- b. [HP [VP nothing [VP bothers [NP the one who owns it ] ] ] ]

Similarly, an inverse involving a first-person object permits binding into that object by the logical subject:<sup>34</sup>

- (304) Ma=te wen n-wisukiluwehta-ku-wi-n [NP nilun naka nekom mosis-ol ] .  
 Neg=Emph someone 1-get.mad.at-Inv-Neg-1P 1P and 3 3.sister-Obv  
 ‘No one<sub>1</sub> got mad at [NP me and his<sub>1</sub> sister ] .’ AH,SN 10:7.15

If the Inverse were simply the base-generation of the reverse hierarchical order of arguments from the Direct, then like the Direct we would expect the Inverse to be scopally rigid. The fact that it is not supports the movement hypothesis: at LF, the raised object can reconstruct, putting it within the scope of the subject.<sup>35</sup>

#### 2.4.6 Where the Inverse is Impossible: WCO

There are several contexts where the Inverse does not occur, and in these WCO always appears. The first is with inanimate objects. As explained above, inanimates may not be [+P], and will never be able to raise to

<sup>34</sup>It is conceivable that the conjoined NP here does not actually form a syntactic unit, meaning that the first person conjunct could raise to H independently of the third person conjunct. Certainly phrases conjoined by *naka* can appear in separate positions. Obviously a theory of conjunction in Passamaquoddy is necessary, one that will explain, among other things, why the first person plural pronoun is used here even though only the speaker and the sister are referred to. (The usual pattern of conjoined pronouns and nouns is to use a plural, but without ‘and’: *kiluwaw Piyel*, 2P Piyel, ‘you (sg.) and Piyel’.) I do not have such a theory to present here.

<sup>35</sup>The ambiguity of the Inverse resembles A-scrambling and scope rigidity in Japanese, where an object cannot take scope over a subject in the base SOV word order, but scope is ambiguous when the object undergoes A-scrambling (OSV order; Kuroda 1970, cited in Hoji 1985). On this topic, the hypothesized movement in Passamaquoddy to the head H, which can carry either the subject or the object, resembles recent proposals of Miyagawa (2001) regarding Japanese A-scrambling: Miyagawa hypothesizes that in Japanese, either the subject or the object can raise to TP to satisfy the Extended Projection Principle (Chomsky 1981), viewed as a featural requirement of the head T.

HP. This means that if an inanimate is questioned, it will cross over the logical subject in its *wh*-movement, which should give rise to a WCO violation. This is the case:<sup>36</sup>

(305) WN5:11.15

- a. [ <sub>NP</sub> Not kis-uwikho-k ] 'pott-aqosomon 't-ahtwikhikon.  
 Dem Perf-write-3ConjTI 3-accidentally-burn 3-book  
 'The one who wrote it accidentally burned his book.'
- b. \* Keqsey pett-aqoso-k [ <sub>NP</sub> not kis-uwikho-k ] t?  
 what IC.accidentally-burn-3ConjTI Dem Perf-write-3ConjTI  
 'What<sub>1</sub> did the one who wrote it<sub>1</sub> accidentally burn?' (Echo question only)

A second context where the Inverse is impossible is with the AI+O class of verbs mentioned above. These verbs behave like intransitives in several ways: their subject can be a singular NP with *psi=te* 'all', they make a dual/plural subject distinction, and they inflect for agreement in many ways like intransitives (for instance, they take intransitive Conjunct endings). However, they take a direct object. Some examples of verbs of this type follow:

(306) AI+O Verbs:

- apotehsinon* 's/he stands leaning against it; s/he leans on it'  
*apotepin* 's/he sits leaning against it'  
*apotukonapin* 's/he sits against it with h/ knees raised'  
*asuwihtahkusin* 's/he wears it over one shoulder and diagonally across body to the opposite hip'  
*'kisahkan* 's/he threw it; s/he can throw it'  
*'kolahman* 's/he keeps anyone from using it (i.e., no trespass sign)'  
*'kolapecinon* 'h/ clothes get caught in it (e.g., brambles)'  
*'kolonomahsin* 's/he goes on an errand to get it'

Some very common verbs are pseudotransitive, for instance *'kosinuhkan* 'have pain/illness in (body part)' and *nituwini*, 'need'.

In the independent order the morpheme -N- appears (this is the final segment in the citation forms given above), as illustrated in 307a; in the Conjunct, AI endings are used (307b):

- (307) a. 'Kosinuhka-n mikikon.  
 3-pain-N chest  
 'She had a pain in her chest.'
- b. Keqsey kesinuhka-yin?  
 what IC.pain-2ConjAI  
 'What do you have a pain in?'

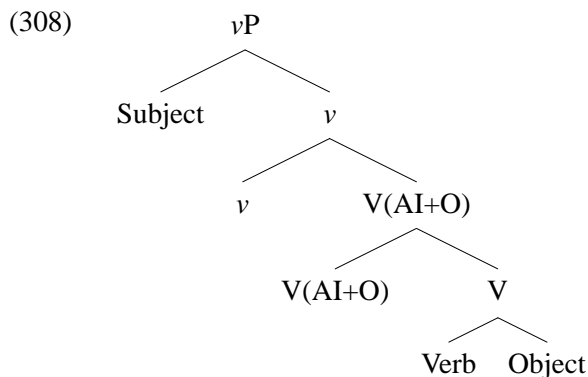
The object is restricted to being third person, although it can be animate or inanimate; importantly, this object does not participate in the Inverse. Because it cannot be first or second person, the Inverse cannot arise as 3/1

<sup>36</sup>Incidentally, these examples show that Passamaquoddy does not permit parasitic gaps, Baker's (1996) explanation for the lack of WCO in Mohawk.

or 3/2; and it must always be outranked by the subject when they are both third persons (i.e., the object must always be obviative with respect to the subject). The object of an AI+O verb is usually grouped together with the second object of a ditransitive verb under the label “secondary object;” the data presented here indicate that the two types of objects do indeed pattern together in many ways; see below and Rhodes (1990a).

The way to understand the restrictions on these objects in the current theory is to impose further restrictions on the valuation of the [P] feature. Let us suppose that only canonical arguments—subjects and primary objects—can be [+P]. I will outline one way in which this might follow from the way that features are checked; this theory will extend naturally to other cases, including ditransitives and raising to object.

Suppose that AI+O verbs include an extra verbal head either above or below the verb root:



Now the object will have its [P] feature checked not by *v*, but by the most local verbal head, V(AI+O). At this point the object is the sole third person argument, and will not be able to be valued [+P] in opposition to another third person. Its [P] feature will be checked and marked for deletion (see Chapter 5).

Thereafter *v* and its external argument will be merged into the derivation. The external argument *is* opposed to another local third person: the object. The latter has already had its [P] feature checked, however; therefore only the subject can be valued [+P]. This will cause the assignment of [Obv] to the object, which will be spelled out as an obviative. (If the subject is first or second person, the object’s [P] feature will also remain unvalued, but it will not be assigned [Obv].) This means that the secondary object can never move to HP, and never give rise to an Inverse.

As far as scope is concerned, the object of a pseudotransitive is incapable of taking scope over the subject, though the subject can easily take scope over the object; ‘different’ in the first example must again be interpreted contextually:

(309) AH,SN 4:10.20

- a. Piluwey muwin ’t-iyal-ikhahsi-n                      yatte wen-il    mahtoqehsuw-ol.  
 different bear    3-around-look.for.AI+O-N each who-Obv rabbit-Obv  
 ‘A different bear searched around for each rabbit.’ (\*each>a)
- b. Muwinuw-ok ’t-iyal-ikhas-ulti-ni-ya                      yatte wen mahtoqehsuw-ol.  
 bear-3P            3-around-look.for.AI+O-Plural-N-3P each who rabbit-Obv  
 ‘The bears each searched around for a rabbit.’

In wh-questions, WCO appears with a questioned object:

(310) WN5:11.15

- a.  $[_{NP}$  Not kisi-ht-aq  $]$  napisqahma-n 't-oqtoput.  
Dem Perf-make-3ConjTI trip.over.AI+O-N 3-chair  
'The one who made it tripped over his chair.'
- b. \* Keqsey  $[_{NP}$  not kisi-ht-aq  $]$  napisqahma-t  $t?$   
what Dem Perf-make-3ConjTI trip.over.AI+O-3Conj  
'What<sub>1</sub> did the one who made it<sub>1</sub> trip over?'

Because the secondary object cannot do A-movement to HP, it will always be unable to A-bind the subject. If it undergoes wh-movement, it will cross over the subject, giving rise to a WCO violation.

### 2.4.7 Ditransitives

In ditransitives, the Direct-Inverse opposition surfaces between the subject and the primary object. The secondary object, in contrast, is like the object of an AI+O verb: it must be third person, and it must rank lower than the other two arguments on the participant hierarchy. It is irrelevant, then, for attraction to the head H. Like the secondary object of an AI+O, we may hypothesize that the secondary object of a ditransitive may not be [+P]. The theory presented here therefore predicts that the secondary object will be unable to take scope over either the subject or the primary object (and WCO will appear in wh-questions), while the relation between the subject and the primary object will depend on whether the verb is Direct or Inverse.

This appears to be true, although I do not have clear examples that demonstrate all of the scope relations. The primary object certainly can take scope over the secondary object:

- (311) a. Susehp mil-a-n yatte wen pesq wikhikon.  
Susehp give-Dir-N each someone one book  
'Susehp gave each person one book.' (each>one)
- b. Susehp mil-a-n pesq wikhikon yatte wen.  
Susehp give-Dir-N one book each someone  
'Susehp gave each person one book.' (each>one)
- (312) Psi=te wen n-kisi-mil-a-n-ol cikonyi-il.  
all=Emph someone 1-Perf-give-Dir-N-Obv apple-Obv  
'I gave everyone an apple.' WN1:9.8 (every>a)

The ability to take scope turns up in wh-questions as a lack of WCO: a wh-primary object can bind a variable in the secondary object:

- (313) '-Tiy-a-l, "Wen<sub>1</sub> kisi-komutonatom-uw-ot t<sub>1</sub> nihtol '-coqols-um-ol?"  
3-say.to-Dir-Obv who Perf-steal-App-2Conj that.Obv 3-frog-Poss-Obv  
'He says to him, "Who<sub>1</sub> did you steal his<sub>1</sub> frog from?"' AH,SN 7:4.6

It is more difficult to show that the secondary object cannot take scope over the primary object, since informants object to the very idea of a situation involving such a context. For example, one informant refused to even consider possible the situation described by the English 'I gave each apple to two people (and they

had to split it).’ Moreover, the distributive quantifier *yatte wen* does not seem to be grammatical as the secondary object of a ditransitive.<sup>37</sup>

The following pair does indicate that the secondary object cannot bind a variable in the primary object:

(314) AH,SN 4:10.20

- a. Psi=te wen n-kisi-messunom-uw-a-n [<sub>NP</sub> oqiton kisi-ht-aq ] .  
all=Emph someone 1-Perf-show-App-Dir-N canoe Perf-make-3Conj  
‘I showed everyone<sub>1</sub> the canoe he<sub>1</sub> built.’
- b. \* N-kisi-messunom-uw-a-n-ol psi=te oqitonu-l kisi-ht-aq-il.  
1-Perf-show-App-Dir-N-InanP all=Emph canoe-InanP Perf-make-3Conj-PartObv  
‘I showed the one who made it<sub>1</sub> every canoe<sub>1</sub>.’ (Grammatical as ‘I showed him<sub>1</sub> all the canoes he<sub>1</sub> built.’)

In the Direct, the primary object cannot take scope over the subject, just like in a simple transitive.<sup>38</sup>

- (315) Pesq pilsqehsis mil-a-n yatte wen wikhikon.  
one girl give-Dir-N each someone book  
‘One girl gave each person a book.’ DD1:9.6 (\*each>one)

As expected, the subject is able to bind into the primary object:

- (316) Psite wen mossis-ol ’-koti-mil-a-n ’-poskusuwon.  
all someone 3.older.sis-Obv 3-Fut-give-Dir-N 3-necklace  
‘Everyone<sub>1</sub> will give his<sub>1</sub> sister a necklace.’ AH,SN 6:2.28

The secondary object cannot bind into the subject, as expected if it is incapable of raising to the head H.<sup>39</sup>

(317) AH,SN 10:7.14

- a. Wikuwoss-ol n-kisi-kat-a-ku-n-ol nican-ol.  
3.mother-Obv 1-Perf-hide-App-Inv-N-Obv 3.child-Obv  
‘It’s mother hid her child from me.’
- b. \* Wikuwoss-ol n-kisi-kat-a-ku-n psi=te wen.  
3.mother-Obv 1-Perf-hide-App-Inv-N all=Emph someone  
‘His<sub>1</sub> mother hid everyone<sub>1</sub> from me.’

The subject (including the logical subject of the Inverse) does bind into the secondary object:

<sup>37</sup>The present theory might be able to explain this restriction, given an additional (commonly made) assumption: that generalized quantifiers are uninterpretable in object position and must move out of the VP in order to be interpreted semantically. Secondary objects of ditransitives are unable to move to HP, and hence unable to move to vP without some independent motivation. They might be forced to remain within VP, and would be uninterpretable as the quantifier *yatte wen* (other quantifiers could be interpreted as referential or as choice functions in the case of indefinites).

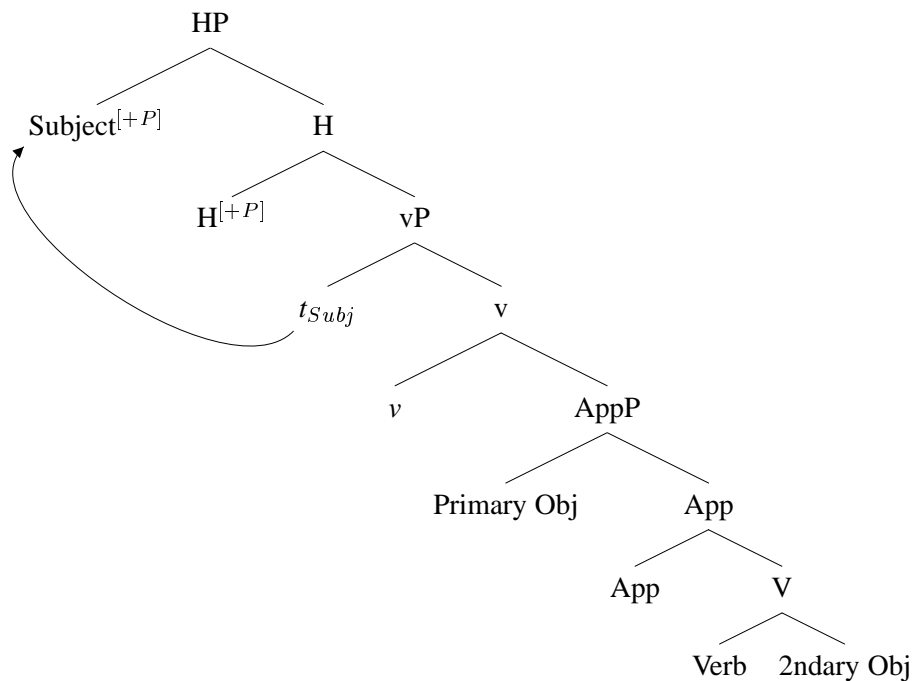
<sup>38</sup>Here, once again, *yatte wen* would be expected to be obviative, given that the subject ‘one girl’ is proximate, and the verb is Direct. See footnote 18.

<sup>39</sup>There may be an independent problem here with obviation: the subject and the primary object must outrank the secondary object, meaning that *psite wen* would have to be obviative with respect to ‘his mother’; but this would preclude it from being interpreted as the possessor of ‘mother’, which is proximate. It may also just be impossible to have *psite wen* as the secondary object of a ditransitive (as far as I can tell, it is impossible for the distributive *yatte wen* to fill this grammatical role).

- (318) a. Yatte wen wikuwoss-ol n-kisi-kat-a-ku-n-ol nican-ol.  
 each someone 3.mother-Obv 1-Perf-hide-App-Inv-N-Obv 3.child-Obv  
 ‘Each mother<sub>1</sub> hid from me her<sub>1</sub> child.’ AH,SN 10:7.14
- b. Psi=te ehpit n-kisi-messunom-a-ku-n-ol nekom te nican-ol.  
 all=Emph woman 1-Perf-show-App-Inv-N-Obv 3 Emph 3.child-Obv  
 ‘Every woman<sub>1</sub> showed me her<sub>1</sub> own child.’ AH,SN 10:7.15

Ditransitives, then, act like monotransitives, with another argument lower than the primary object that is irrelevant for attraction to the head H. In this structure “App” stands for the Applicative morpheme that appears overtly in many Passamaquoddy examples. I assume that it is this morpheme that introduces the primary object (following Marantz 1993, Pyllkkänen 2000).

(319) **Ditransitives**



The Direct is shown; in the Inverse, the primary object rather than the subject will move to H to check off its [+P] feature.

We can understand the restriction against a [+P] secondary object in ditransitives in the same way as the restriction against a [+P] object of an AI+O verb. In 319, the secondary object will have its [P] feature checked by the head App rather than by *v*. At the point where this feature is checked, there are no other third persons around to value its feature [+P]. It must therefore remain unvalued [P] and be marked for deletion. Subsequently, the primary object and subject are introduced. One of these will be valued [+P]; if third person, the other will be assigned [Obv]. At the same time, the secondary object will be assigned [Obv], being a third person in the same local domain as a [+P] third person.<sup>40</sup>

<sup>40</sup>The case of a first or second person subject or primary object opposed to a third person is slightly more complicated. The fact is that the first or second person will not value the third person or assign it [Obv]. At the same time, however, we do not want the

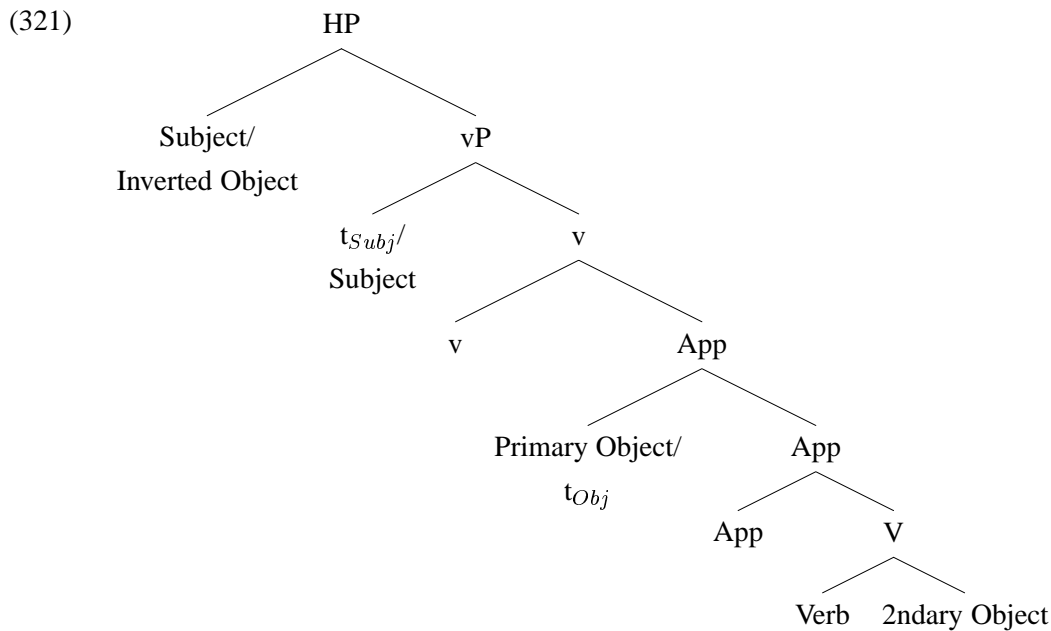


**2.4.8 Scope and A-Binding: Summary**

The facts presented above lead to the generalization in 320 regarding scope and A-binding in Passamaquoddy:

(320) Passamaquoddy scope is fixed by c-command relations among A-positions.

The c-command relations among A-positions are illustrated in 321:

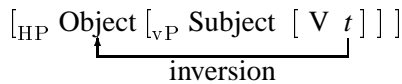


(322) [ Subject > [ t [ Primary Object > [ Secondary Object ] ] ] DIRECT

(323) [ Primary Object > [ Subject > [ t [ Secondary Object ] ] ] ] INVERSE

The Inverse is a syntactic operation that raises a primary object which outranks the subject on the participant hierarchy (here, which has the feature [+P]) to a higher A-position, from which it A-binds and takes scope over the subject:

(324) The Inverse: Syntactic inversion (A-movement):



The position to which the NP inverts must be an A-position (argument position), since it circumvents WCO and changes binding and scope relations. Moreover, it is involved in verb agreement and voice morphology, a characteristic of A-positions but not A-bar positions.

---

secondary object to value it [+P], as it did in the AI+O case; it does not act like a [+P] third person. We must suppose that only when there is no other argument around does a third person pay attention to a third person with checked [P] feature and become [+P]. Alternatively, the head App delimits a phase, but the head V(AI+O) in AI+O verbs does not; then, a checked [P] feature can only value another third person [+P] if they are in the same phase. This will carry over to cross-clausal cases, where a higher NP will sometimes mark an NP in a lower clause as obviative. The relation never works the opposite way, however: a lower obviative cannot make a higher third person [+P] (nor can a lower proximate make a higher NP obviative.)

The fact that the inverted object, like the subject, frequently appears in a preverbal position suggests that the Spec of HP precedes the final position of the verb. However, this cannot be established with any certainty, since it is perfectly possible for a postverbal but inverted object to bind into a subject (which can, I believe, appear anywhere). This means either that the HP position is actually postverbal, and overt movement by the highest-ranking argument is required (but can be followed by movement to a preverbal discourse-oriented position, which usually picks out the highest-ranking argument); or that the NP bearing the feature [+P] can raise to HP at LF, and such covert movement feeds scope and binding (a palatable assumption, since these are phenomena usually thought to be computed at LF). Either option is compatible with the present state of knowledge of Passamaquoddy clause structure, and with what will be uncovered in the rest of this investigation. What is crucial is that the Inverse is a syntactic phenomenon, reflected either directly or indirectly in the morphology, and it affects scope and binding, a property of A-movement.

Given that scope and binding seem to be read off of a hierarchy of A-positions, including the derived one that inverted objects raise to, a natural question is how word order variations are derived. They do not seem to affect scope and binding. The next section investigates this issue, and uncovers one piece of evidence suggesting that at least some word order differences are the product of A-bar movement, which obligatorily reconstructs for scope and binding.

## 2.5 A-Bar Movement

We saw in the preceding section that scope and variable binding follow a hierarchy of A-positions, with one operation of A-movement, the Inverse, able to reverse the order of two arguments. Surface word order apparently does not affect scope or binding possibilities. One hypothesis, that word order variations are or can be derived by A-bar scrambling, receives support from properties of reconstruction for the purposes of variable binding.

Suppose that surface word order variations are generally derived by A-bar movement, which obligatorily reconstructs for scope and variable binding. Then we predict the observed facts about pronominal variable binding: that it will not depend on linear order. An A-bar moved NP containing a variable can (and must) reconstruct at LF to its A-position, where it is c-commanded by a quantifier in a higher A-position. Thus a universal quantifier can bind a pronoun in an NP to its left:

- (325) a. *Wikuwoss-ol psi=te wen* ' -koselom-a-l.  
 3.mother-Obv all=Emph someone 3-love-Dir-Obv  
 'Everyone<sub>1</sub> loves his<sub>1</sub> mother.' AH8:5.3
- b. *'T-akom mamote n-kis-onuhm-uw-a-n psi=te wen.*  
 3-snowshoe.ObvP finally 1-Perf-buy-App-Dir-N all=Emph someone  
 'I finally bought from everyone<sub>1</sub> his<sub>1</sub> snowshoes.' AH,SN 8:5.4

However, we might expect some restrictions on LF reconstruction to constrain the availability of variable binding. In fact one appears in Passamaquoddy: an A-bar-moved NP does not seem to be able to reconstruct below a negative quantifier. A negative quantifier such as *ma=te wen* 'no one', in 326–327 below, can perfectly well bind a variable in an NP that it c-commands, both within a clause and across clauses:

- (326) a. Nitte ma=te wen 'kisi-wolehl-a-wiy-il 't-akoma-l.  
right.away Neg=Emph someone 3-Perf-fix-Dir-Neg-Obv 3-snowshoe-Obv  
'No one<sub>1</sub> fixed his<sub>1</sub> snowshoe right away.' AH8:5.3
- b. Nitte ma=te wen 't-akoma-l 'kisi-wolehl-a-wiy-il.  
right.away Neg=Emph someone 3-snowshoe-Obv 3-Perf-fix-Dir-Neg-Obv  
'No one<sub>1</sub> fixed his<sub>1</sub> snowshoe right away.' AH8:5.3
- c. Katolu ma=te wen 'komutonom-a-wiy-il mosis-ol.  
of.course Neg=Emph someone 3-rob-Dir-Neg-Obv 3.younger.sis-Obv  
'Of course no one<sub>1</sub> would steal from his<sub>1</sub> sister.' AH8:5.6
- (327) a. Ma=te wen litahasi-w nekom mahtoqehs.  
Neg=Emph someone think.3-Neg 3 rabbit  
'No one<sub>1</sub> thinks he<sub>1</sub>'s a rabbit.' AH7:3.20
- b. Ma=te wen wewitaham-a-wiy-il wen-il nemiy-at-s neke  
Neg=Emph someone remember.TA-Dir-Neg-Obv who-Obv IC.see-3Conj-DubPret Past  
welaqiwik.  
night  
'No one<sub>1</sub> remembers who she<sub>1</sub> saw that night.' AH,SN 8:5.5

However, variable binding becomes ungrammatical when the NP containing the variable appears to the left of the negative quantifier:

- (328) a. ?? Nitte 't-akoma-l ma=te wen 'kisi-wolehl-a-wiy-il.  
right.away 3-snowshoe-Obv Neg=Emph someone 3-Perf-fix-Dir-Neg-Obv  
'No one<sub>1</sub> fixed his<sub>1</sub> snowshoe right away.' AH8:5.3
- b. \* Pihce wik ma=te wen n-kisi-messunma-ku-w-on.  
long.ago 3.house Neg=Emph someone 1-Perf-show-Inv-Neg-N  
'No one<sub>1</sub> showed me his<sub>1</sub> house a long time ago.' AH8:5.6
- c. ?? Katolu mosis-ol ma=te wen 'komutonom-a-wiy-il.  
of.course 3.younger.sis-Obv Neg=Emph someone 3-rob-Dir-Neg-Obv  
'Of course no one<sub>1</sub> would steal from his<sub>1</sub> sister.' AH8:5.6

Informants will sometimes assent to such sentences, but when repeating them always reverse the order of the quantifier and the NP containing the variable.<sup>41</sup>

Similarly, a conjunctive interpretation of 'or' is dispreferred if it occurs to the left of a negative quantifier:

<sup>41</sup>There may also be a difference between sentences containing particles, like those in the text, where judgements ranging from uncertainty to ungrammaticality uniformly arise, and sentences without particles, where informants sometimes permit the binding. For example, I obtained the following contrast with a conjunctive interpretation of 'or' in the scope of negation:

- (i) a. Cihplakon-ol kosona kuhas-ol ma=te wen nomiy-a-wiy-il.  
eagle-Obv or hawk-Obv Neg=Emph someone see-Dir-Neg-Obv  
'No one saw an eagle or a hawk.' (neither seen) AH,SN 9:6.10
- b. \* Nipayu-kotunk-ahtu-wok [<sub>CP</sub> on saku cihplakon-ol kosona kuhas-ol ma=te wen nomiy-a-w-on  
night-hunt-Plural-3P then therefore eagle-Obv or hawk-Obv Neg=Emph someone see-Dir-Neg-N  
] .  
'They hunted at night, so no one saw an eagle or a hawk.'

(329) AH,SN 9:6.11

- a. Nipayu-kotunk-ahtuw-ok on saku **ma=te** **wen** nomiy-a-w-on [ cihplakon-ol  
 night-hunt-Plural-3P then therefore Neg=Emph someone see-Dir-Neg-N eagle-Obv  
 kosona kuhas-ol ] .  
 or hawk-Obv  
 ‘They hunted at night, so no one saw an eagle or a hawk.’ (neither seen)
- b. \*Nipayu-kotunk-ahtuw-ok on saku [ cihplakon-ol kosona kuhas-ol  
 night-hunt-Plural-3P then therefore eagle-Obv or hawk-Obv Neg=Emph  
 ] **ma=te** **wen** nomiy-a-w-on.  
 someone see-Dir-Neg-N  
 ‘They hunted at night, so no one saw an eagle or a hawk.’

These restrictions can be explained as a type of blocking effect with LF lowering. The NP containing the variable or ‘or’ needs to reconstruct at LF in order for the variable to be bound by ‘no one’ or for ‘or’ to receive a conjunctive interpretation, but this NP cannot reconstruct below the negative quantifier that must take scope over it.

We see the same constraint at work in the raising to object construction, to be examined at length in Chapter 5. An NP raised to matrix object position (actually a peripheral position within the lower clause; see Chapter 5) can contain a variable bound by a universal quantifier in the embedded clause:

- (330) a. N-kosiciy-a wikuwoss-ol eli psi=te wen koselm-ih.  
 1-know.TA-Dir 3.mother-Obv C all=Emph someone love-3ConjInv  
 ‘I know that everyone<sub>1</sub> is loved by his<sub>1</sub> mother.’ AH8:5.3
- b. N-kosiciy-a nisuwihtic-il eli psi=te wen koselom-at.  
 1-know.TA-Dir 3.spouse-PartObv C all=Emph someone love-3Conj  
 ‘I know that everyone<sub>1</sub> loves his<sub>1</sub> spouse.’ AH7:3.20

But it cannot contain a variable bound by a negative quantifier:

(331) AH7:3.20

- a. N-kosiciy-a eli skat wen musqitaham-ahq nisuwihtic-il.  
 1-know.TA C Neg someone hate-3ConjNeg 3.spouse-PartObv  
 ‘I know that no one<sub>1</sub> hates his<sub>1</sub> spouse.’
- b. N-kosiciy-a nisuwihtic-il eli skat wen musqitaham-ahq.  
 1-know.TA 3.spouse-PartObv C Neg someone hate-3ConjNeg  
 ‘I know that his/her<sub>1</sub> spouse doesn’t hate anyone/someone<sub>2</sub>.’ NOT ‘I know that no one<sub>1</sub> hates his<sub>1</sub> spouse.’

(332) AH7:3.20

- a. \*N-kosiciy-a ’t-akòm eli skat wen ksihkahl-ahq.  
 1-know.TA-Dir 3.snowshoe.ObvP C Neg someone lose-3ConjNeg  
 ‘I know that no one lost his snowshoes.’

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I have no explanation for why the particles would make a difference, though it is probably crucial to understanding the structure and derivation of the Passamaquoddy clause.

- b. ?? N-kosiciy-a wikuwoss-ol skat wen koselm-ihq.  
 1-know.TA-Dir 3.mother-Obv Neg someone love-3ConjInvNeg  
 ‘I know that no one<sub>1</sub> is loved by his<sub>1</sub> mother.’

The hypothesis that A-bar movement is involved in deriving word order variations in Passamaquoddy is equipped to handle this asymmetry: raising to object is a type of A-bar movement, which can be undone at LF (see Chapter 5). However, A-bar reconstruction cannot put an NP back within the scope of a negative quantifier.

It is not negation alone which blocks reconstruction; a universal quantifier can bind a variable within an NP to its left even in the presence of negation:

- (333) 'T-akoma-l ma=te **psi=te** **wen** '-kisi-wolehl-a-wiy-il.  
 3-snowshoe-Obv Neg=Emph all=Emph someone 3-Perf-fix-Dir-Neg-Obv  
 ‘Everyone<sub>1</sub> didn’t fix his<sub>1</sub> snowshoe.’ AH,SN 8:5.4

I hypothesize that this follows from the fact that the scope of negation in Passamaquoddy is fairly free, but usually quite high. It is able to take scope in various positions, and hence can “get out of the way” of reconstruction at LF, by taking scope in an appropriate position. (This theory makes many predictions, of course, which I am unable to explore here.) A negative quantifier, however, is more restricted: it cannot take scope lower than the argument position of the quantifier, and if negation takes scope higher, the binding relation between sentential negation and the indefinite in argument position conceivably interferes with reconstruction.<sup>42</sup>

<sup>42</sup>The fact that negative quantifiers in Passamaquoddy do not permit reconstruction across them may be part of a broader cross-linguistic generalization: negative quantifiers are more restricted in various ways than other types of quantifiers. For instance, negative quantifiers do not seem to reconstruct in overt raising in English (Lasnik 1999). Negative quantifiers are also unable to take scope higher than their surface position in many cases, where universal quantifiers are not so restricted. Negative island effects might be explainable as the inability of a quantifier (e.g., a wh-phrase) to reconstruct below negative quantifiers (in some cases, sentential negation).

In Passamaquoddy, negative quantifiers cannot take scope over epistemic particles, even when they precede them (some particles simply forbid such a word order):

(i) AH,SN 7:4.8

- a. Cuwal=lu ma=te wen '-kisi-peneqi-ksomahka-w-on-ol; nekom te peneqi-napisqahme.  
 must.be Neg=Emph someone 3-Perf-down-push.AI+O-Neg-N-Obv 3 Emph down-trip.3  
 ‘It must be that no one pushed him; he tripped.’
- b. Ma=te wen cuwal=lu '-kisi-peneqi-ksomahka-w-on-ol; nekom te peneqi-napisqahme.  
 Neg=Emph someone must.be 3-Perf-down-push.AI+O-Neg-N-Obv 3 Emph down-trip.3  
 ‘It must be that no one pushed him; he tripped.’

(ii) AH,SN 7:4.8

- a. Piyel al te '-kisi-ksmahka-n-ol.  
 P. Uncertain Emph 3-Perf-push.AI+O-N-Obv  
 ‘Peter must have pushed him.’ (Epistemic)
- b. \*Ma=te wen al te '-kisi-ksomahka-(w)-on-ol.  
 Neg=Emph someone Uncertain Emph 3-Perf-push.AI+O-(Neg)-N-Obv  
 ‘No one must have pushed him.’ (Epistemic)

In contrast, universal quantifiers with singular agreement but not plural agreement seem to be able to take scope over at least *cipotu* ‘maybe’:

## 2.6 Conclusion

The investigation of quantifiers and binding in this chapter led to the conclusion that scope and binding are determined by the A-positions of quantifiers in Passamaquoddy. There is one operation of A-movement, the Inverse, which raises an object (the primary object in ditransitives) to a position above the subject. The Inverse takes place when the object outranks the subject on a participant hierarchy. I presented a theory of how this works, in terms of uninterpretable features and syntactic licensing (feature checking). The syntactic inversion involved permits the object to bind into the subject, reversing as it does the hierarchical relations of the two.

Word order variations beyond the Direct-Inverse opposition may be due to A-bar scrambling, as indicated by the inability of NPs containing variables to reconstruct below a negative quantifier. These variations in word order also do not affect scope and binding, which is explained by the hypothesis that they are generally derived by A-bar scrambling.

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(iii) Plural Agreement (AH,SN 7:4.8)

- a. Peskuwok mawsuwinu-wok ksinuhk-hotuw-ok matahk ksiciy-a-wiy-ik wen-ik.  
 some.3P person-3P be.sick-Plural-3P but.Neg know.TA-Dir(Indef/3)-Neg-3P who-3P  
 ‘Some people are sick but it’s not known who.’
- b. # Psi=te wen cipotu te ksinuhk-hotuw-ok.  
 all=Emph someone maybe Emph be.sick-Plural-3P  
 ‘Everyone might be sick.’ (only might>every)

(iv) Singular Agreement (AH,SN 7:4.8)

- a. Psi=te wen cipotu te ksinuhka, tehpu epahsiw ksinuhk-hotuw-ok.  
 all=Emph one maybe Emph be.sick.3 only half be.sick-Plural-3P  
 ‘Everyone might be sick, but only half the people are sick.’ (every>might)
- b. Yatte wen cipotu te ksinuhka.  
 each one maybe Emph be.sick.3  
 ‘Each might be sick.’ (each>might)
- c. Cipotu te yatte wen ksinuhka.  
 maybe Emph each one be.sick.3  
 ‘Each might be sick.’ (each>might)

In other words, negative quantifiers are more restricted in their ability to take scope.

## Chapter 3

# Extraction and Scrambling

### 3.1 Introduction

The first two chapters described the basic morphosyntax, word order, and clause structure of Passamaquoddy, and established tests for binding and A-movement. This chapter turns to exploring phenomena that will be relevant to the study of cross-clausal phenomena: extraction and the syntax of complementation.

First, I show how *wh*-questions and relativization work in Passamaquoddy: in the familiar way, involving *wh*-movement (A-bar movement). Arguments for this come from island phenomena and successive-cyclic agreement, a topic that is explored in detail in Chapter 4. There are several types of *wh*-questions: (core) argument extraction, and relative root argument extraction; and in addition, this division is cross-cut by another division, according to which *wh*-question formation divides into two syntactic structures, one of which involves an equational structure (with the second part of the equation being a relative clause, often head-internal). This background will lead into the study of *wh*-scope marking undertaken in Chapter 4.

Second, I will argue that complex interactions of *wh*-extraction with raising to object (the subject of Chapter 5) and relative root argument extraction follow from the theory of phases and the necessity of Agree in successive-cyclic movement. In order for a *wh*-phrase (or relative operator) to move through a phase—in particular, a *v*P phase—it must Agree with the head of that phase—*v*. In Passamaquoddy, this Agree relation is often spelled out morphologically. In the case of raising to object, a long-distance *wh*-moved argument *must* be the argument agreeing with the verb as a “raised” object. In the case of relative root argument extraction, a relative root must be added to higher verbs in order for long-distance extraction to be successful. I argue that this is a reflex of Agree: the only way a verb can Agree with a relative root argument is to have a relative root added to it.

Finally, I will contrast *wh*-movement with left-dislocation or long-distance scrambling, which need not involve movement (it can violate islands, for instance).

### 3.2 Extraction Phenomena: Questions

As illustrated briefly in Chapter 1, Passamaquoddy, like other languages superficially of the nonconfigurational type, possesses wh-movement of the familiar sort. In particular, wh-movement dislocates a phrase from the position where it is interpreted to a scope position at the edge of a clause. This can be shown to involve syntactic movement: the dislocation obeys islands, and it triggers agreement on the verb of every clause the phrase moves through. Similar arguments will show that relativization (internally-headed and externally-headed) depends on movement.

Wh-phrases move obligatorily to their scope position in Passamaquoddy: the wh-phrase must be initial in the clause where it takes scope. As in many languages, wh-words do double duty as indefinites (see Chapter 2); if there is no overt movement, only the indefinite use is possible.<sup>1</sup>

(334) Direct Questions:

- a. [CP **Wen**<sub>1</sub> kisi-mil-ot t<sub>1</sub> psi=te oqitonu-l ] ?  
 who Perf-give-2Conj all=Emph canoe-InanP  
 ‘Who did you give all the canoes?’ DF1:7.21
- b. [CP N-koti-mil-a-n **wen** atomupil ] .  
 1-Fut-give-Dir-N someone car  
 ‘I want to give someone a car.’ (\*‘Who do I want to give a car?’) DD1:8.24

(335) Indirect Questions:

- a. Ma=te n-kosiciy-a-w [CP **wen**<sub>1</sub> t<sub>1</sub> kisi-komutonatom-uw-at  
 Neg=Emph 1-know.TA-Dir-Neg who Perf-steal-App-3Conj  
 n-kci-coqols-um-ol] .  
 1-big-frog-Poss-Obv  
 ‘I don’t know who stole my big frog.’ AH,SN 7:4.6
- b. N-kosiciy-a [CP nucitqonket ma=te **wen-il** ’-kisi-tqon-a-wiy-il ] .  
 1-know.TA-Dir policeman Neg=Emph someone-Obv 3-Perf-arrest-Dir-Neg-Obv  
 ‘I know the police didn’t arrest anyone.’ (\*‘I know who the police didn’t arrest.’) AH,SN 5:11.9

There are also various types of question words that cannot be indefinites, such as the wh-quantifier *tan*<sup>2</sup>; these can only appear in their scope position or they are ungrammatical:

(336) DD,DF 1:8.24

- a. [CP **Tan eliko-k** atomupil Husa kisi-mil-at Susehp-ol ] ?  
 WH IC.such.type-IIConj car H. Perf-give-3Conj S.-Obv  
 ‘Which car did Husa give to Susehp?’

<sup>1</sup>The choice of independent or conjunct verb morphology is irrelevant: the wh-word must be initial in order for the clause to be a question. (These types of questions do also require the Conjunct, but even then they could not be interpreted as questions without movement.)

<sup>2</sup>*Tan* can head various types of relative clauses, such as free relatives; these will have the distribution of arguments, but *tan* itself appears in the leftmost position of the relative clause.



- b. \* [CP Husa kisi-mil-at Susehp-ol **tan eliko-k** atomupil ] ?  
 H. Perf-give-3Conj S.-Obv WH IC.such.type-IIConj car  
 ‘Which car did Husa give to Susehp?’

(337) DD,DF 1:8.24

- a. Husa ’-kocicihtun [CP **tan eliko-k** atomupil kisi-mil-uk Susehp ] .  
 H. 3-know.TI WH IC.such.type-IIConj car Perf-give-1Conj S.  
 ‘Husa knows which car I gave to Susehp.’
- b. \* Husa ’-kocicihtun [CP kisi-mil-uk Susehp **tan eliko-k** atomupil ] .  
 H. 3-know.TI Perf-give-1Conj S. WH IC.such.type-IIConj car  
 ‘Husa knows which car I gave to Susehp.’

Such questions form equational structures with a following complex NP: ‘[What type] is [the car that Husa gave to Susehp]?’ This will be examined more closely in Section 3.2.2

### 3.2.1 Movement

Sticking to simple questions using the question words *wen* ‘who’, *keq* ‘what’ (which alternates, apparently freely, with a longer form *keqsey*), and *tama*, ‘where’, it is easy to demonstrate that these questions involve overt extraction. For one thing, question formation obeys islands:<sup>3</sup>

(338) Adjunct Islands

- a. \* **Wen**<sub>1</sub> maceha-t psi=te wen [ mesq t<sub>1</sub> mace-ntu-hk ] ?  
 who leave-3Conj all=Emph someone before start-sing-3ConjNeg  
 ‘Who did everyone leave before started singing?’ AH,SN 10:7.16
- b. \* **Wen**<sub>1</sub> wolihpukot muwinew-ey [ eci t<sub>1</sub> laqoso-k ] (’sami ’-pisacqehtun)?  
 who taste.good.II bear-meat when cook.TI-3Conj (because 3-bake.TI)  
 ‘Who does bear meat taste good when cooks it (because he bakes it)?’

(339) Complex NP Islands

- a. \* **Wen**<sub>1</sub> kis-uwikh-ot [NP muwin kisi-siktehpawl-at t<sub>1</sub> ] ?  
 who Perf-photograph-2Conj bear Perf-scare-3Conj  
 ‘Who did you take a picture of the bear that scared?’ WN1.9.8
- b. \* **Wen**<sub>1</sub> kis-ankum-ot Piyel [NP tuwihput t<sub>1</sub> kisi-ht-aq ] ?  
 who Perf-sell-2Conj P. table Perf-make-3Conj  
 ‘Who did you sell Piyel the table that made?’ AH,SN 6:2.21 (OK as ‘Who did you sell the table Piyel made?’)

(340) Sentential Subject<sup>4</sup>

- a. \* **Wen-il**<sub>1</sub> (nit) wetomeya-sk [CP eli k-itapiy-ik musqitaham-ahtic-il t<sub>1</sub> ] ?  
 who-Obv (this.Inan) IC.bother-2ConjInv C 2-friend-3P hate-3PConj-PartObv  
 ‘Who does it bother you that your friends hate?’ AH,SN 9:6.10

<sup>3</sup>In 340b, replacing the Independent form of ‘be surprised (at)’ with the Conjunct form will not improve its grammaticality (I expect, based on 340a); the same holds for 341a.

<sup>4</sup>Unlike English, doubling the CP subject with an inanimate pronoun does not improve the grammaticality of extraction.

- b. \* **Wen**<sub>1</sub> tassokitahasu Tihtiyas [<sub>CP</sub> eli *t*<sub>1</sub> moke-ptah-at aneqehsu ] ?  
 who be.surprised.3 T. C lots-hook-3Conj flounder.ObvP  
 ‘Who did it surprise Tihtiyas that caught the most flounder?’ AH,SN 3:9.25

(341) Wh-Islands

- a. \* **Wen-il**<sub>1</sub> taktal ’-kosiciy-a [<sub>CP</sub> keqsey kikiht-ih *t*<sub>1</sub> ] ?  
 who-Obv doctor 3-know.TA-Dir what cure-3ConjInv  
 ‘Who does the doctor know what will cure?’ AH,SN 3:9.27 (Marginal as ‘Does the doctor know what will cure someone?’)

Attempting to use an overt pronoun in the trace position as a resumptive pronoun does not salvage island violations:

(342) AH,SN 9:6.10

- a. \* **Wen**<sub>1</sub> kisi-wisukilwaha-yin [ ’sami *t*<sub>1</sub> ma=te k-ciksota-ku-wi-n ] ?  
 who Perf-get.angry-2Conj because Neg=Emph 2-listen.to-Inv-Neg-1P  
 ‘Who did you get mad because didn’t listen to us (Incl)?’
- b. \* **Wen**<sub>1</sub> kisi-wisukilwaha-yin [ ’sami **nekom**<sub>1</sub> ma=te k-ciksota-ku-wi-n ] ?  
 who Perf-get.angry-2Conj because 3 Neg=Emph 2-listen.to-Inv-Neg-1P  
 ‘Who did you get mad because he didn’t listen to us (Incl)?’

The fact that islands cannot be violated without an overt pronoun means that null pronouns cannot be used as resumptives to salvage islands; because overt pronouns cannot be used either, there simply does not appear to be a resumptive pronoun strategy in Passamaquoddy.

Note that overt extraction even of argument wh-phrases obeys all islands, including weak islands. An example of a wh-island was given above; overt extraction also obeys some weak negative islands, such as this one formed by the negative verb ‘deny’ (sentential negation does not form an island to overt extraction of either arguments or adjuncts; see below):

(343) AH,SN 9:6.10

- a. Mihku ’t-ikonewatomon eli kisi-komutonom-at Piyel-ol.  
 M. 3-deny.TI C Perf-rob-3Conj P.-Obv  
 ‘Mihku denied that he robbed Piyel.’
- b. \* **Wen-il**<sub>1</sub> Mihku ikonewato-k eli kisi-komutonom-at *t*<sub>1</sub> ?  
 who-Obv M. deny-3Conj C Perf-rob-3Conj  
 ‘Who did Mihku deny that he robbed?’

Relativization can take place out of this island (but only overtly; see Chapter 4), but wh-movement apparently may not. (This island is selective in a manner different from in English.)

Another argument for movement will be given in Chapter 4; this is that long-distance extraction can trigger successive-cyclic agreement on verbs along the path of movement:

- (344) a. [<sub>CP</sub> **Wen-ih**<sub>1</sub> piluwitaham-oc-**ih**<sub>i</sub> [<sub>CP</sub> Piyel kisi-komutonom-ac-**ih**<sub>i</sub> *t*<sub>1</sub> ] ] ?  
 who-ObvP suspect-2Conj-PartObvP P. Perf-rob-3Conj-PartObvP  
 ‘Who all do you suspect that Piyel robbed?’ AH,SN 6:3.2

- b. [CP **Wen-ih<sub>1</sub>** tepitaham-oc-**ik** [CP ketuw-ewestuwam-ac-**ih<sub>1</sub>** *t<sub>1</sub>* ] ] ?  
 who-ObvP think.TA-2Conj-Part3P IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’ WN8:5.9

This agreement holds even across three clauses, meaning that it could not just be determined locally by, in the higher clause, the wh-phase itself, and in the lower clause, the gap (this example is a relative clause rather than a question, but the pattern is the same):

- (345) N-musal-a [NP **wot skitap** [CP Piyel ito-k-(**il**) [CP elitahasi-t/c-**il** [CP  
 1-like-Dir this.An man P. say-3Conj-(PartObv) IC.think-3Conj-(PartObv) ] ] ] .  
 kisi-komutonom-ih<sub>1</sub>/c-**il** ] ] ] .  
 Perf-rob-3ConjInv-(PartObv)  
 ‘I like [NP the man that Piyel said he thought robbed him] .’ AH,SN 10:7.14

In addition to long-distance movement, Passamaquoddy also makes use of wh-scope marking. In this construction a contentful wh-phrase moves partially, to an embedded CP, but its scope is marked as the matrix clause by the wh-word meaning ‘what’:

- (346) **Keqsey** kisi-yuhu-sk [CP **wen-ih<sub>1</sub>** ali-wiciyem-ac-ih<sub>1</sub> Tihtiyas *t<sub>1</sub>* ] ?  
 what Perf-say.to-2ConjInv who-ObvP around-go.with-3Conj-PartObvP T.  
 ‘Who all did he tell you that Tihtiyas is going around with?’ AH,SN 10:7.16

Wh-scope marking is the topic of Chapter 4.

### 3.2.2 Simplex Vs. Complex Wh-Phrases

In addition to the argument question words *wen* ‘who’ and *keq(sey)*, ‘what’, which double as indefinites and demonstrably start out in argument position (the arguments for movement above), Passamaquoddy possesses more complex wh-phrases. Most of these involve the addition of a relative root to the verb. Relative roots serve to introduce (oblique) arguments; LeSourd (2001) hypothesizes that in the case of wh-questions, they add a variable as an oblique argument which the wh-quantifier binds. This is a reasonable hypothesis, which I will adopt in what follows; the syntax of relative roots and their arguments is taken up in more detail in Section 3.4.

#### Simplex Wh-Phrases

Relative root questions can be further subdivided. The first type simply adds a relative root and a wh-quantifier that questions it; this is done with *tama*, ‘where’, for example, which requires the locative relative root *toli*-:<sup>5</sup>

<sup>5</sup>*Tama*, like *keq* and *wen*, also doubles as an indefinite, ‘somewhere’:

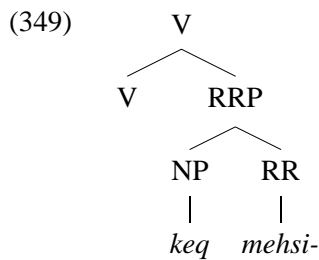
- (i) Koti-komutonom-a qeni-ya-t **tama**.  
 (2)-Fut-rob-Dir during-go-3Conj somewhere  
 ‘You’re going to rob him while he’s away somewhere.’ AH,SN 10:7.16

- (347) a. **Tama** k-**tli**-kisi-pcitahka-n tatwikhikon?  
 where 2-**there**-Perf-send-N letter  
 ‘Where did you send a letter?’ AH,SN 5:11.8
- b. **Tama** ma=te wen wikuwaci-**toli**-hpi-w?  
 where Neg=Emph someone enjoy-**there**-eat.3-Neg  
 ‘Where does no one like to eat?’ AH,SN 10:7.14

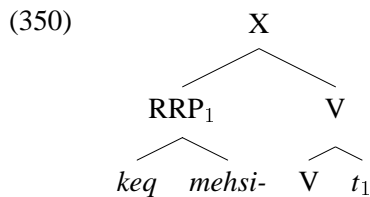
Questions with ‘why’ are the same—a preverb *mehsi-* is added to the verb, and questioned with the inanimate wh-word *keq*. *Keq* and *mehsi-* usually occur together on the surface, with *mehsi-* often physically separated from the rest of the verb:<sup>6</sup>

- (348) a. Ma=te k-wewitaham-ol-u [<sub>CP</sub> **keq mehsi** *pcitahk-in* tatwikhikon] .  
 Neg=Emph 2-remember.TA-1/2-Neg what X.reason send.AI+O-2Conj letter  
 ‘I don’t remember why you sent the letter.’ AH,SN 5:11.8
- b. Ma=te n-kosicihtu-w-on [<sub>CP</sub> **keq mehsi** Pil *monuhmuw-ew-at* Maliw-ol  
 Neg=Emph 1-know.TI-Neg-N what X.reason Bill buy-App-3Conj Mary-Obv  
 yut atomupil] .  
 this.Inan car  
 ‘I don’t know why Bill bought Mary this car.’ AH,SN 8:5.7

In Section 3.4, I will present an analysis of relative roots and their arguments according to which they begin as a constituent, below the base position of the verb:



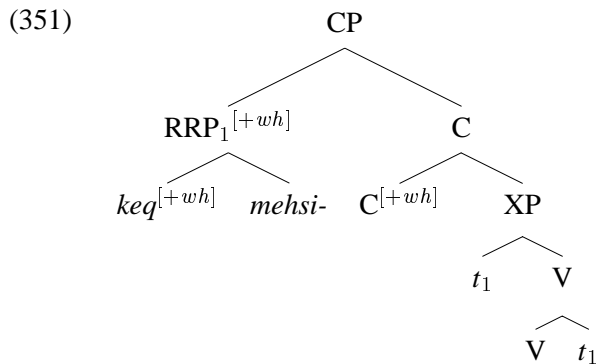
The entire RRP constituent moves to a preverbal position, where the preverb itself may attach phonologically to the verb (but does not have to, depending on morphophonological factors):



From this position the wh-word *keq* moves to Spec-CP to satisfy its [+wh] feature. Alternatively, the entire RRP moves to Spec-CP, deriving the word order where other elements intervene between *keq mehsi-* and the rest of the verb. For this case we might assume that the wh-feature of *keq* percolates up to the entire RRP<sup>7</sup>

<sup>6</sup>There are reasons to regard *mehsi-* as a preverb rather than the complex *keq mehsi* as a unit, perhaps as a wh-phrase like ‘why’ or ‘how come’. For one thing, *mehsi-* acts like a preverb in various ways, including the fact that it prevents initial change from affecting the verbal stem to its right (the assumption is that the initial change affects *mehsi-* as a preverb, but with no effect).

<sup>7</sup>Not all relative roots can separate from the verb; the preverb *toli-*, for instance, is usually unable to:



In addition to ‘why’ questions with *keq*, occasionally just *mehsi-* is used, without the wh-word *keq*:

- (352) Susehp nt-iy-oq [ **mehsi** miluwe-t utapakon-ol ] .  
 S. 1-tell-Inv X.reason give.away-3Conj 3.car-InanP  
 ‘Susehp told me why he gave away his cars.’ AH,SN 5:11.8

Here the sense is probably that of a definite in English: he told me *the reason* he gave away his cars. However, there are actual content questions in texts without the wh-word, such as the pair in 353:

- (353) a. **Keq** olu nit **mehsi** ol-cok-sit-ayin?  
 what Emph thus X.reason thus-dirty-feet-2Conj  
 ‘Why are your feet so dirty?’ (Newell 1974a, 9)
- b. **Mehsi** nit ol-cok-sit-ayin?  
 X.reason thus thus-dirty-feet-2Conj  
 ‘Why are your feet so dirty?’ (Newell 1974a, 9)

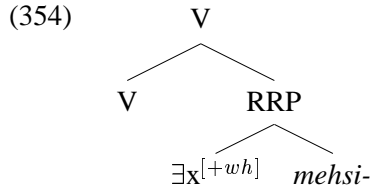
If the relative root adds a variable that must be bound by some kind of operator, there is nothing to bind it in 353b, unless the wh-operator can be covert. There is some reason to think that it can. A simple hypothesis regarding the indefinite/wh-words *keq*, *wen*, and *tama* is that they are indefinite quantifiers which introduce a variable. They can be bound by a variety of operators, such as universal quantifiers (*psite*, ‘all, every’ and *yatte*, ‘each’), negation, adverbial quantifiers, and a non-overt question operator. Such a theory is outlined in Chapter 2. It would mean that in 353a, *keq* is not itself the operator that binds the variable introduced by *mehsi-*; it is an existential quantifier introducing a variable, which can be endowed with a [+wh] feature. The actual operator is a question operator in C (see Chapter 2).

Let me spell this out as a working hypothesis. The indefinites *wen*, *keq*, and *tama* are simply existential quantifiers which introduce variables. They can optionally be inserted with [+wh] features. These features

(i) AH,SN 5:11.8

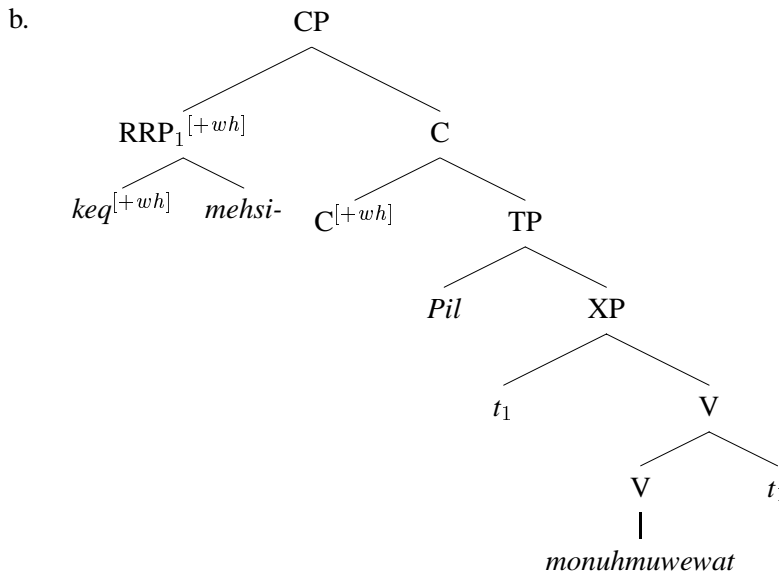
- a. Ma=te k-wewitaham-ol-u **tama** tatwikhikon k-**toli**-kisi-pcitahka-n.  
 Neg=Emph 2-remember.TA-1/2-Neg where letter 2-where-Perf-send.AI+O-N  
 ‘I don’t remember where you sent a letter.’
- b. \* Ma=te k-wewitaham-ol-u **tama** k-**toli** tatwikhikon kisi-pcitahka-n.  
 Neg=Emph 2-remember.TA-1/2-Neg where 2-where letter Perf-send.AI+O-N  
 ‘I don’t remember where you sent a letter.’

will cause a derivation to crash if there is no [+wh] C in the structure to check them. If there is a [+wh] C, however, they will move to Spec-CP, where they check their [wh] feature and are bound by the question operator. In the question in 353a, for example, the preverb introduces an existential operator endowed with a [+wh] feature as its argument, which is spelled out as *keq*. (With other relative roots it will usually be spelled out as the default *tan*.) This is illustrated below:



As we saw above, there are two options for movement to CP. Either the [+wh] quantifier *keq* will move by itself, or the [+wh] feature will percolate up to the entire RRP. In the latter case the entire constituent is pied-piped to CP. This derivation derives the word order in 348b, repeated as 355a:

- (355) a. Ma=te n-kosicihtu-w-on **keq mehsi** Pil monuhmuw-ew-at Maliw-ol yut  
 Neg=Emph 1-know.TI-Neg-N what X.reason Bill buy-App-3Conj Mary-Obv this.Inan  
 atomupil.  
 car  
 ‘I don’t know why Bill bought Mary this car.’ AH,SN 8:5.7



In examples without the overt wh-phrase *keq*, a null existential quantifier must serve as *mehsi*’s argument. Suppose that a null quantifier *requires* that the [+wh] feature percolate up to the entire relative root phrase. A constraint might require that a [+wh] operator always have phonological content, for instance; or, because a [+wh] complementizer requires that its specifier have an overt wh-phrase in it (the EPP for [+wh] C), pied-piping will have to take place. Either way, this means that the relative root must be pied-piped to

CP if the existential quantifier is null.<sup>8</sup>

The two examples in 353, repeated in 356, suggest by their word order that this is exactly what takes place:

- (356) a. **Keq** olu nit **mehsi** ol-cok-sit-ayin?  
 what Emph thus X.reason thus-dirty-feet-2Conj  
 ‘Why are your feet so dirty?’ (Newell 1974a, 9)
- b. **Mehsi** nit ol-cok-sit-ayin?  
 X.reason thus thus-dirty-feet-2Conj  
 ‘Why are your feet so dirty?’ (Newell 1974a, 9)

These two sentences each contain two relative roots, *mehsi-*, ‘for X reason’, and *oli-*, ‘thus’. The latter specifies a degree of dirtiness by the demonstrative *nit*. Note that when *keq* is used it is separated from the rest of the verb by *nit*, while when no question word is used *nit* follows *mehsi-*, intervening between it and the verb. This suggests that *mehsi-* does indeed undergo wh-movement to CP in 356b, but only *keq* does in 356a.

The entire RRP can occasionally move long-distance, as well. As will be shown in Section 3.4.6, relative root questions can only be formed long-distance when the higher verb is inherently relative (unless a relative root is also added to the higher verb). In such a case, however, *keq* and *mehsi* can move together:

- (357) a. **Keq mehsi** elitahasi-yin [CP Susehp ’-komutonom-a-l Piyel-ol ] ?  
 what X.reason IC.think-2Conj S. 3-rob-Dir-Obv P.-Obv  
 ‘Why do you think Susehp stole from Piyel?’ (find source)
- b. **Keq mehsi** elitahasi-yin [CP Mihku ’-kisi-pson-a-l otuhk-ol ] ?  
 what X.reason IC.think-2Conj M. 3-Perf-catch-Dir-Obv deer-Obv  
 ‘Why do you think Mihku caught the deer?’ AH,SN 6:3.3

Other examples of wh-questions ranging over relative root arguments include the preverb *tuci-*, ‘to X extent/degree’, and ‘how’ questions using the preverb *oli-* ‘thus, in that manner’; both are questioned with the all-purpose wh-morpheme *tan* (see Chapter 4):

- (358) a. K-wewitaham-a [CP **tan tuci**-molikikona-n-ess ] ?  
 2-remember.TA-Dir WH X.extent-be.strong.3-N-DubPret  
 ‘Do you remember how strong he was?’ AH,SN 10:7.13
- b. **Tan** ’t-**oli**-tkiqol-on Meyhsis kisi-yuhu-sk?  
 WH 3-thus-be.heavy-N M. Perf-tell-2ConjInv  
 ‘How heavy is Meyhsis, did she tell you?’ AH,SN 6:2.24
- c. **Tan** kt-**oli**-y-a-n sukolopan-ok?  
 WH 2-thus-make.TA-Dir-N cake-3P  
 ‘How do you make cakes?’ AH,SN 2:9.12

<sup>8</sup>Alternatively, there is no quantifier, and the argument of the relative root is simply a variable. In this case [+wh] can *only* be a feature of the entire RRP, forcing it to pied-pipe to Spec-CP.

- d. 'T-iy-a-n, "Tan p=al kt-ol-kuw-i-ni-ya nil muh-ul-eq?"  
 3-say.to-Dir-N WH would-Uncertain 2-thus-affect-2/1-N-2P 1 eat-1/2-2PConj  
 'He says to them, "How would you affect me if I were to eat you?"' (Mitchell 1921/1976a, 22)

### Complex Relative Root Questions

'How many' questions can be formed as simplex relative root questions like those above, but they can also be formed as more complex wh-questions. As the first type, they use the wh-word *tan* and the preverb *kehsi* 'many' or 'X.many', attached directly to the verb:

- (359) a. **Tan kehsi**-nomiy-ot apikciluwih-ik?  
 WH X.many-see-2Conj skunk-3P  
 'How many skunks did you see?' AH,SN 10:7.15
- b. **Tan Pil kehsi**-cuwi-monuwo-k wikhikon-ol?  
 WH Bill X.many-must-buy-3Conj book-InanP  
 'How many books does Bill have to buy?' AH,SN 6:2.24

In the more complex alternative, 'be (X) many' is a verb in itself, and the entire question is formed as an equational structure:<sup>9</sup>

- (360) a. [ **Kehsu-wok** ] [<sub>NP</sub> apikciluwih-ik keti-nomiy-oc-ik ] ?  
 X.many-3P skunk-3P IC.Fut-see-2Conj-Part3P  
 'How many skunks do you want to see?' [lit. 'How many are [the skunks you want to see?']  
 AH,SN 10:7.15
- b. [ **Tan=oc kehsi-ni-ya** ] [<sub>NP</sub> cikonyi-ik keti-mil-ot yatte wen pilsqehsis ] ?  
 WH=Fut X.many-N-3P apple-3P IC.Fut-give-2Conj each someone girl  
 'How many will be the apples that you give each girl?' WN1:9.8

The fact that the NP itself is separable, often appearing as the internal head of a relative clause, argues for this more complex structure:<sup>10</sup>

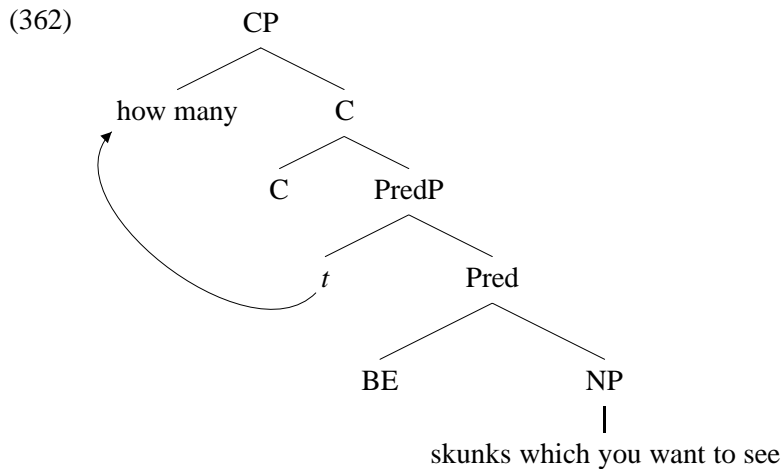
- (361) **Kehsu** Tihtiyas peciph-ac-ih **cikoni**?  
 X.many.ObvP T. bring-3Conj-ObvP apple.ObvP  
 'How many apples did Tihtiyas bring?' AH,SN 4:10.16

Note again that the verb can be used alone, without an overt wh-operator, or with one (*tan*). In either case the wh-phrase 'how many' will move to CP:

<sup>9</sup>I will analyze 'how many' questions here as equational structures, but they could also be a matrix verb ('be X.many') with a complex NP (the relative clause) as subject. The two are equivalent for all the phenomena discussed here.

<sup>10</sup>A possible alternative is that *kehsi*- is always a D-quantifier, and in these cases splits off its NP restriction. There are some text examples suggesting that a D-quantifier analysis is at least possible; see also Chapter 2 for non-wh examples. Interference effects from quantificational phrases might also argue for a split DP analysis.

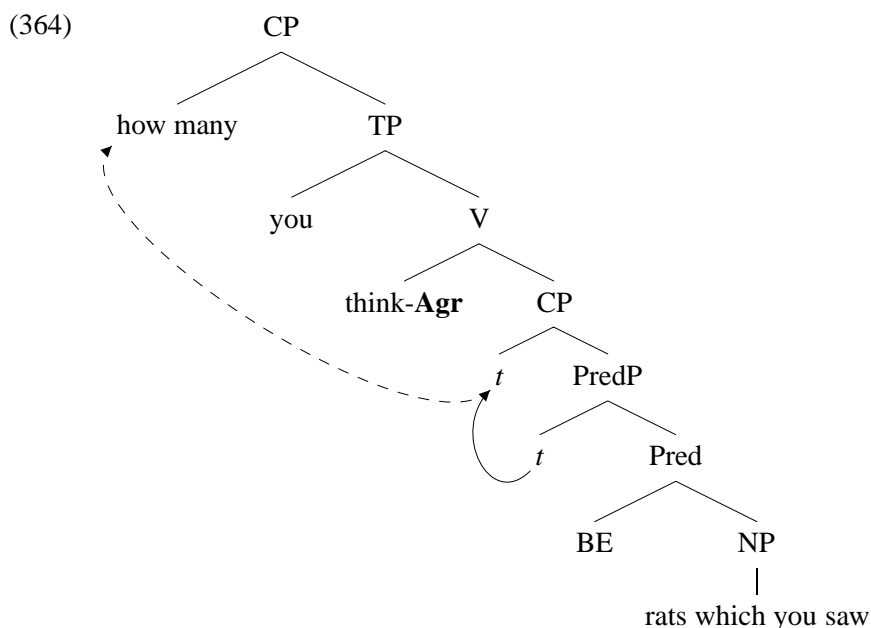




The diagram in 362 shows the entire verb meaning ‘how many’ moving to CP. That this movement does take place can be seen by comparing long-distance and scope marking questions (see Chapter 4):

- (363) a. [ **Tan kehsi-n-iyā** ] [ elitahasi-yin-(**ik**)      nemiy-oc-**ik**      **apikciluwih-ik** ] ?  
 WH X.many-N-3P IC.think-2Conj-(Part3P) IC.see-2Conj-Part3P skunk-3P  
 ‘How many skunks did you think you saw?’ AH,SN 10:7.15
- b. **Tan** elitahasi-yin      **tan kehsi-n**      nemiy-oc-ik      apiqsehsuw-ok?  
 WH IC.think-2Conj-(Part3P) WH X.many-N IC.see-2Conj-Part3P rat-3P  
 ‘How many rats do you think you saw?’ AH,SN 10:7.16

The long-distance question in 363a could be a long-distance internally headed relative clause, ‘[how many] are [the skunks which you think you saw]?’ , but the partial movement case in 363b could not. As argued in Chapter 4, it could only involve LF movement of ‘how many’ to the matrix CP:

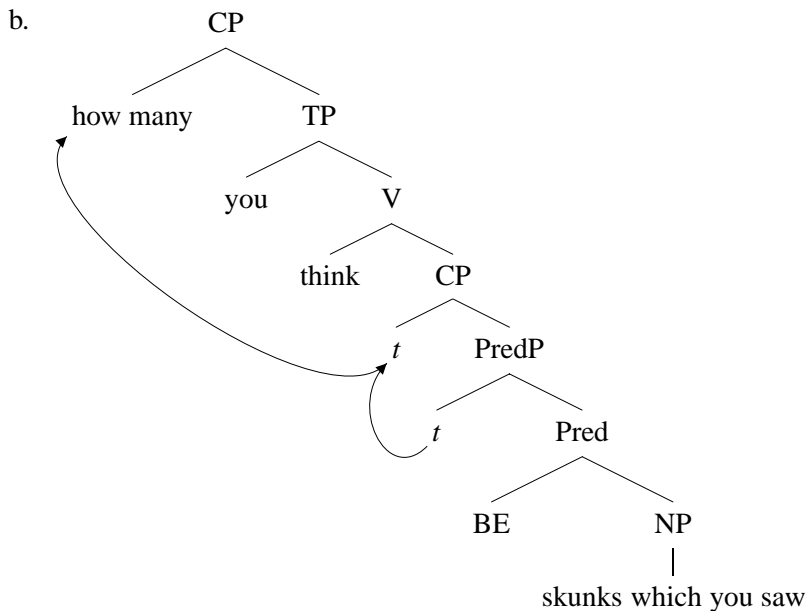


Part of the evidence for this comes from the ability of the matrix verb to agree with the ‘how many’ phrase (which is covalued with ‘rats’):

- (365) Tan elitahasi-yin-(**ik**) [CP **tan kehsi-n** nemiy-oc-**ik** **apiqsehsuw-ok**] ?  
 WH IC.think-2Conj-(Part3P) WH X.many-N IC.see-2Conj-Part3P rat-3P  
 ‘How many rats do you think you saw?’ AH,SN 10:7.16

This means that the long-distance movement structure is at least available, and suggests that an overt derivation involving long-distance movement of ‘how many’, rather than a long-distance relative clause, is at least possible for cases like 363a, repeated below:

- (366) a. [ **Tan kehsi-n-iyā**] elitahasi-yin-(**ik**) nemiy-oc-**ik** **apikciluwih-ik**?  
 WH X.many-N-3P IC.think-2Conj-(Part3P) IC.see-2Conj-Part3P skunk-3P  
 ‘How many skunks did you think you saw?’ AH,SN 10:7.15



This type of equational structure is the only way to form ‘which’ and ‘what type’ questions:

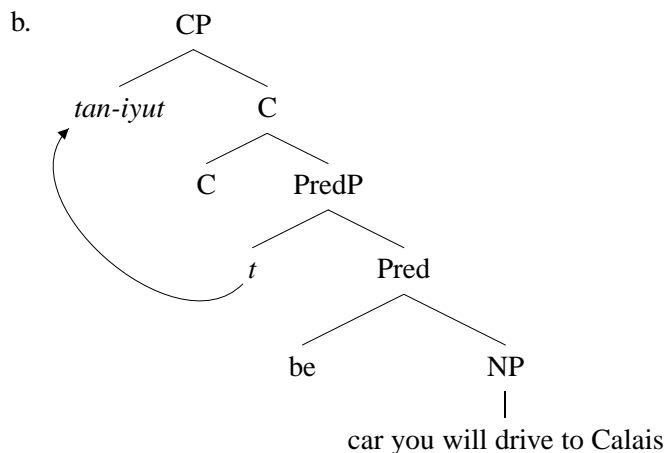
- (367) a. [ **Tan-iyut**] =oc [ mace-hkmo-n **atomupil** Kehlis-k ] ?  
 WH-this.Inan=Fut start-drive-2Conj car Calais-Loc  
 ‘Which car will you drive to Calais?’ AH1:9.7
- b. [CP **Tan eliko-k**] [ atomupil Husa kisi-mil-at Susehp-ol ] ?  
 WH IC.such.type-IIConj car H. Perf-give-3Conj S.-Obv  
 ‘Which car (what kind) did Husa give to Susehp?’ DD,DF 1:8.24

These are literally ‘[Which] is [the car that you will drive to Calais]?’ and ‘[What type] is [the car that Husa gave to Susehp]?’ . There are various arguments that these do involve equational structures, which are given in Chapter 4 (these structures are contrasted there with simple questions, which are not equational). These arguments include the fact that the two halves of the equation constitute separate obviation domains; and that

the placement of second-position clitics matches the proposed structure. The forms of the two verbs are also consistent with this structure: in 360, the first verb is in the Independent (either Indicative or Subordinative), while the second is the Changed Conjunct, meaning that it is likely to be a relative clause.<sup>11</sup>

In questions translating ‘which’, I transcribe *tan* with the following demonstrative, for phonological reasons: speakers pronounce them together, with a connective vowel (*taniyut*, *tanuwot*, *taniyuhtol*, etc.). Syntactically the two appear to form the first part of the equation:

- (368) a. [ **Tan-iyut** ]=oc [ mace-hkmo-n **atomupil** Kehlis-k ] ?  
 WH-this.Inan=Fut start-drive-2Conj car Calais-Loc  
 ‘Which car will you drive to Calais?’ AH1:9.7



I assume that *tan* plus the demonstrative start out as the subject of the equational sentence. As a wh-phrase, they move together to CP.

This analysis is supported by the possibility of including the word *nit*, used in nominal predications like that in 369b:

- (369) a. Tan wot **nit** [ <sub>NP</sub> muwin kisi-maton-at nihiht mawsuwinu ] ?  
 WH this.An that bear Perf-fight-3Conj those.ObvP person.ObvP  
 ‘Which bear attacked those people?’ AH,SN 3:9.26
- b. Yuhtol **nit** [ <sub>NP</sub> kis-uwehke-c-il pahq-il nehpah-ac-il  
 these.InanP that Perf-use-3Conj-PartInanP arrow-InanP kill-3Conj-PartInanP  
 musuw-ol ] .  
 moose-Obv  
 ‘These are the arrows that he used to killed the moose.’ AH,SN 6:2.26

*Nit* follows the first part of the equation in 369b; in ‘which’ questions, it follows the combination of *tan*+demonstrative. Note also the position of the second-position clitic *oc* in 368a: not between *tan* and *yut* but after the two of them, indicating that they together form the first phonological word in the sentence. (This topic is taken up again in Chapter 4.)

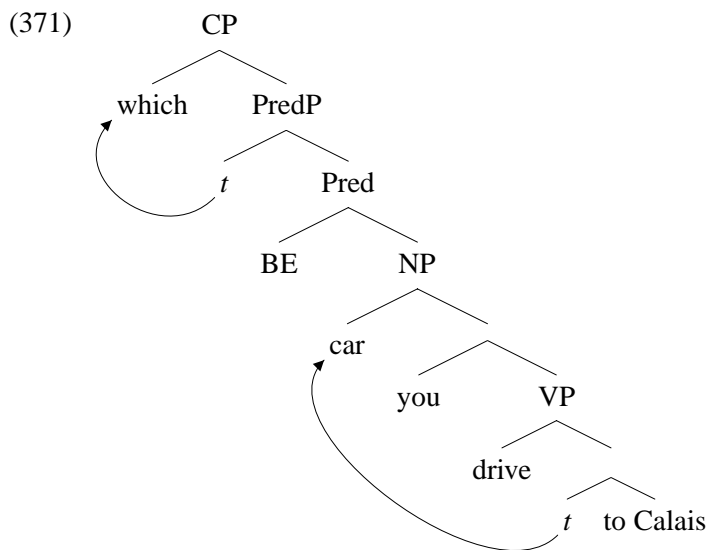
<sup>11</sup>Core argument extraction generally uses the Changed Conjunct, however.

There is another possibility, which seems to be in use by speakers. In 369a *tan* and *wot* were not pronounced with the connective vowel, but as two separate words. It may be that *tan* is separable and can move without the demonstrative, just like *keq* and *mehsi-* could move as a unit or separately.

The second part of the equational sentence, a relative clause, is very often head-internal, as in 368a. As with internally-headed relative clauses generally, agreement with the head can be found even above the surface position of the head (see Chapter 4):

- (370) Not nit [<sub>CP</sub> elitahasi-c-**il** [<sub>CP</sub> kisi-pson-ac-**il** **otuhk-ol** ] ] .  
 that.An that IC.think-3Conj-PartObv Perf-catch-3Conj-PartObv deer-Obv  
 ‘This is the deer that he thought he was going to catch.’ AH,SN 10:7.13

This, together with the fact that internally-headed relative clauses obey islands (below, and Chapter 4), indicates that the internal head of a relative clause, including those in ‘which’ questions, undergoes covert movement (see Chapter 4). Thus, complex questions such as ‘which’ and ‘how many’ involve two movement chains:



The structure is simply that of an equational sentence, with one half of the equation questioned, and the other half consisting of an NP plus modifying relative clause.

That wh-movement does take place with the wh-part of the equation was shown above with embedded questions:

- (372) DD,DF 1:8.24
- a. Husa ’-kocicihtun [<sub>CP</sub> **tan eliko-k** atomupil kisi-mil-uk Susehp ] .  
 H. 3-know.TI WH IC.such.type-IIConj car Perf-give-1Conj S.  
 ‘Husa knows which car I gave to Susehp.’
- b. \*Husa ’-kocicihtun [<sub>CP</sub> kisi-mil-uk Susehp **tan eliko-k** atomupil ] .  
 H. 3-know.TI Perf-give-1Conj S. WH IC.such.type-IIConj car  
 ‘Husa knows which car I gave to Susehp.’

If these structures were simply equational sentences where the *wh*-part happened to be initial, they should be reversible, as equational sentences generally are. 372b should then be grammatical as, ‘Husa knows [the one I gave to Susehp] is [WH-type of car]’.<sup>12</sup>

In Chapter 2, I showed that various numeral quantifiers seemed to be ambiguous between a structure like those above, where the numeral quantifier constituted the main predicate and the rest of the sentence was a relative clause, and one in which the numeral quantifier was, like English, a D-quantifier forming a constituent with an NP. The data were examples like the following, where negative concord indicates that the lower verb must be the direct complement of the higher perception verb; the latter is in its Independent form, and could not constitute part of a relative clause:

- (373) Ma=te nomiy-a-w skitap kisi-nehpaha-hq nisu mahtoqehsu.  
 Neg=Emph see-Dir-Neg man Perf-kill-3ConjNeg two.ObvP rabbit.ObvP  
 ‘I didn’t see the man kill two rabbits.’ AH,SN 6:3.1

There is no parse of such examples in which any part of the sentence is a relative clause. The only possible structure is one in which ‘two’ and ‘rabbits’ form a DP constituent.

‘How many’ questions also seem to be able to have this sort of D-quantifier parse. For instance, in the following question the NP restriction of ‘how many’ moves long-distance with ‘how many’:

- (374) Kehsuw-ok otuhk-ok nt-iy-oq Pil meson-ac-ih?  
 X.many-3P deer-3P 1-say.to-Inv Bill IC.catch-3Conj-PartObvP  
 ‘How many deer did Bill tell me he caught?’ AH,SN 9:6.13

It is impossible for ‘deer’ to be the head of a relative clause ‘which Bill caught’ here; it is also impossible for it to be the head of a relative clause including ‘tell’, since ‘tell’ is inflected in the Independent Order. Relative clauses always require the Conjunct.

The only parse this question could have is one like the English translation, in which ‘how many deer’ form a [+wh] DP and move together to Spec-CP. It therefore seems to be possible for ‘how many’ to be a D-quantifier, just as numeral quantifiers can be. While important for the correct analysis of Passamaquoddy questions, this fact will not be that relevant to the examples used in the rest of this study. What is relevant is the difference between simplex *wh*-questions and complex *wh*-questions that involve a relative clause. The difference is important to keep in mind in analyzing *wh*-movement in this chapter, and it will be important in Chapter 4, where I will develop a theory of *wh*-scope marking.

### 3.2.3 Multiple Questions

Speakers readily translate multiple questions into Passamaquoddy, rendering them as, for example, the following:

- (375) DF1:8.23

<sup>12</sup>A better comparison would be, ‘Husa knows [the car I gave to Susehp] is [WH-type].’ I believe that this would also be ungrammatical, but do not have the data.

- a. **Keqsey** etoli-ht-uw-ot                      **wen**?  
 what IC.Prog-make-App-2Conj who  
 ‘What are you making for who?’ (Pair-list)
- b. **Keqsey** toke etoli-ht-uw-at                      **wen-(il)**?  
 what now IC.Prog-make-App-3Conj who-(Obv)  
 ‘What is he/she making now for who?’ (Pair-list)
- c. **Keqsey** toke **wen-il** etoli-ht-uw-at                      ?  
 what now who-Obv IC.Prog-make-App-3Conj  
 ‘What is he/she making now for who?’ (Pair-list)

But these are suspicious. First, note that only one item can move to Comp. The other wh-phrase apparently remains in situ. But wh-words, we know, do double duty as indefinites. An immediate possibility is that the wh-word in situ is not actually a wh-word, but is an indefinite instead, which we might believe to have to be the case if these elements are only interpreted as wh-phrases by virtue of moving to CP.

On such an analysis the correct translation of the sentences above would be something like, ‘What are you making for someone/people?’, which can be answered with a list of pairs if the addressee is being helpful. They will match the ‘what’ to each ‘someone’ in answering. Similarly for a monotransitive, ‘What did people make?’:<sup>13</sup>

- (376) **Keqsey wen** kisi-ht-aq?  
 what who Perf-make-3Conj  
 ‘Who made what?’ DF2:9.14

Such an interpretation is even more plausible in the following. I suspect that the informant offered ‘I want to know whoever you gave a car to’ for ‘I want to know which car you gave to who’ and ‘I want to know which car you gave to someone’ for ‘I want to know which car you gave to who.’ The pairs are similar enough; a helpful listener will add information on which cars match which people. (The quantifier *tan* is used with indefinites like *wen* to mean ‘whoever’ or ‘anyone who’.)

- (377) AH1:9.6
- a. N-koti-ksicihtun [<sub>CP</sub> **tan wen** kisi-mil-ot atomupil ] .  
 1-Fut-know.TI WH who Perf-give-2Conj car  
 ‘I want to know which car you gave to who.’ [‘whoever you gave a car to’]
- b. N-koti-ksicihtun [<sub>CP</sub> **tan-iyut** atomupil **wen** kisi-mil-ot ] .  
 1-Fut-know.TI WH-this.Inan car who Perf-give-2Conj  
 ‘I want to know which car you gave to who.’ [‘which car you gave to someone/people’]

Additionally, it was shown above that ‘which’ questions are equational structures with a relative clause as the second half of the equation. If that is so, ‘who’ in 377b is within an island, and could not undergo LF-movement to matrix Comp to achieve a multiple question reading. That is, the structure would be the following:

<sup>13</sup>Note that Superiority (Chomsky 1973) would be violated in all of these examples if both *keqsey* and *wen-il* were wh-phrases. There seems to be a preference for *keq(sey)* to precede *wen* whenever they co-occur; this preference holds for their indefinite uses as well.

- (378) I want to know [<sub>CP</sub> which [<sub>CP</sub> [<sub>PreDP</sub> *t* BE [<sub>NP</sub> car [<sub>CP</sub> that you gave who ] ] ] ] ]  
 \*covert mvmt

Here, ‘who’ must undergo covert wh-movement to the embedded CP to achieve the multiple question reading, but such movement would have to cross a complex noun phrase island. As we will see in Chapter 5, covert movement cannot do this in Passamaquoddy.

Nevertheless 377b is grammatical and was offered as a multiple question. The conclusion must be that true multiple questions are ungrammatical, and any wh-in-situ is necessarily an indefinite. A question containing an indefinite can be interpreted as a multiple question by pragmatic inference: ‘tell me the people as long as you’re telling me which cars you gave to people.’

The hypothesis that a wh-in-situ is actually an indefinite is confirmed by the fact that wh-phrases that do not double as indefinites cannot occur in situ. For example, we saw above that *tan* questions required movement to CP; they could not remain in situ and be interpreted as indefinites. They also cannot remain in situ when some other wh-phrase occupies Spec-CP, and move there only at LF.<sup>14</sup>

- (379) AH,SN 4:10.17

- a. \* **Wen** kisi-peskh-at **tan-uwot** muwinuw-ol?  
 who Perf-shoot-3Conj WH-this.An bear-Obv  
 ‘Who shot which bear?’
- b. **Tan-uwot wen** kisi-peskh-at muwinuw-ol?  
 WH-this.An who Perf-shoot-3Conj bear-Obv  
 ‘Which bear did someone shoot?’ OR ‘Which one shot the bear?’ (NOT multiple Q)

This fact indicates that multiple questions are not permitted: it is impossible for wh-phrases to remain in situ overtly but move to Spec-CP at LF. (It is also impossible for more than one wh-phrase to move to Spec-CP.)

Furthermore, we will see in Chapter 4 that multiple questions cannot be licensed by wh-scope marking:

- (380) \* **Keq** itom [<sub>CP</sub> **wen** elitahasi-t [<sub>CP</sub> **tan kehsi-li-n** cuspes nehpah-ac-ihi  
 what say who IC.think-3Conj WH X.many-ObvS-N porpoise.ObvP shoot-3Conj-ObvP  
 Tihtiyas] ] ?  
 T.  
 ‘Who did he say thinks that Tihtiyas shot how many porpoises?’ AH,SN 6:3.3

In languages that permit multiple questions, wh-scope marking does license multiple questions. This, again, is consistent with the view that Passamaquoddy lacks true multiple questions.

It is possible to have a matrix plus an embedded question in Passamaquoddy:

- (381) [<sub>CP</sub> **Wen** kesiciy-at [<sub>CP</sub> **wen-il** ali-wiciyem-ac-il Tihtiyas ] ] ?  
 who IC.know.TA-3Conj who-Obv around-go.with-3Conj-PartObv T.  
 ‘Who knows who Tihtiyas is going around with?’ AH,SN 10:7.16

But here both wh-phrases have moved overtly to their scope positions—*different* scope positions.

<sup>14</sup>The demonstrative in 379a is the wrong one for an obviative (‘bear’ is obviative here), but I believe the facts will hold with *tan-iyuhtol* (WH-this.Obv) as well: overt movement is required. (The informants did not offer this as an alternative, which they usually do when I just get the obviation wrong. In addition, they permit *tan-uwot* to associate with ‘bear’ in the second sentence, perhaps because the first part of the equational sentence constitutes a separate obviation domain; see Chapter 4.)

### 3.2.4 Unselective Binding?

It appears, therefore, that multiple questions are ungrammatical in Passamaquoddy: an in-situ wh-phrase must be an indefinite, ruling out wh-phrases that cannot independently be indefinites.

However, with wh-phrases that do double duty as indefinites, it might be possible to analyze “multiple questions” as ending up semantically equivalent to a multiple question, even though they do not involve two wh-words. In Chapter 2, the indefinites that serve as wh-phrases—*wen* ‘who’, *keq* ‘what’, and *tama* ‘where’—were analyzed as simple indefinite quantifiers that introduce a variable. This variable can be bound by a variety of operators, including quantifiers, quantificational adverbs, negation, and wh-operators. This means that even when it *is* a wh-phrase, an indefinite simply introduces a variable that is bound by an operator (possibly the question operator Q in Comp; Baker 1970, Pesetsky 1987, Reinhart 1998), and is not itself the question operator (it may well be inserted with wh-features, to satisfy the morphosyntactic featural requirements of a [+wh] C). If the question operator can bind unselectively, an indefinite in situ, without any wh-features, could also be bound by the question operator. This would result in a multiple-question interpretation, but only in the case of these indefinite quantifiers.

Some evidence that this might be possible comes from the following, where the overt operator *tan* gives a type of universal quantification, and seems to be able to bind both indefinites, giving equivalent interpretations for both word orders:

- (382) N-ulasuweltomu-w-a=oc [ **wen keq** kisi-mil-it— ]  
 1-thank=Fut who something Perf-give-1ConjInv  
 ‘I should thank everyone who gave me something—’ AH2:9.14
- (383) a. N-koti-kociciy-a [ **tan wen keq** kisi-mil-it ] .  
 1-Fut-know.TA-Dir WH who what Perf-give-1ConjInv  
 ‘I want to know who gave me what.’
- b. N-koti-kociciy-a [ **tan keq wen** kisi-mil-it ] .  
 1-Fut-know.TA-Dir WH what who Perf-give-1ConjInv  
 ‘I want to know who gave me what.’

The informant translated the first sentence (background to the next pair) with an indefinite, but the other two with two wh-phrases. It is likely that the operator *tan* simply binds both indefinites, making both word orders equivalent.<sup>15</sup>

Further support for this view of the nature of the indefinites-cum-wh-phrases comes from cases where informants translated them variably as wh-phrases or indefinites, and declared them to be equivalent:

- (384) AH,SN 3:9.28
- a. **Wen-il** al **keq** etoli-ht-uw-at?  
 who-Obv Uncertain what Prog-make-App-3Conj  
 ‘I wonder what he’s making for someone/I wonder who he’s making something for.’

<sup>15</sup>It is also possible that unselective binding is not correct, and the interpretations of the two sentences are actually different: ‘I need to know whoever gave me something’ and ‘I need to know whatever someone gave me’; but these can, again, be answered—helpfully—with a list of pairs.



- b. **Keqsey** al            **wen-il**    etoli-ht-uw-at?  
 what    Uncertain who-Obv Prog-make-App-3Conj  
 ‘I wonder what he’s making for someone/I wonder who he’s making something for.’

The informants stated that both sentences had both of the interpretations given, which they would on the unselective binding approach. The question operator would simply bind both indefinites; but one would overtly have wh-features, which cause it to move to Spec-CP!<sup>16</sup>

### 3.3 Extraction: Relative Clauses

Relative clauses in Passamaquoddy can be either externally headed, as in 385, or internally headed, as in 386:

(385) External

- a. Piyel kis-uwikh-a-l                    [NP **skitapiy-il** ankum-iht    *oc* utapakon ] .  
 P. Perf-photograph-Dir-Obv    man-Obv sell-3ConjInv Fut car  
 ‘Piyel took a picture of the man who is going to sell him a car.’ AH1:9.7
- b. Kat=op    n-kot-uhp-a-w    [NP **mus** nehpih-iht    skitapiy-il ] .  
 Neg=would 1-Fut-eat-Dir-Neg    moose kill-3ConjInv man-Obv  
 ‘I wouldn’t eat the moose that’s killed by that man.’ AH,SN 6:2.27

Second-position clitics within the relative clause, such as *oc* in 385a, ignore the head of the relative clause, meaning that it truly is external.

(386) Internal

- a. [NP Susehp kis-onuhmuw-ew-it    **atomupil** ] kakawiye.  
 S. Perf-buy-App-1ConjInv car            go.fast.3  
 ‘The car that Susehp bought for me goes really fast.’ AH1:9.7
- b. Wen kis-ankum-ot    [NP Piyel **tuwihput** kisi-ht-aq            ] ?  
 who Perf-sell-2Conj    P. table Perf-make-3Conj  
 ‘Who did you sell the table Piyel made?’ AH,SN 6:2.21

Externally-headed relative clauses obey islands:

(387) Adjunct Island (AH6:2.22)

- a. Wot nit **skitap**<sub>1</sub> [ palitaham-uk    *t*<sub>1</sub> [ eli kis-akonim-at    Lehpit-ol ] ] .  
 this that man    be.proud.of-1Conj    C Perf-tell.on-3Conj L.-Obv  
 ‘This is the man that I’m proud of because he told on Lehpit.’

<sup>16</sup>Again, unselective binding could be incorrect, and these sentences have the interpretations they do due to pragmatics. That is, one would be ‘I wonder what he’s making for people’; the other would be ‘I wonder who he’s making things for.’ These come out as near-equivalent if one decides to be helpful and list the matching people and things. See Chapter 2 for cases where unselective binding does seem to be necessary.

- b. \* Wot nit **skitap**<sub>1</sub> [ palitaham-uk Piyel [ eli kis-akonim-ac-il t<sub>1</sub> ] ] .  
 this that man be.proud.of-1Conj P. C Perf-tell.on-3Conj-PartObv  
 ‘This is the man I’m proud of Piyel because he told on.’

(388) Wh-Island (AH6:2.22)

- a. N-kisi-yah-a-n Mali [CP wen kisi-komutonom-at pahtoliyas-ol ] .  
 1-Perf-tell-Dir-N M. who Perf-steal.from-3Conj priest-Obv  
 ‘I told Mary who robbed the priest.’
- b. \* Wot nit **pahtoliyas**<sub>1</sub> [ kisi-yuh-uk Mali [CP wen kisi-komutonom-at/c-il t<sub>1</sub>  
 this that priest Perf-tell-1Conj M. who Perf-steal.from-3Conj-(PartObv)  
 ] ] .  
 ‘This is the priest that I told Mary who robbed.’

(389) Complex NP Island (AH,SN 8:5.8)

- a. \* Wol-ihpuk-ot **kuhus-is-ey**<sub>1</sub> [ kis-ewestuwam-uk [NP  
 good-taste-II cow-Dim-meat Perf-talk.to-1Conj someone  
 wen kis-aqoso-k t<sub>1</sub> ] ] .  
 Perf-cook-3Conj  
 ‘The beef is good that I talked to the one who cooked.’

Internally-headed relative clauses also obey islands; here, a negative island formed by the verb ‘deny’ that also blocks overt question formation in 390b:

- (390) a. \* Nihtol nit [NP ikonewato-k Petak [CP eli kisi-komutonom-ac-il **pahtoliyas-ol** ] ] .  
 that.Obv that deny-3Conj P. C Perf-rob-3Conj-PartObv priest-Obv  
 ‘That’s the priest that Petak denied that he robbed.’ AH,SN 10:7.13
- b. \* **Wen-il**<sub>1</sub> Mihku ikonewato-k [CP eli kisi-komutonom-at t<sub>1</sub> ] ?  
 who-Obv M. deny-3Conj C Perf-rob-3Conj  
 ‘Who did Mihku deny that he robbed?’ AH,SN 9:6.10

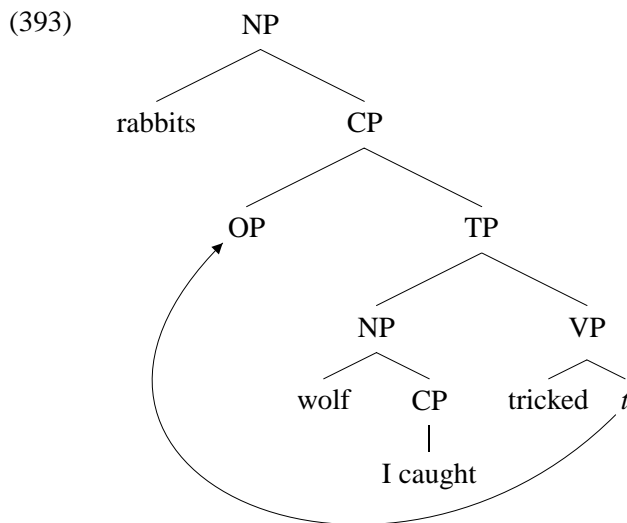
Both internally-headed and externally-headed relative clauses show (optional) agreement along the path of extraction (see Chapter 4):

- (391) a. Not nit [NP elitahasi-c-il [CP kisi-pson-ac-il **otuhk-ol** ] ] .  
 that.An that IC.think-3Conj-PartObv Perf-catch-3Conj-PartObv deer-Obv  
 ‘This is the deer that he thought he was going to catch.’ AH,SN 10:7.13
- b. Wot nit [NP **pahtoliyas**<sub>1</sub> Mali elitahasi-c-il [CP eli wen  
 this that priest M. IC.think-3Conj-PartObv C someone  
 kisi-komutonom-ac-il t<sub>1</sub> ] ] .  
 Perf-rob-3Conj-PartObv  
 ‘This is the priest that Mary thinks someone robbed.’ AH6:2.22

Because this agreement cannot appear in clauses that the relative operator would not move through, agreement together with obedience to islands argues that both internally-headed and externally-headed relative clauses are formed by movement:

- (392) Yuktok nit [<sub>NP</sub> **mahtoqehsuw-ok**<sub>1</sub> [<sub>CP</sub> [<sub>NP</sub> malsom [<sub>CP</sub> ecitawel-uk-(\*ihi) ] ] ] ]  
 these.3P that rabbit-3P wolf IC.trick-1Conj-(\*PartObvP)  
 meson-ac-ihit<sub>1</sub> ] ] .  
 IC.catch-3Conj-PartObvP  
 ‘These are the rabbits that [<sub>NP</sub> the wolf that I tricked] caught.’

In this example, the relative operator associated with ‘rabbits’ does not move through the relative clause that modifies the subject of the main verb. Hence, agreement with the relative operator associated with ‘rabbits’ is ungrammatical:



### 3.3.1 Indirect (Non)-Wh-Questions

In addition to overt wh-phrases, Passamaquoddy has another way of forming what can be translated into English as either embedded wh-questions or as relative clauses. This is to form a headless relative clause, using the Changed Conjunct, with a relative root. For example, locations can be formed with the Changed version of the locative preverb *toli-*, *etoli-*:

- (394) a. On ’-komoqi-n nit qihiw [ **etoli** kisi kuskawe-htit ] .  
 then 3-dive-N there near IC.there Perf capsize-3PConj  
 ‘They put him in *where the two had capsized*.’ (Newell 1979, 20)
- b. Itom-uk=yag ’-kosiciy-a-l Susehp [ Can-ol **etoli**-nehpah-at musuw-ol ] .  
 say-3P=Quot 3-know.TA-Dir-Obv S. John-Obv IC.there-kill-3Conj moose-Obv  
 ‘They say Susehp knows *where John killed a moose*.’ WN1:9.8

The relative root is not necessary with inherently relative roots such as ‘be (located)’:

- (395) a. On saku n-tol-ahka-n-en otuhk nit=te qihiw **eyi-t**.  
 then therefore 1-there-throw-N-1P deer there=Emph near IC.be-3Conj  
 ‘We threw the deer right down near *where he was*.’ AH,SN 10:7.14

- b. Ma=te n-kosiciy-a-w **eyi-t**.  
 Neg=Emph 1-know.TA-Dir-Neg IC.be-3Conj  
 ‘I don’t know *where he is*.’ AH,SN 10:7.15

Similarly, ‘how’ questions can be formed with the Changed version of ‘thus’, *eli-*:

- (396) a. N-mihtaqs n-kis-okehkim-uk [ **eli**-kotunkal-uk muwin ] .  
 1-father 1-Perf-teach-Inv IC.thus-hunt-1Conj bear  
 ‘My father taught me *how to hunt bear*.’ AH2:9.13
- b. Mecimiw nt-oqeto-kehkim-s [ **eli**-piluw-atuw-i ] .  
 formerly 1-try-teach-Refl IC.thus-different-speak-1Conj  
 ‘I used to try to teach myself *how to speak different languages*.’ AH,SN 3:9.28
- c. Kisi yah-a-n papehk=ote **eli**-ki-li-t.  
 Perf tell-Dir-N exactly.like=Emph IC.thus-look-ObvS-3Conj  
 ‘He told him just *what he looked like*.’ (Newell 1974a, 7)

Non-relative root preverbs can also be used; for example *kisi-* with its ‘ability’ meaning (which I continue to gloss as “Perf”; see Chapter 1).

Interestingly, these clauses do not constitute wh-islands.<sup>17</sup>

(397) AH,SN 10:7.13

- a. Nihtol nit **otuhk-ol**<sub>1</sub> [ skat wen kesiciy-ahq [ kisi-pson-ahq *t*<sub>1</sub>  
 that.Obv that deer-Obv Neg someone IC.know.TA-3ConjNeg Perf-catch-3ConjNeg  
 ] ] .  
 ‘That’s the deer that no one knows how to catch.’
- b. Nihtol nit [ skat wen kesiciy-ahq [ kisi-pson-ahq **otuhk-ol** ] ] .  
 that.Obv that Neg someone IC.know.TA-3ConjNeg Perf-catch-3ConjNeg deer-Obv  
 ‘That’s the deer that no one knows how to catch.’

If there is an overt wh-phrase, the clause does count as a wh-island.<sup>18</sup>

<sup>17</sup>Note the negative concord on the lower verb, apparently in agreement with the higher negation. This phenomenon occurs with perception verbs as well:

- (i) ‘T-iy-a-l, “Ma=te tama k-nomiy-a-w mahtoqehs yut tuciye-w?”  
 3-say.to-Dir-Obv Neg=Emph somewhere 2-see-Dir-Neg rabbit here go.by.3-Neg  
 ‘He said to him, “Haven’t you seen a rabbit going by here?”’ (Newell 1974a, 5)

It may be that some sort of restructuring takes place here, which could help to account for the non-island status of these clauses.

<sup>18</sup>The extraction is still ungrammatical with Conjunct morphology in the lower clause:

- (i) \*Not nit **otuhk-ol**<sub>1</sub> [ skat wen kesiciy-ahq [ **tan** wen eli-pson-at *t*<sub>1</sub> ] ] .  
 that.An that deer-Obv Neg someone IC.know.TA-3ConjNeg WH someone IC.thus-catch-3Conj  
 ‘This is the deer that no one knows how to catch.’ AH,SN 10:7.13

- (398) \* Not nit **otuhk-ol**<sub>1</sub> [ skat wen kesiciy-ahq [ **tan** wen  
 that.An that deer-Obv Neg someone IC.know.TA-3ConjNeg WH someone  
 't-oli-pson-a-n t<sub>1</sub> ] ] .  
 3-thus-catch-Dir-N  
 'This is the deer that no one knows how to catch.' AH,SN 10:7.13

The fact that if there is no wh-element the clause can be extracted from suggests that these headless relative clauses do not involve an operator in Spec-CP. If there is no operator, there is nothing to bind the variable introduced by the relative root—in the case of relative root relative clauses as in 396; without a relative root, as in 397, presumably there is no problem. However, the fact that there need not be any variable, as in the examples in 397, suggests that it is wrong to analyze even the examples in 396 as relative clauses with a null operator (a relative root argument) as head. Instead the difference between the presence of a wh-element and the absence of one is reminiscent of the English difference with infinitives:

- (399) a. My father taught me [ **how** to ride a bike ] .  
 b. My father taught me [ to ride a bike ] .

I suggest that the relative root in 396 is fulfilling a complementizer-type function (as may be present but null in English wh-infinitives like that in 399a), and does not actually introduce an argument.<sup>19</sup> *Eli-* does seem to act as a complementizer in other cases, to which we now turn.

### 3.3.2 The Element *Eli-*

The use of *eli-* 'thus' (with Initial Change) described above and illustrated in 396, we saw, superficially resembles a relative clause with the manner argument added by the relative root as its head. On such an analysis the null relative operator would bind the variable introduced by the relative root (Phil LeSourd, p.c.). However, we saw that the possibility of extracting from these clauses argued against a relative clause analysis, and suggested a complementizer analysis instead.

Many subordinate clauses also begin with the same element *eli-*, very often separated from the verb by the subject or some other constituent. These do not have the meaning of 'how' that the clauses in 396 did, however; they are simple declarative complements. For example, sentential subjects often begin with *eli-*, as do various types of clausal complements.<sup>20</sup>

#### (400) Sentential Subjects

- a. kis yaq cel al-taqot [<sub>CP</sub> **eli** ksinhkaha-t tama kuhec ] .  
 already Quot even around-heard.II C be.lost-3Conj somewhere warden  
 'It's already going around that a warden is lost somewhere.' (Newell 1974b, 6)
- b. Mec=ote toke pemkiskahk wewinaqot [<sub>CP</sub> **eli** kotama piyehs-w-ihq 'qoci-k  
 still=Emph now today be.seen.II C Neg hair-have-3ConjNeg backside-Loc  
 Espons ] .  
 raccoon

<sup>19</sup>The same may or may not be true of the locative *etoli-*; I do not know if *etoli-* clauses constitute islands.

<sup>20</sup>In 401b, an NP raised to object position usually precedes *eli*. See Chapter 5.

‘Still, even today, it can be seen that the raccoon has no hair on his hind end.’ (Mitchell 1921/1976a, 22)

## (401) Complement Clauses

- a. Nilun kahk oli-ya-yek, nitte=hc nona-ku-ne-n, naka [']-kosicihtun [<sub>CP</sub> 1P Emph there-go-1PConj right.away=Fut recognize-Inv-N-1P and 3-know.TI **eli** nilun kisi nehpeh-ek not otuhk ] .  
C 1P Perf kill-1PConj this deer  
‘If WE (excl) went, he’d recognize us right off, and know that we (excl) killed that deer.’ (Newell 1974b, 6–8)
- b. N-kociciy-a-k ’-tus [<sub>CP</sub> **eli** kis-cem-ahtit Susehp-ol ] .  
1-know.TA-Dir-3P 3-daughter.ObvP C Perf-kiss-3PConj S.-Obv  
‘I know that his daughters kissed Susehp.’ DF,DD 1:8.22
- c. Nt-assokitaham-a [<sub>CP</sub> **eli** skat nihtaw-aqosom-uhk aqalmiq wiyuhs ] .  
1-wonder.about-Dir C Neg know.how-cook-3ConjNeg wild meat  
‘I can’t believe she didn’t know how to cook wild meat.’ AH,SN 4:10.18

It is possible that all such subordinate clauses are nominalized, that is, are relative clauses with the relative root argument introduced by ‘thus’ as head (Phil LeSourd, p.c.). Such a hypothesis might be able to explain why *wh*-phrases and *eli*- generally do not co-occur (unless *eli*- introduces the argument being questioned):

## (402) WN5:11.15

- a. N-kosicihtun keq menuhmu-htit.  
1-know.TI what IC.buy-3PConj  
‘I know what they’re going to buy.’
- b. \*N-kosicihtun keq eli monuhmu-htit.  
1-know.TI what C buy-3PConj  
‘I know what they’re going to buy.’
- c. N-kosicihtun eli keq monuhmu-htit.  
1-know.TI C something buy-3PConj  
‘I know that they’re going to buy something.’

However, the same argument as that given above indicates that these clauses are not nominal. Clausal complements introduced by *eli*- can be extracted from easily:

- (403) a. **Tama** itom [<sub>CP</sub> **eli** kisi-ksokay-acqim-at awti-k ] ?  
where say.3 C Perf-across-drag-3Conj road-Loc  
‘Where did he say that he dragged it (An.) across the road?’ AH,SN 9:6.12
- b. Wot nit **pahtoliyas**<sub>1</sub> [ Mali elitahasi-c-il [<sub>CP</sub> **eli** wen  
this that priest M. IC.think-3Conj-PartObv C someone  
kisi-komutonom-ac-il *t*<sub>1</sub> ] ] .  
Perf-rob-3Conj-PartObv  
‘This is the priest that Mary thinks someone robbed.’ AH6:2.22

In contrast, unambiguous relative clauses form strong islands to extraction, as was shown above. This difference suggests that *eli*- clauses are not nominals formed via relativization.

Another argument against the nominal status of *eli*- clauses is the fact that they cannot be replaced by free relatives. That is, the clause does not have the distribution of a nominal. For example, the pattern we saw above with an inherently relative root, to mean ‘where he/she is’, cannot be replaced by a free relative:

(404) AH,SN 10:7.15

- a. Ma=te n-kosiciy-a-w **eyi-t**.  
Neg=Emph 1-know.TA-Dir-Neg IC.be-3Conj  
‘I don’t know where he is.’
- b. Ma=te n-kosiciy-a-w, tan te eyi-t.  
Neg=Emph 1-know.TA-Dir-Neg WH Emph IC.be-3Conj  
‘Wherever he is, I don’t know (about him).’

The free relative requires a pause, and does not mean ‘I don’t know his location at any point in time’. It can only be an appositive, as the English translation indicates.

The alternative explanation for the complementarity of *wh*-phrases and *eli*- shown in 402 is that *eli*- as a clausal subordinator represents some kind of Comp material. Then, like the English subordinator *that*, it cannot co-occur with *wh*-phrases due to some version of the Doubly-Filled Comp Filter (Chomsky and Lasnik 1977). The hypothesis that *eli*- is a clausal subordinator is advanced by Sherwood (1986), who says (p. 138) that *eli* is the changed form of *ol*- ‘thus’, “with no expressed antecedent; in this use, [/eli-/] apparently functions simply as a subordinator.” Sherwood does not commit to any kind of syntactic analysis, however.

One fact that does suggest that *eli* is a some kind of subordinator is that, in many languages, embedded left-dislocated elements, which occur to the left of matrix *wh*-phrases, *follow* the complementizer; in Passamaquoddy they follow *eli*:

- (405) N-kisi-akuhutehkas [<sub>CP</sub> **eli** [<sub>NP</sub> yet olu man ] , kisi-komutonatom ] .  
1-Perf-deny C that.Inan Top money Perf-steal.1Conj  
‘I denied that that money, I stole it.’ AH,SN 5:11.11

Compare the English ‘That money, *who* denied that he stole it?’ with ‘I denied *that* that money, I stole it’. As shown in Chapter 1, Passamaquoddy left-dislocated NPs also precede matrix *wh*-phrases. The fact that they follow *eli*- suggests that *eli*- is a complementizer, or at least that it occurs in the position of a complementizer.

I will assume that *eli*- is some kind of subordinator in Comp, and gloss it as “C” for “Complementizer.” The same analysis carries over to the clauses translated as ‘how’ (in 396).<sup>21</sup>

<sup>21</sup>However, I believe there is some evidence that *eli* moves to Comp and is not generated there as a complementizer. One reason is that *eli*- acts in all morphological respects like a preverb (Phil LeSourd, p.c.). If we assume that it is like the relative root preverbs that move to C when questioned (above, Section 3.2.2), we can account for this fact. *Eli*- is generated as a preverb and moves to C, where it acts as a subordinator. (Cf. Pesetsky and Torrego 2001, who hypothesize that English *that* begins in T and moves to C.)

### 3.4 Relative Root Questions and Complementation

Having seen how extraction in general works, let us now turn closer attention upon extraction of arguments introduced by relative roots, in particular to long-distance extraction. This turns out to work in a very interesting way: a relative root must be added to the matrix clause in addition to the subordinate clause where the argument is interpreted. I suggest that this pattern follows from the fact that *wh*-extraction takes place via the edge of the *v*P phase, and that an abstract Agree relation is necessary between the moving *wh*-phrase and *v*; the relative root is a reflection of this relation.

#### 3.4.1 Relative Root Arguments

In addition to the standard set of arguments—subject, primary object, secondary object (see Chapter 1)—Algonquian languages have another type of argument, usually called a “relative root argument” (see, e.g., Rhodes 1990b, 1998). These arguments are normally introduced by a preverb on the verb. For example, in order to specify or to ask ‘where’, a relative root (here *toli*) must be added to a verb:

(406) AH,SN 9:6.11

- a. N-qecimul-ku-n 'Tolitolli [<sub>CP</sub> n-**toli**-nomiy-a-n **Malikons-ok** ] .  
 1-ask-Inv-N T. 1-there-see-Dir-N Mulligan's-Loc  
 ‘Tolitolli asked me to meet her at Mulligan's.’
- b. Keqsey kisi-qecimul-osk 'Tolitolli [<sub>CP</sub> **tama** k-**toli**-nomiy-a-n ] ?  
 what Perf-ask-2ConjInv T. where 2-there-see-Dir-N  
 ‘Where did Tolitolli ask you to meet her?’

When the relative root argument is questioned, it uses Independent morphology rather than the Conjunct morphology of core argument questions. In 406b, this is indicated by the prefix /k-/, which occurs only in the Independent, and the Direct suffix /-a-/. (This is generally but not always true; ‘why’ questions, for example, which use the preverb *mehsi-*, are inflected in the Conjunct. They also use *keq* rather than *tan* or *tama*.)

Certain verbs appear to be inherently specified for this type of relative root argument. In the domain of locative adjuncts, for example, verbs of location inherently specify a relative root argument, and do not need to be prefixed with a relative root in order to specify the location:

- (407) Otuhk **yuk kcihku-k** iyu 'sami tahk sakoli-pskuw-a.  
 deer here forest-Loc be.3 because ? hard-find-Indef/3  
 ‘There's a deer **here in the forest** that's hard to find.’ AH,SN 10:7.13

We saw this verb above, where it could be relativized to form what might be translated as an indirect question (the examples in 395).

Like argument/adjuncts added by a separate relative root, when the argument of an inherently relative root is questioned the verb appears in the Independent rather than the Conjunct form; compare the relative clause in 409 (and those in 395):



- (408) a. Ma=te n-kosiciy-a-w [CP **tama iyu** ] .  
 Neg=Emph 1-know.TA-Dir-Neg where be.3  
 ‘I don’t know where he is.’ AH,SN 10:7.15 Independent
- b. Itom yaq, “**Tama** nil nt-i?”  
 say.to Quot where 1 1-be  
 ‘He said, “Where am I?”’ (Newell 1974b, 2) Independent
- (409) “on saku nt-ol-ahka-n-en otuhk nit-te qihiw **eyi-t**,”  
 then therefore 1-there-throw-N-1P deer there-Emph near IC.be-3Conj  
 ‘“so we threw away the deer right there near **where he was**,”’ (Newell 1974b, 6) Conjunct

The argument of a relative root must generally be expressed overtly.<sup>22</sup> For example, Leavitt (1996, 12) gives the following examples using *oli-* ‘thus; to there’ and *oloqi-* ‘in that direction’:

- (410) a. **oli-y-e** **uten-ek**  
 to.there-go-3 town-Loc  
 ‘s/he goes to town’
- b. ’t-**oloq**-aph-a-l **oloqi-w** **gospem-ok**  
 3-that.way-track-Dir-Obv that.way-Particle lake-Loc  
 ‘she tracked him toward the lake’

Note that the preverb resembles a free-standing particle in 410b—a preposition, which can introduce the overt argument of the relative root. (It has been hypothesized that relative roots are, diachronically and synchronically, incorporated prepositions; Craig and Hale 1987, 1988; Rhodes 1990b, 1998.)

Overt adverbial phrases added by relative roots often occur postverbally, like those in 410. However, they usually occur preverbally if they are pronominal (using inanimate demonstratives) or particles.<sup>23</sup>

- (411) a. Mehsi **nit** kil **tut**-alokiqa-yin?  
 X.reason **thus** 2 **X.extent**-eye-2Conj  
 ‘Why are your eyes so big?’ (Newell 1974a, 8)
- b. Nekom yaq pahtoliyas cel yaq wap-atpe, **nihkaniw tol**-imiye.  
 3 Quot priest even Quot white-hair.have.3 front there-pray.3  
 ‘He was the priest and he had white hair, he was at the front praying.’ (Newell 1974a, 5)

A postverbal locative phrase may also be doubled by a preverbal pronoun:

- (412) AH,SN 10:7.14
- a. **Etol**-mskuw-at nicalku-l **utene-k**.  
 IC.there-find-3Conj 3.uncle-Obv town-Loc  
 ‘He found his uncle in the town.’
- b. **Nit** **etoli**-mskuw-at nicalku-l **utene-k**.  
 there IC.there-find-3Conj 3.uncle-Obv town-Loc  
 ‘He found his uncle there in the town.’

<sup>22</sup>According to Leavitt (1996, 12), there are four relative roots that do not require an antecedent: *ckuwi-* (*weckuwi-*) ‘toward here’, *olomi-* (*elomi-*) ‘away from here’, *peci-* ‘toward’, and *mace-* ‘away, beginning’. These are all deictic, usually with the speaker’s location as the one referred to. *Mace-* also has an aspectual use, ‘to start doing’.

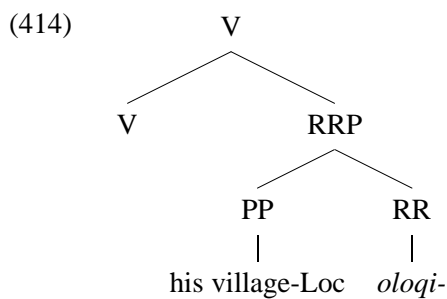
<sup>23</sup>Note that in such cases the Subordinative mode is often used, rather than the Indicative (unless the context demands the Conjunct, as in ‘why’ questions). On this topic, see Goddard (1983), and, with a theoretical analysis, Bruening and Rackowski (2000).

### 3.4.2 Analysis

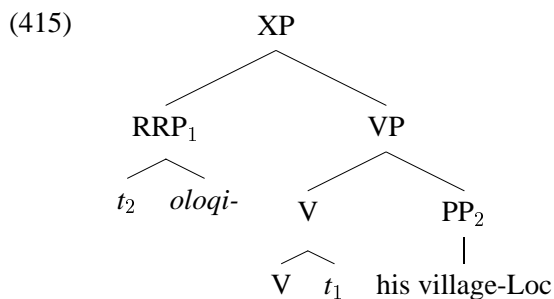
Cross-linguistically, locative arguments that are added to a verb by valence-changing morphology are structurally low, being c-commanded by other arguments (Baker 1988a, Marantz 1993). In Passamaquoddy, subjects at least c-command into locative phrases that are added by a relative root:

- (413) On yatte wen 't-**oloqi**-ya-n 't-**utene-k**.  
 then each someone 3-that.direction-go-N 3-village-Loc  
 'Then each one<sub>1</sub> goes toward his<sub>1</sub> own village.' (Mitchell 1921/1976c, 18)

As mentioned briefly above, I will hypothesize that relative roots and their arguments enter the derivation as a constituent, inside the VP and below the core arguments (subject, primary object, secondary object):



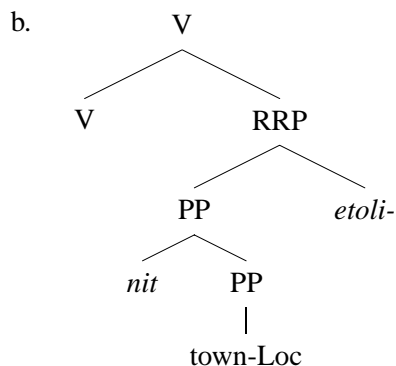
A full prepositional phrase generally raises, either to a higher specifier or to adjoin to VP. The remnant RRP moves to a preverbal position, from which the preverb attaches phonologically to the verb stem:



When the PP is a proform, it will simply move as part of the containing RRP, like the wh-phrase case described in Section 3.2.2.

The PP can also be doubled; I hypothesize that this involves the following structure, where the PP as a whole is represented by the proform *nit*, and is restricted by another PP (see Chapter 4):

- (416) a. **Nit etoli**-mskuw-at nicalku-l **utene-k**.  
 there IC.there-find-3Conj 3.uncle-Obv town-Loc  
 'He found his uncle *there in the town*.' AH,SN 10:7.14

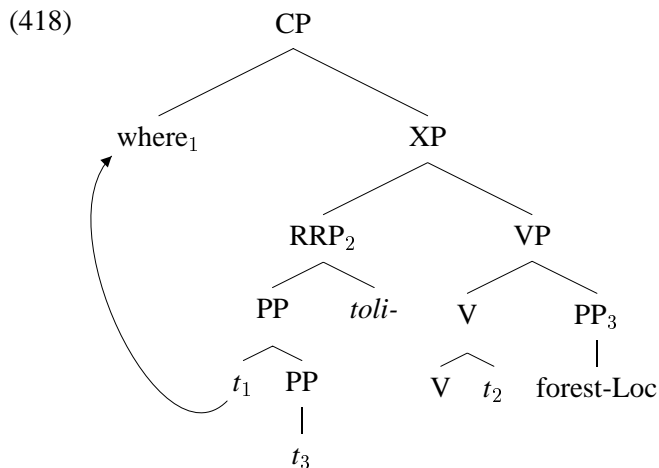


The PP ‘in the town’ will, again, move out of the RRP, whereupon the remnant will raise to a preverbal position, taking *nit* along with it.

In addition to the inanimate locative proform, a wh-phrase can co-occur with a PP:

- (417) a. **Tama**=c k-**toli**-ya-pon wolakuk **etolosmutim-ok**?  
 where=Fut 2-there-go-1P tonight bar-Loc  
 ‘Which bar should we go to tonight?’ AH1:9.7
- b. **Tama** k-**toli**-nomiy-a-k kehceyawihitit weyossis-ok **kcihku-k**?  
 where 2-there-see-Dir-3P be.many-3PConj animal-3P forest-Loc  
 ‘Which forest did you see a lot of animals in?’ AH,SN 2:9.12

In these sentences the locative phrase serves to restrict the more general question over locations, to those locations that are bars and forests, respectively. I suggest that this involves the same structure, with fronting of the RRP followed by wh-movement:



Questions like this are similar to the English ‘*Where* did you see him *in the forest*?’ , where the PP can either be split off the wh-phrase, or pied-pipe with it: ‘*Where in the forest* did you see him?’ . In Chapter 4, I will suggest that these are locative counterparts of the propositional wh-scope marking.

The precise analysis of relative root arguments is not crucial to the current study. It is useful to have something concrete to work with, however, as the analysis of clause-embedding inherently relative root verbs will be important to long-distance extraction and wh-scope marking in the next chapter.

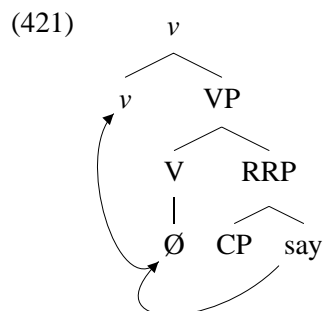
### 3.4.3 Relative Root Complement Clauses

It turns out that there are several verbs whose clausal argument acts like it is an inherently specified relative root argument, similar to the locatives and other relative root arguments illustrated above. When their CP argument is questioned, for example, they use the Independent rather than the Conjunct: compare ‘tell’ and ‘say’, inherently relative roots, with ‘ask’ and ‘deny’, which are not inherently relative:

- (419) a. Keq kt-iy-oq Piyel?  
 what 2-say.to-Inv P.  
 ‘What did Piyel tell you?’ AH,SN 9:6.15 Independent
- b. Keqsey kisi-qecimul-osk ’Tolitolil?  
 what Perf-ask-2ConjInv T.  
 ‘What did ’Tolitolil ask you?’ AH,SN 9:6.11 Conjunct
- (420) a. Keq itom Scooby-Doo?  
 what say.3 S.  
 ‘What does Scooby-Doo [a watch] say?’ AH,SN 9:6.13 Independent
- b. Keq Mihku ikonewato-k?  
 what M. deny-3Conj  
 ‘What did Mihku deny?’ AH,SN 9:6.10 Conjunct

At least one other phenomenon indicates that these verbs are inherently relative, and differ from other verbs taking clausal complements. This is the fact that long-distance extraction of relative root arguments is only possible by adding a relative root to the higher verb as well as to the verb where the argument is interpreted. Inherently relative root verbs are the only ones that do not require the addition of a relative root, indicating that they themselves are already relative roots. This phenomenon will be returned to in Section 3.4.6.

I will hypothesize that inherently relative root verbs (whether taking locative or CP arguments) are the combination of a relative root and an empty verb; the relative root undergoes head movement to adjoin to the verb and to *v*:



### 3.4.4 Non-Relative Root Complement Clauses

Verbs that are not inherently relative but take clausal complements can be any category morphologically: they can be intransitive (AI, e.g., *mihqitahasu* ‘suddenly remember’, *piluwitahasu* ‘suspect’, *tepitahasu* ‘think’,

*assokitahasu* ‘be amazed, wonder (at)’), or transitive. Transitive verbs can be TA (e.g., *wicuhkemat* ‘help’, *kisiyahsimal* ‘convince’, *qecimulal* ‘ask’, *tolokimal* ‘tell to do’) or TI (e.g., *pawatomon* ‘want’, *nomihtun* ‘see (epistemic)’, *taskuwahtun* ‘wait for’, *nokatomon* ‘fear’). All of the TA verbs share an argument: the object is also an argument of the lower clause, usually the subject. Agreeing versions of raising to object verbs (see Chapter 5) are also TA verbs; the non-agreeing versions are TI verbs. There are also some clause-embedding AI+O verbs: *uttemin* ‘cry about’ and *unitahasin* ‘forget’. There are also perception verbs, which come in both TA and TI forms.

Finally, a set of verbs is morphologically ditransitive. These take an NP primary object, and a CP complement which may be secondary object. Most of these are equivalent to Object Control verbs: *kiseltomuwan* ‘allow’, *kolamuwan* ‘forbid’, *powatomuwan* ‘want’, *kisehtuwan* ‘make’. One exception is *takonutomuwan* ‘tell someone something’, which can occasionally take a clause as well as an NP as the thing that is told.

(Inherently relative root verbs also differ in transitivity and morphological properties: *litahasu* ‘think’ is AI, *tiyal* ‘say to’ is TA, and *itom* ‘say’ is TI, but with odd morphological properties.)

Extraction does not distinguish any of the different types of non-relative root verbs. It is possible to question the CP complement of any of these verbs, and to question an argument of the lower clause. Both cases act the same as far as the morphology of the matrix verb is concerned—the matrix verb is always in the Conjunct:

## (422) TA

- a. Keqsey Petak elkim-at witapihi?  
 what P. IC.instruct-3Conj 3.friend.ObvP  
 ‘What did Petak tell his friends to do?’ AH,SN 10:7.15
- b. ?Wen-ih ihi kisi-elkim-ot Petak wicuhkem-a-n?  
 who-ObvP Perf-instruct-2Conj P. help-Dir-N  
 ‘Who all did you tell Petak to help?’ AH,SN 10:7.14

## (423) TI

- a. Keqsey wewitahatom-on?  
 what remember.TI-2Conj  
 ‘What do you remember?’ AH,SN 9:6.15
- b. Keq skat wewitahatom-uhk Piyel kisi-mil-uk Susehp?  
 what Neg remember.TI-3ConjNeg Piyel Perf-give-1Conj S.  
 ‘What doesn’t Piyel remember that I gave to Susehp?’ WN4:10.18

## (424) TA+O (shared argument)

- a. Keqsey kiseltom-uw-at ’-tus-ol?  
 what permit-App-3Conj 3-daughter-Obv  
 ‘What does he permit his daughter?’ WN9:6.13
- b. Keq(sey) skat kiseltom-a-luhk k-nisuwiyek kt-itom-on?  
 what Neg permit-App-2ConjInvNeg 2-spouse 2-say-N  
 ‘What doesn’t your husband let you say?’ AH,SN 6:2.24

(425) TA+O (no shared argument; WN9:6.13)

- a. Keqsey akonutom-uw-at w-itapih-il?  
 what tell.story-App-3Conj 3-friend-Obv  
 ‘What did he tell his friend?’
- b. Wen-il akonutom-uw-at w-itapih-il kesinuhka-li-c-il?  
 who-Obv tell.story-App-3Conj 3-friend-Obv IC.be.sick-ObvS-3Conj-PartObv  
 ‘Who did he tell his friend was sick?’

All of these verbs take Conjunct morphology when their CP complement is questioned, and when it is questioned out of. Transitives are shown above; the same holds with intransitives:

- (426) a. Keq=apc sesolahki=te mihqitahas-iyin ehcuwi-monuhmon-s?  
 what=again suddenly=Emph remember-2Conj IC.must-buy.2Conj-DubPret  
 ‘What else did you suddenly remember you had to buy?’ AH,SN 8:5.8 AI
- b. Keqsey piluwitahas-iyin Piyel nemiht-aq?  
 what suspect.AI-2Conj P. IC.see.TI-3Conj  
 ‘What do you suspect that Piyel saw?’ AH,SN 6:3.2 AI
- c. Wen-ik wettem-ihin-(ik) kisi-tomkehl-ot/c-ik?  
 who IC.cry.about-2Conj-Part3P Perf-run.over-2Conj-(Part3P)  
 ‘Who are you crying about running over?’ AH,SN 6:2.24 AI+O

Conjunct morphology appears both when the questioned argument is a core argument, and when it is one of the complex relative root arguments discussed above:

(427) WN4:10.18

- a. Keq skat wewitahatom-uhk Piyel kisi-mil-uk Susehp?  
 what Neg remember.TI-3ConjNeg Piyel Perf-give-1Conj S.  
 ‘What doesn’t Piyel remember that I gave to Susehp?’
- b. Tan kehson(-ol) atomupil-ol skat wewitahatom-uhk Piyel kisi-mil-uk  
 WH X.many-(InanP) car-InanP Neg remember.TI-3ConjNeg Piyel Perf-give-1Conj  
 Susehp?  
 S.  
 ‘How many cars doesn’t Piyel remember that I gave to Susehp?’
- c. Tan-iyut atomupil skat wewitahatom-uhk Piyel kisi-mil-uk Susehp?  
 WH-this.Inan car Neg remember.TI-3ConjNeg Piyel Perf give-1Conj S.  
 ‘Which car doesn’t Piyel remember that I gave to Susehp?’

In contrast, as shown above, inherently relative roots take Independent morphology in both cases, just as they take Independent morphology when the complement itself is questioned:

- (428) a. Keq kt-iy-oq (Piyel)?  
 what 2-say.to-Inv (P.)  
 ‘What did he (Piyel) tell you?’ AH,SN 9:6.15

- b. Kehsuw-ok otuhk-ok nt-iy-oq Pil meson-ac-ih?  
X.many-3P deer-3P 1-say.to-Inv Bill IC.catch-3Conj-PartObvP  
'How many deer did Bill tell me he caught?' AH,SN 9:6.13
- c. Keqsey Pil kt-iy-oq ketuw-aqosom-a-sk?  
what Bill 2-say.to-Inv IC.Fut-cook-App-2ConjInv  
'What did Bill tell you he was going to cook for you?' AH8:5.6

Note that the lower clause has whatever morphology is appropriate: in these examples, Conjunct (the lower verbs are not themselves inherently relative root verbs).

C-command tests all indicate that the CP complement of non-inherently relative root verbs is low, c-commanded by all other arguments in the clause:

- (429) a. Ma=te wen wewitaham-a-wiy-il wen-il nemiy-at-s neke  
Neg=Emph someone remember.TA-Dir-Neg-Obv who-Obv IC.see-3Conj-DubPret Past  
welaqiwik.  
night  
'No one<sub>1</sub> remembers who he<sub>1</sub> saw that night.' AH,SN 8:5.5
- b. Ma=te wen 'kolam-uw-a-w-on Piyel-ol wikuwamkom-ku-n cika=te  
Neg=Emph someone 3-forbid-App-Dir-Neg-N P.-Obv visit-Inv-N even.if=Emph  
eli-ksinuhk-at.  
IC.thus-be.sick-3Conj  
'No one<sub>1</sub> forbade Piyel to visit him<sub>1</sub> even though he<sub>1</sub> was sick.' AH,SN 9:6.14

The same holds for relative root complement clauses:

- (430) a. Litahasu psi=te wen n-cuwi-kospaht-uw-a-n utapakon.  
think.3 all=Emph someone 1-must-wash.TI-App-Dir-N 3.car  
'Everyone<sub>1</sub> thinks I should wash his<sub>1</sub> car.' AH7:3.18
- b. Nt-iy-oq psi=te wen eli koti-wikuwamkom-at nisuwihtic-il.  
1-say.to-Inv all=Emph someone C Fut-visit-3Conj 3.spouse-Obv  
'Everyone<sub>1</sub> told me that s/he<sub>1</sub> was going to visit his/her<sub>1</sub> spouse.' AH,SN 10:7.15
- c. Tama 't-iy-a-l psi=te wen-il 'tli-koti-nomiy-a-l?  
where 3-say.to-Dir-Obv all=Emph someone-Obv 3-there-Fut-see-Dir-Obv  
'Where did he tell everyone<sub>1</sub> that he would meet him<sub>1</sub>?' AH,SN 10:7.13

Binding holds even when the CP is doubled with the inanimate demonstrative.<sup>24</sup>

<sup>24</sup>Binding is not possible when the CP is doubled with the inanimate demonstrative, if the CP is fronted:

(i) AH,SN 10:7.15

- a. Susehp (eli) koti-wikuwamkom-at 't-iy-a-n psi=te wen-il.  
S. (C) Fut-visit-3Conj 3-say.to-Dir-N all=Emph someone-Obv  
'That Susehp would visit him<sub>1</sub> he told everyone<sub>1</sub>.'
- b. \* Susehp (eli) koti-wikuwamkom-at nit 't-iy-a-n psi=te wen-il.  
S. (C) Fut-visit-3Conj that.Inan 3-say.to-Dir-N all=Emph someone-Obv  
'That Susehp would visit him<sub>1</sub> he told everyone<sub>1</sub>.'

- (431) a. Nit nt-iy-oq psi=te wen eli koti-wikuwamkom-at nisuwihitic-il.  
 that.Inan 1-say.to-Inv all=Emph someone C Fut-visit-3Conj 3.spouse-Obv  
 ‘Everyone<sub>1</sub> told me it that s/he<sub>1</sub> was going to visit his/her<sub>1</sub> spouse.’ AH,SN 10:7.15
- b. Susehp nit ’t-iy-a-l psi=te wen-il eli koti-wikuwamkom-at.  
 S. that.Inan 3-say.to-Dir-Obv all=Emph someone-Obv C Fut-visit-3Conj  
 ‘Susehp told everyone<sub>1</sub> it that he would visit him<sub>1</sub>.’ AH,SN 10:7.15

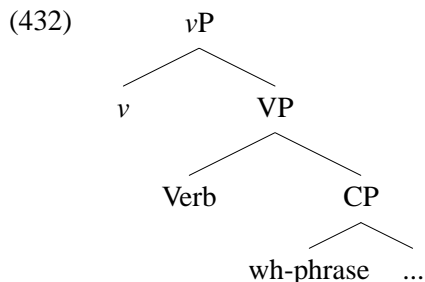
The binding facts for the relative root verbs follow from the structure proposed above. The CP is introduced as the complement of a relative root verb, below any other arguments (core arguments) of the verb. For the non-relative root verbs, we need only assume that the CP complement is lower than any other, especially the subject.

Note that the CP complement does not have to be marked as an argument of the verb. AI verbs are morphologically intransitive, and have no object; and the TA verbs have an object in addition to the CP; they agree with that object, and not with the CP. As for the AI+O, TI, and TA+O verbs, the clause may be the argument that is marked on the verb, but it might not be. The verbs themselves might be just formally transitive, and register default object agreement.

### 3.4.5 Agree and Successive Cyclicity

I will hypothesize that the difference in morphology (Conjunct vs. Independent) between inherently relative roots and non- in long-distance questions is due to the necessity of an Agree relation being established between the matrix  $v$  and the wh-phrase. In order to move to the matrix CP, the wh-phrase must move through Spec- $v$ P, according to the theory of phases: if it does not, it will be unable to escape the  $v$ P phase, will be spelled out with that phase, and the derivation will crash. In order to move to the specifier of any head, the head must Agree with the element to be moved. It follows that  $v$  must agree with any wh-phrase from a lower clause that is to take matrix scope.

For instance, at the point shown in 432, where a lower wh-phrase has moved to embedded Spec-CP, it must Agree with  $v$  in order to move further:



### Raising to Object Verbs

The necessity of this Agree relation is easiest to see with raising to object verbs. As will be shown in Chapter 5, these verbs embed a CP complement but can optionally register agreement with an argument from the lower clause. This argument often moves to a position at the left edge of the lower clause:



- (433) Susehp ' -koscicy-à                    **akòm**                    eli Muwin kisi-mil-at                    Wiphun.  
 S.            3-know.TA-Dir.**ObvP** snowshoe.**ObvP** C    M.            Perf-give-3Conj W.  
 'Susehp knows that Muwin gave Wiphun snowshoes.' AH,SN 3:9.27

With embedded questions, the raising to object verb often agrees with the embedded wh-phrase, as in 434a, but it need not. In 434b–c, the verb agrees with some other argument; in 434c this argument appears to the left of the embedded wh-phrase:

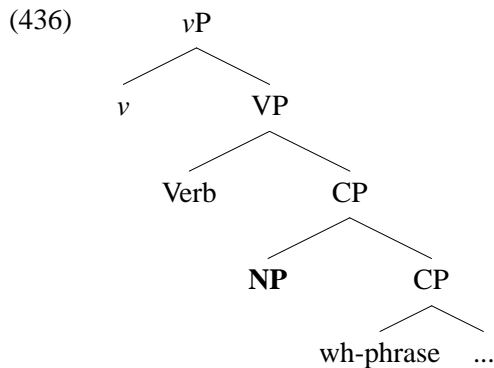
- (434) a.    Tihtiyas ma=te                    wewitaham-**a-wiy-il**                    **wen-il**                    amsqahs kis-aqosom-uw-iht  
 T.            Neg=Emph remember-Dir-Neg-Obv who-Obv first                    Perf-cook-App-3ConjInv  
 kiwhosu.  
 muskrat.ObvP  
 'Tihtiyas doesn't remember who first cooked muskrat for her.' AH,SN 6:3.3
- b.    N-koscicy-**a-k**                    keq **nuhuw-ok muwinuw-ok** kis-temu-htit.  
 1-know.TA-Dir-3P what three-3P bear-3P                    Perf-eat-3PConj  
 'I know what the three bears ate.' AH7:4.5
- c.    N-koscicy-**a-k**                    **nuhuw-ok muwinuw-ok** keq kis-temu-htit.  
 1-know.TA-Dir-3P three-3P bear-3P                    what Perf-eat-3PConj  
 'I know what the three bears ate.' AH7:4.5

However, a long-distance matrix wh-question *requires* agreement with the wh-phrase and does not permit agreement with any other argument:

- (435) AH,SN 6:3.2
- a.    **Wen<sub>1</sub>** kil piluwitaham-**ot** kisi-komutonom-uk  $t_1$ ?  
 who 2 suspect-2/3Conj Perf-rob-1Conj  
 'Who do you suspect that I robbed?'
- b.    \***Wen<sub>1</sub>** kil piluwitaham-**iyin** kisi-komutonom-uk  $t_1$ ?  
 who 2 suspect-2/1Conj Perf-rob-1Conj  
 'Who do you suspect me that I robbed?'

To see why, let us return to the point of the derivation of a long-distance matrix question shown in 432. Here a wh-phrase has moved to the embedded Spec-CP and must move further, eventually to the matrix Spec-CP. In order to do so it must move to the edge of the  $\nu$ P phase; and in order to do that, it must Agree with  $\nu$ . Raising to object verbs are the one type of verb that can morphologically express this Agree relation; it is spelled out as what would be object agreement in a simple transitive verb.

The reason the verb cannot Agree with some other argument follows from economy considerations. As argued in Chapter 5, any NP that is to Agree with the higher verb must move to a clause-peripheral position:



The verb now has the option of entering into two Agree relations, or just one. It *must* Agree with the wh-phrase, in order for the wh-phrase to move to matrix Spec-CP; it could in addition Agree with the moved NP, and register that agreement morphologically. Economy considerations dictate that it Agree with one element only, unless that would result in features remaining unchecked. As argued in Chapter 5, there are no requirements on the raised NP in raising to object structures. Therefore there is no reason for the verb to Agree with it, and by economy it cannot; it must Agree only once, with the wh-phrase.

It is not just that a raising to object verb cannot Agree with some NP other than a matrix wh-phrase, it is also unable to simply *not* Agree (and receive default TI agreement).<sup>25</sup>

(437) DF6:3.2

- a. Wen mihqitaham-ot kisi-komutonom-uw-at Piyel-ol?  
 who remember.TA-2Conj Perf-rob-App-3Conj P.-Obv  
 ‘Who did you remember robbed Piyel?’
- b. \*Wen mihqitahatom-on kisi-komutonom-uw-at Piyel-ol?  
 who remember.TI-2Conj Perf-rob-App-3Conj P.-Obv  
 ‘Who did you remember robbed Piyel?’

If the TI form appears only when no Agree relation is established, this restriction also follows. Agree is necessary for wh-movement through vP; therefore the TI form will never be derived.

### Conjunct Versus Independent

Raising to object verbs are able to express the Agree relation between *v* and a moving wh-phrase as object agreement. Most other clause-embedding verbs are not able to morphologically express this relation (except through the participle endings analyzed in Chapter 4). However, Agree *is* registered in other ways morphologically, in particular in the form of inflection.

Here it would be desirable to spell out a theory of the distribution of the Conjunct and the Independent Orders, but such a theory is well out of the scope of this study. (Some recent theories of their distribution are those of Brittain 1999 and Richards 2000.) Instead I will simply observe the general fact that relative root argument extraction triggers Independent morphology (except for ‘why’ questions), while core argument

<sup>25</sup>This fact was observed by Branigan and Mackenzie 1999.

extraction triggers Conjunct morphology. This morphology in long-distance extraction, I suggest, is a reflex of Agree.

When a higher *v* Agrees with a *wh*-phrase in embedded Spec-CP, the form of the verb will be determined by the type of the *wh*-phrase. If the verb is not an inherently relative root, it will Agree with the *wh*-phrase as though it were a core argument, because that is the only kind of argument it can take. This will result in Conjunct morphology. The actual agreement does not have to be morphologically realized, nor will it override any other agreement relations. An AI verb, for example, does not have to become transitive, and a TA verb still agrees with its NP object. (Agree can be spelled out as participle agreement).

If the verb is an inherently relative root, it will Agree with the *wh*-phrase as though it were a relative root argument, because that is the type of argument it takes. This will result in Independent morphology.

Inherently relative root verbs, of course, take core arguments as well as relative root arguments. Their subject is a core argument: when questioned, it results in Conjunct morphology. In addition, *'tiyal*, 'say to', takes an NP object, which it agrees with on the pattern of a TA verb. It follows that an inherently relative root verb ought to also be able to Agree with a *wh*-phrase as though it were a core argument rather than a relative root argument. This turns out to be true. While long-distance extraction can and often does result in Independent morphology on the matrix verb, it is also possible for the verb to be in the Conjunct.<sup>26</sup>

(438) *itom* 'say'

- |    |  |  |
|----|--|--|
| a. | Wen <b>itom</b> Mihku nekka-hl-ac-ih<br>who say.3 M. IC.completely-eat-3Conj-PartObvP<br>'Who did Mihku say ate all the cookies?' AH,SN 6:2.28             | sukolopan-is-ok?<br>cake-Dim-3P<br>Independent |
| b. | Wen-il Mali <b>ito-k-il</b> kisi-pinuwi-t wolaku?<br>who-Obv M. say-3Conj-PartObv Perf-bingo-3Conj<br>'Who did Mary say got bingo yesterday?' AH,SN 6:2.26 | yesterday<br>Conjunct                          |

(439) *litahasu* 'think'

- |    |  |                                    |
|----|--|------------------------------------|
| a. | Keqsey kt-olitahas op keti wen mil-ot Nipayimiyan?<br>what 2-think would IC.Fut someone give-2Conj<br>'What do you think we should give to people for Christmas?' AH2:9.14 | Christmas<br>Independent           |
| b. | Wen-ih<br>who-ObvP IC.think-2Conj P. rob-3Conj-PartObvP<br>'Who all do you think that Piyel robbed?' AH,SN 6:3.2   | Piyel komutonom-ac-ih?<br>Conjunct |

Note that it is absolutely impossible for the questioned clause itself to trigger Conjunct morphology. It is the relative root argument, and cannot be treated as anything but.<sup>27</sup>

- |          |   |             |
|----------|---|-------------|
| (440) a. | Keq itom Scooby-Doo?<br>what say.3 S.<br>'What does Scooby-Doo [a watch] say?' AH,SN 9:6.13 | Independent |
|----------|---|-------------|

<sup>26</sup>This is especially true of *litahasu*, 'think'. I suspect that *litahasu* is not generally treated as an inherently relative root verb, but can be because it includes the preverb *oli-*. Thus it generally appears in the Conjunct with long-distance extraction, but permits long-distance relative root questions due to the presence of *oli-*.

<sup>27</sup>The difference between questioning the CP, which requires the Independent, and questioning out of the CP, which permits the Conjunct, indicates that agreement with the CP itself is not a prerequisite for extraction.

- b. \* Keq ito-k Scooby-Doo?  
 what say-3Conj S.  
 ‘What does Scooby-Doo say?’ AH,SN 9:6.13 Conjunct

The same fact will account for long-distance relative root questions: relative root arguments *must* agree as such, meaning that they cannot be extracted through any clause that does not have a relative root and cannot take a relative root argument.

### 3.4.6 Long-Distance Relative Root Questions

A long-distance adjunct question can be formed only by the addition of a relative root to the higher verb in addition to the lower, where it is interpreted.<sup>28</sup>

(441) AH,SN 9:6.15

- a. \* **Tama** ’-kolam-uw-a-n ’-tus-ol ’t-**otoli**-nomiy-a-n Piyel-ol?  
 where 3-forbid-App-Dir-N 3-daughter-Obv 3-there-see-Dir-N P.-Obv  
 ‘Where did he forbid his daughter to see Piyel?’
- b. **Tama** ’t-**otoli**-kolam-uw-a-n ’-tus-ol ’t-**otoli**-nomiy-a-n Piyel-ol?  
 where 3-there-forbid-App-Dir-N 3-daughter-Obv 3-there-see-Dir-N P.-Obv  
 ‘Where did he forbid his daughter to see Piyel?’

(442) WN9:6.13

- a. \* **Tama** Susehp ’-kiselom-uw-a-n ’-tus-ol ’-**toli**-ya-li-n.  
 where S. 3-permit-App-Dir-N 3-daughter-Obv 3-there-go-ObvS-N  
 ‘Where does Susehp let his daughter go?’
- b. **Tama** ’-**toli**-kiselom-uw-a-l ’-tus-ol ’-**toli**-ya-li-n.  
 where 3-there-permit-App-Dir-Obv 3-daughter-Obv 3-there-go-ObvS-N  
 ‘Where does he let his daughter go?’

It is not just the question word *tama* that requires this; in order to extract the default wh-word *tan*, a relative root is required on the higher verb as well (the verb meaning ‘happen’ contains at least in part a relative root, or is an inherently relative root):

- (443) **Tan** op Pil li-pawatom leyu?  
 WH would Bill thus-want happen  
 ‘What would Bill want to happen (do you think)?’ AH,SN 6:2.24

Inherently relative root verbs are the only ones that do not require the addition of a relative root. Relative root arguments can be extracted across them without any difficulty:

<sup>28</sup>I have one example of an apparent long-distance relative root question without a higher relative root:

- (i) Tama k-pawatom-a-ku-n ’Tolitol k-toli-nomiy-a-n?  
 where 2-want-App-Inv-N T. 2-there-see-Dir-N  
 ‘Where does Tolitol want you to meet her?’ AH,SN 9:6.11

I do not know what to make of this example. On other occasions the same speakers used a relative root with this same verb.

(444) AH,SN 9:6.11

- a. **Tama** kt-itom [<sub>CP</sub> k-**toli**-koti-nomiy-a 'Tolitolil ] ?  
 where 2-say 2-there-Fut-see-Dir T.  
 'Where did you say you're going to meet 'Tolitolil?'
- b. **Tama** kt-olitahas [<sub>CP</sub> k-**toli**-koti-nomiy-a 'Tolitolil ] ?  
 where 2-think 2-there-Fut-see-Dir T.  
 'Where do you think you're going to meet 'Tolitolil?'

In fact, if a relative root *is* added to the higher verb, it results in a matrix interpretation of the wh-phrase. In the following set, the verb 'drag across' (which includes a relative root *kosokay*) does not need the preverb *toli-* in order to question 'where':

(445) AH,SN 9:6.12

- a. Tama itom eli kisi-ksokay-acqim-at awti-k?  
 where say.3 C Perf-across-drag-3Conj road-Loc  
 'Where did he say that he dragged it (An.) across the road?'
- b. Tama '-toli-itom eli kisi-ksokay-acqim-at awti-k?  
 where 3-there-say C Perf-across-drag-3Conj road-Loc  
 'Where was he when he said that he dragged it (An.) across the road?' (\*where drag)

The requirement of a higher relative root I hypothesize to be an instance of the same fact as the above: that Agree is a prerequisite for movement. As explained above, in order for a wh-phrase to move to Spec-*v*P, it must enter into an abstract Agree relation with *v*. In Passamaquoddy, *v* is only able to Agree with core arguments, unless a relative root is added. This restriction on Agree is just an empirical fact: relative root arguments can not be added to a clause as an adjunct; they require a relative root on the verb. (Agree in many ways fulfills the function of syntactic licensing: it checks off formal features, without which checking the derivation would crash.) It follows that if *v* is to Agree with a relative root argument, a relative root must be added.<sup>29</sup> This explains the pattern above: a long-distance relative root question requires the addition of a relative root to the higher verb, unless that verb is inherently relative. An inherently relative root verb can Agree with a relative root argument, without the addition of another relative root.

The form of the relative root itself will only be locally determinable. That is, at the point at which the higher *v* Agrees with the wh-phrase, only the features of the wh-phrase are visible for determining the form of the relative root. Thus *tama* questions, which are inherently locative, require the locative preverb *toli-*:

(446) **Tama** 't-**otoli**-kolam-uw-a-n '-tus-ol 't-**otoli**-nomiy-a-n Piyel-ol?  
 where 3-there-forbid-App-Dir-N 3-daughter-Obv 3-there-see-Dir-N P.-Obv  
 'Where did he forbid his daughter to see Piyel?' AH,SN 9:6.15

But if the question word is *tan*, the default, with no feature specification other than [+wh], only a default relative root may be added. This appears to be *oli-*, usually glossed 'thus', but introducing all kinds of manners, degrees, instruments, and other types of relations:

<sup>29</sup>Problems with cyclicity need not arise, even though relative roots are structurally lower than *v*. When the higher clause is being constructed, the information that the wh-phrase is a relative root argument will be available. Derivations that add a relative root will converge, while those that do not will not.

- (447) **Tan kt-oli-wewitaham-a-n tan tuci-molikikona-n-ess?**  
 WH 2-thus-remember.TA-Dir-N WH X.extent-be.strong.3-N-DubPret  
 ‘How strong do you remember he was?’ AH,SN 10:7.13 relative root

Rather than adding the same relative root as in the lower clause (*tuci-*), the default *oli-* is used. This fact follows from the theory of phases and the condition that wh-phrases Agree: the relative root is a reflection of a local Agree relation between the matrix verb and the wh-phrase; only the features of *tan* are available, without looking down into the lower phase (which would violate the Phase Impenetrability Condition)<sup>30</sup>

Note that just in these cases the form of the verb is not the form that would be derived by extracting the complement CP itself, rather than an element from within the complement. The matrix verb is in its Independent form. This is the form that usually occurs with relative root extraction, indicating that Agree does, in fact, treat the wh-phrase as a relative root argument.

Further evidence for this theory comes from long-distance ‘why’ questions. We saw above that these are formed with the relative root *mehsi-*, ‘for X.reason’, which can move to Spec-CP with its wh-argument *keq*. The two can also move together long-distance:<sup>31</sup>

- (448) a. **Keq mehsi elitahas-iyin Susehp ’-komutonoma-l Piyel-ol?**  
 what X.reason IC.think-2Conj S. 3-steal.from-Obv P.-Obv  
 ‘Why do you think Susehp stole from Piyel?’ AH,SN 3:9.23
- b. **Keq mehsi elitahasi-yin Mihku ’-kisi-pson-a-l otuhk-ol?**  
 what X.reason IC.think-2Conj M. 3-Perf-catch-Dir-Obv deer-Obv  
 ‘Why do you think Mihku caught the deer?’ AH,SN 6:3.3

The question in 448b can be answered with either ‘because I saw him’, or ‘because he wants to eat it’. That is, it can be either a matrix question or a long-distance question. Either way, the matrix verb is in the Conjunct, as questions with ‘why’ independently require. In other words, the form of the matrix verb is just what would be expected of the relative root extraction itself, as the Agree theory predicts.<sup>32</sup>

<sup>30</sup>There is another possibility for long-distance relative root questions, at least with certain matrix predicates; this is to add the relative root only to the higher verb:

- (i) **Kehsi-pawatom-on-(ik) k-nomiy-a-n apikciluwih-ik?**  
 X.many-want-2Conj-(Part3P) 2-see-Dir-N skunk-3P  
 ‘How many skunks do you want to see?’ AH,SN 10:7.15

<sup>31</sup>All of the examples I have of this use a higher inherently relative root verb. I do not know if it is possible with a non-relative root verb.

<sup>32</sup>Note that the lower verb in 448a–b is in the Independent, even on the long-distance interpretation. This might indicate that the choice of Independent or Conjunct is determined by what occupies Spec-CP: ‘why’ questions require the Conjunct because *keq mehsi-* together end up in Spec-CP, just like relative clauses require the Conjunct because a relative operator occupies CP. (Other relative root argument questions will require the Independent.) In the long-distance interpretation of 448b, nothing but a trace occupies the lower Spec-CP, permitting the Independent form. A theory of this sort is confirmed by the ability of a limited class of complement clauses (those that are normally required to be in the Subordinative mode of the Independent Order) to be in the Independent form even in long-distance relativization:

- (i) **Yut nit skat nisuwiyek kiseltomuw-ihq n-uskuhutomo-n.**  
 this that Neg I.spouse allow-IInvNeg I-talk.about-N  
 ‘This is what my husband doesn’t let me talk about.’

Because the intermediate CP contains only a trace, the verb is permitted to be in its Independent form.

One more piece of evidence for this theory comes, again, from raising to object verbs. Normally wh-scope marking is ungrammatical with raising to object verbs (see Chapters 4 and 5); and, as we saw above, a raising to object verb must agree with the wh-phrase in a matrix question. However, when the wh-phrase is a relative root argument, in which the Agree relation is different, a matrix question can be formed by the addition of a relative root to the raising to object verb:

- (449) Tan kt-oli-wewitaham-a-n      tan tuci-molikikona-n-ess?  
 WH 2-thus-remember.TA-Dir-N WH X.extent-be.strong.3-N-DubPret  
 ‘How strong do you remember he was?’ AH,SN 10:7.13

In this example the verb agrees with the lower subject on the pattern of core argument agreement. The question is a wh-scope marking question, using a construction to be discussed in Chapter 4. This scope marking pattern uses *tan* as the scope marker rather than *keq(sey)*, and shows evidence of LF movement of the lower wh-phrase. What is important here is that the raising verb can Agree with both the wh-phrase (via the relative root) and some other argument. Normally it cannot, and it is forced to agree only with the wh-phrase due to economy, as explained above. Just when the wh-phrase is a relative root argument, however, a relative root is required for Agree, and Agree with a core argument is freed to register agreement with some other NP.

The theory of phases and the necessity of Agree for successive-cyclic movement, then, explain in a simple manner the complex pattern of long-distance extraction in Passamaquoddy:<sup>33</sup>

<sup>33</sup>There is one apparent problem for this theory: perception verbs, which can agree with the subject of the complement clause rather than the questioned object. In (ib), the verb is in its TA form, agreeing not with *keqsey* as in (ia), but with ‘rabbit’:

- (i) AH,SN 9:6.15
- a. Keq nemih-t-uwon?  
 what IC.see.TI-2Conj  
 ‘What did you see?’
- b. Keqsey nemiy-ot      mahtoqehs etoli-komutonato-k?  
 what IC.see.TA-2Conj rabbit IC.Prog-steal-3Conj  
 ‘What did you see the rabbit stealing?’

However, there are several interfering factors with perception verbs. One is that the perception verb is semantically required to register agreement with whatever NP is directly perceived. So in the sentence ‘I smell Mary cooking muskrat’, the verb must be applicativized in order to register agreement with the NP that is actually smelled, the muskrat:

- (ii) Mali n-posseht-uw-a-n-ol      etol-aqos-at      kiwhosuw-ol.  
 M. 1-smell.TI-App-Dir-N-Obv IC.Prog-cook-3Conj muskrat-Obv  
 ‘I smell Mary cooking muskrat.’

The other relevant fact is that the TA verbs listed above, such as ‘tell’, continue to agree with their NP complement, even when another NP is questioned out of their CP complement. That is, Agree with the wh-phrase does not require morphological expression, and in particular does not overwrite a pre-existing agreement relation. In the perception verb case, the pre-existing Agree relation is with the directly perceived NP, which acts like an argument of the perception verb. Raising to object verbs differ in that there is no pre-existing Agree relation, only the possibility of Agreement with something in the embedded Spec-CP (see Chapter 5).

### 3.4.7 Conclusion

Passamaquoddy possesses various kinds of *wh*-questions (and relative clauses), all of which involve syntactic movement. Long-distance extraction follows a complex pattern of agreement and inflection. I have argued here that the pattern falls out from the theory of phases and Agree. Phases capture successive cyclicity, which is visible in Passamaquoddy as participle agreement on verbs along the path of movement (explored more fully in Chapter 4). Movement through a phase also requires Agree with the head of that phase; this relation results in the patterns of inflection described in long-distance extraction.

The final section of this chapter describes long-distance NP dislocation in Passamaquoddy. In contrast to extraction, it need not involve movement, as indicated by the ability to violate islands.

## 3.5 Long-Distance Scrambling

NPs can be dislocated across clause boundaries from where they are interpreted. An example from a text was given in Chapter 1 and is repeated below:

- (450) Nit mil-ut-ss assok-taqsuwakon, kiseltomuw-a-n ’-tuwehkan  
 that.Inan give-Indef/3-DubPret strange-noise Indef.allow-Dir-N 3-use.TI  
 etoli-piskahte-k.  
 IC.there-be.dark-IConj  
 ‘The wondrous noise that was given to him he is allowed to use in the dark world.’ (Mitchell 1921/1976c, 24)

The NP ‘The wondrous noise that was given to him’ has been fronted from object of ‘use’ into the higher clause ‘allow’. As the English translation suggests, this fronting has the force of topicalization. It is an open question whether such long-distance dislocation always has this discourse property; the usual case is one of topicalization. Speakers often hesitate when presented with long-distance dislocation out of the blue, but then invent a context, often involving a demonstrative and pointing, and accept the sentence as grammatical.

The dislocated NP must surface in a left-peripheral position within the clause where it appears. Here a dislocated NP may occur at clause-peripheral positions, but may not occur between a higher verb and its object:

- (451) AH,SN 3:9.27
- Kiwhosuwatq** itom Susehp eli taktal ’-kosiciy-a-l Tihtiyas-ol kikiht-ih.  
 flagroot say.3 S. C doctor 3-know.TA-Dir-Obv T.-Obv cure-3ConjInv  
 ‘Flagroot, Susehp said that the doctor knows will cure Tihtiyas.’
  - Susehp itom eli **kiwhosuwatq** taktal ’-kosiciy-a-l Tihtiyas-ol kikiht-ih.  
 S. say.3 C flagroot doctor 3-know.TA-Dir-Obv T.-Obv cure-3ConjInv  
 ‘Susehp said that flagroot, the doctor knows will cure Tihtiyas.’
  - \* Muwin ’-kisi-yah-a-n **atomupil** Susehp-ol eli kisi-mil-at Wiphun-ol.  
 M. 3-Perf-tell-Dir-N car S.-Obv C Perf-give-3Conj W.-Obv  
 ‘Muwin told Susehp that he gave Wiphun a car.’



Similarly, a dislocated NP cannot appear between a higher clause and the complementizer of the lower clause:<sup>34</sup>

(452) AH,SN 3:9.27

- a. **Wiphun-ol** Muwin 'kisi-yah-a-n Susehp-ol eli kisi-mil-at atomupil.  
W.-Obv M. 3-Perf-tell-Dir-N S.-Obv C Perf-give-3Conj car  
'Wiphun, Muwin told Susehp that he gave a car.'
- b. \* Muwin 'kisi-yah-a-n Susehp(-ol) **Wiphun-ol** [<sub>CP</sub> eli kisi-mil-at atomupil ] .  
M. 3-Perf-tell-Dir-N S.(-Obv) W.-Obv C Perf-give-3Conj car  
'Muwin told Susehp, Wiphun, that he gave a car.'

### 3.5.1 Islands

In contrast with wh-movement above, long-distance NP-dislocation apparently does not involve movement, since it is able to violate islands. Examples of wh-islands appear in 453:

(453) WH Island

- a. **Nihi mus** Susehp 'kosihtun tan Can etoli-nehpat-w-at.  
three.ObvP moose.ObvP S. 3-know.TI WH J. IC.there-kill-App-3Conj  
'Three moose, Susehp knows where John shot for him.' WN1:9.8
- b. **Pileya akom** Piyel ma=te wewitahatom-uw-on wen-il kisi-mil-at.  
new snowshoe.ObvP P. Neg remember.TI-Neg-N who-Obv Perf-give-3Conj  
'New snowshoes, Piyel doesn't remember who he gave.' AH,SN 5:11.12
- c. **Yut olu atomupil**, ma=te n-kosiciht-uw-on keq mehsi Pil monuhmuw-ew-at  
this.Inan Top car Neg=Emph 1-know.TI-Neg-N why Bill buy-App-3Conj  
Maliw-ol.  
Mary-Obv  
'This car, I don't know why Bill bought it for Mary.' AH,SN 8:5.7
- d. **Wot olu muwin** n-kosiciy-a wen itom eli kisi-maton-at mawsuwinu-ol.  
this.An Top bear 1-know-Dir who say.3 C Perf-fight-3Conj person-Obv  
'This bear, I know who said that it attacked a person.' AH,SN 8:5.7

Long-distance dislocation can also violate Complex NP islands:

(454) Complex NP

<sup>34</sup>Like Romance Clitic Left-Dislocation and English Left Dislocation, the topic NP appears to the *right* of an embedded complementizer:

- (i) N-kisi-akuhutehkak [<sub>CP</sub> eli **yet olu man**, kisi-komutonatom ] .  
1-Perf-deny C that.Inan Top money Perf-steal.1Conj  
'I denied that that money, I stole.' AH,SN 5:11.11

See, on different positions for complementizers, wh-phrases, and topic and focus phrases in various languages, Rizzi (1995).

- a. **Nit kuhus-is-ey** kis-ewestuwm-uk [<sub>NP</sub> pilsqehsis kis-aqos-ok ] .  
 this.Inan cow-Dim-meat Perf-talk.to-1Conj girl Perf-cook-3Conj  
 ‘This beef [pointing], I talked to the girl who cooked.’ AH,SN 8:5.8
- b. **Yehtol skitapiy-il** ma=te n-musaci-w-on [<sub>NP</sub> not matuwehs  
 that.Obv man-Obv Neg=Emph 1-like-Neg-N that.An porcupine  
 kisi-lahk-ew-at kawihi ] .  
 Perf-throw-App-3Conj quill.ObvP  
 ‘That man, I don’t like the porcupine that threw quills at.’ AH2:9.14
- c. **Yut tapakon** nonuw-a [<sub>NP</sub> skitap ketuw-onuw-ok ] .  
 this car know-Dir man IC.Fut-buy-3Conj  
 ‘This car, I know the man who’s going to buy.’ WN8:5.9

Long-distance dislocation can also violate adjunct islands:

(455) Adjunct Island

- a. **Bubu** piyemi wolihpukot muwin-ewey [ eci pisacqeht-aq ] .  
 B. most taste.good.II bear-meat when bake.TI-3Conj  
 ‘Bubu, bear meat tastes best when he bakes it.’ AH,SN 4:10.17
- b. **Yut olu atomupil**, nt-iyi-hpon Penoka [ kis-onuhmuw-ew-at Pil Maliw-ol ] .  
 this.Inan Top car 1-be-Pret Bangor Perf-buy-App-3Conj Bill Mary-Obv  
 ‘This car, I was in Bangor when Bill bought it for Mary.’ AH,SN 8:5.7

Finally, long-distance dislocation can extract NPs out of sentential subjects.<sup>35</sup>

- (456) Not moci-mahtoqehs n-utomeya-ku-n eli kisi-nehpahtike-t.  
 that.An bad-rabbit 1-bother-Inv-N C Perf-murder-3Conj  
 ‘That evil rabbit, it bothers me that he can commit murder.’ AH,SN 10:7.14

The fact that wh-movement obeys islands while long-distance dislocation does not indicates that the former is derived by movement, but the latter is not.

A logical possibility is that the initial step of left-dislocation is base-generation in a peripheral position, outside of an island boundary, but subsequent dislocation is movement. However, long-distance dislocation can violate higher islands as well:

- (457) **Wot muwin** ma=te n-wewitaham-a-w wen ito-k [<sub>CP</sub>  
 this.An bear Neg=Emph 1-remember.TA-Dir-Neg who say-3Conj  
 kisi-maton-ac-il ] .  
 Perf-fight-3Conj-PartObv  
 ‘This bear, I don’t remember who said it attacked him/someone.’ AH,SN 10:7.13

<sup>35</sup>Interestingly, scrambling cannot take place if the sentential subject is doubled by the inanimate pronoun *nit*:

- (i) \* Not moci-mahtoqehs **nit** n-utomeya-ku-n eli kisi-nehpahtike-t.  
 that.An bad-rabbit this.Inan 1-bother-Inv-N C Perf-murder-3Conj  
 ‘That evil rabbit, it bothers me that he can commit murder.’ AH,SN 10:7.14

If ‘this bear’ were generated at the edge of the lowest clause and then moved, it should not be able to cross a higher wh-island boundary. This means that long-distance dislocation or scrambling is simply base-generation in the position in which it appears (probably resumed by a pronoun in argument position).

### 3.5.2 Topicalization

We saw above that long-distance dislocation was necessarily to a clause-peripheral position. This position might be the same as the left-dislocated position in a single clause, which seems to be reserved for topics (often explicitly marked as such with the particle *olu*, which occurs in second position within the NP):

- (458) a. **Not olu kotok**, ma te pskuw-a-w.  
Dem Top other Neg Emph find-Indef/3-Neg  
‘But they couldn’t find the other one.’ [lit. ‘the other, they didn’t find him’] (Newell 1979, 20)
- b. **Yat olu mahtoqehs** kisi pkikatomon piyaqtihi kon-is-ol — nohonu-l.  
Dem Top rabbit Perf grab wood.chip-Dim-InanP three-InanP  
‘As for rabbit, he picked up the chips—three of them.’ (Newell 1974a, 2)
- c. **Yuhk yaq olu kotok-ik kukec-ok etuci palitahasu-lti-htit** nemiy-ahtit  
These Quot Top other-3P warden-3P very be.proud-Plural-3PConj IC.see-3PConj  
witape-wa-l,  
3.friend-3P-Obv  
‘As for these other very proud wardens, while they were seeing their friend,’

This topic position is to the left of wh-phrases:

- (459) Tiya-l yaq mahtoqehsw-ol, “**Kil** op **olu** tan kt-olluhka-n?”  
say.to-Obv Quot rabbit-Obv 2 would Top WH 2-do-N  
‘He said to Rabbit, “But what would you do?”’ (Newell 1974a, 1)
- (460) a. **Yet olu atomupil**, wen-ihi kis-eh-t-uw-ahtit monuhmuwa-w-a-n?  
this.Inan Top car, who-ObvP Perf-make-App-3PConj buy-App-Dir-N  
‘This car, who did they make buy it for them?’ AH,SN 5:11.11
- b. \* Wen-ihi **yet olu atomupil**, kis-eh-t-uw-ahtit monuhmuw-ew-a-n?  
who-Obv this.Inan Top car, Perf-make-App-3PConj buy-App-Dir-N  
‘Who, this car, did they make buy it for them?’ AH,SN 5:11.11
- (461) Ma=te n-kosiciy-a-wi **wot olu n-tatat**, tan-iyut keti-nomkuwal-s-it  
Neg 1-know.TA-Dir-Neg this.An Top 1-father WH-this.Inan IC.Fut-lend-Intrans-3Conj  
atomupil.  
car  
‘I don’t know which car, my father, he’s going to borrow.’ AH,SN 5:11.11

Some evidence that the long-distance scrambled position and the topic position are the same comes from the inability of nonreferential quantifiers to appear in this dislocated position. In the examples below, a singular quantifier cannot appear to the left of clause-initial particles:

- (462) a. \* Yatte wen nitte nokkahl-a-l mahtoqehsuw-ol.  
 each one right.away eat.up-Dir-Obv rabbit-Obv  
 ‘Each one right away eats up a rabbit.’ AH7:4.5
- b. \* Psi=te wen nitte ’-peci-naciph-a-n nomehs-um-ol.  
 all=Emph someone right.away 3-come-take-Dir-N fish-Poss-Obv  
 ‘Right away everyone<sub>1</sub> comes to get his<sub>1</sub> fish.’ AH7:4.5
- c. \* Psi=te wen katolu wiku utene-k.  
 all=Emph someone of.course live.3 town-Loc  
 ‘Everyone lives downtown of course.’ AH8:5.3

In the same way, these quantifiers cannot dislocate across clause boundaries, in particular across island boundaries, suggesting that long-distance dislocation is necessarily left-dislocation (as topic):

- (463) AH,SN 4:10.19
- a. Nonuw-a [<sub>NP</sub> skitap **psi=te wen-il** musal-at ] .  
 meet-Dir man all=Emph someone-Obv like-3Conj  
 ‘I met a man who likes everyone.’
- b. \* **Psi=te wen-il** nonuw-a [<sub>NP</sub> skitap musal-at ] .  
 all=Emph someone-Obv meet-Dir man like-3Conj  
 ‘I met a man who likes everyone.’

A long-distance dislocated NP, however, can come after a particle in a higher clause:

- (464) AH,SN 8:5.9
- a. Mamote ’-kisitahatomon messunom-uw-a-n nisuwihtic-il **’t-akom**.  
 finally 3-decide show-App-Dir-N 3.spouse-PartObv 3-snowshoe.ObvP  
 ‘Finally he decided to show his wife his snowshoes.’
- b. Mamote **’t-akom** ’-kisitahatomon messunom-uw-a-n nisuwihtic-il.  
 finally 3-snowshoe.ObvP 3-decide show-App-Dir-N 3.spouse-PartObv  
 ‘Finally he decided to show his wife his snowshoes.’

This example uses a verb that shares an argument with its complement (Subject Control in English), and could plausibly involve some form of restructuring. Similarly, the verb ‘help’ shares an argument, and an NP can be scrambled to the right of a higher particle:

- (465) AH,SN 9:6.15
- a. Cuw=oc=alu n-wicuhkem-a n-mossis kespahl-at **’-temis-ol**.  
 I.guess.I’ll 1-help-Dir 1-older.sis IC.wash-3Conj 3-dog-Obv  
 ‘I guess I’ll help my older sister wash her dog.’
- b. **Nihtol ’-temis-ol** cuw=oc=alu n-wicuhkem-a n-mossis kespahl-at.  
 that.Obv 3-dog-Obv I.guess.I’ll 1-help-Dir 1-older.sis IC.wash-3Conj  
 ‘Her dog, I guess I’ll help my older sister wash.’

- c. Cuw=oc=alu **nihtol** ' -**temis-ol** n-wicuhkem-a n-mossis kespahl-at.  
I.guess.I'll that.Obv 3-dog-Obv 1-help-Dir 1-older.sis IC.wash-3Conj  
'I guess, her dog, I'll help my older sister wash.'

But, in addition, verbs that do not necessarily share an argument also permit a scrambled NP to follow a clause-initial particle:<sup>36</sup>

(466) AH,SN 10:7.14

- a. **Cu** litahasu ' -cuwi-semahtun **nit** **kani-atomupil**.  
surely think.3 3-must-get.rid.of that.Inan old-car  
'Surely he thinks he has to get rid of that old car.'
- b. **Nit** **kani-atomupil** **cu** litahasu ' -cuwi-semahtun.  
that.Inan old-car surely think.3 3-must-get.rid.of  
'Surely he thinks he has to get rid of that old car.'
- c. **Cu** **nit** **kani-atomupil** litahasu ' -cuwi-semahtun.  
surely that.Inan old-car think.3 3-must-get.rid.of  
'Surely he thinks he has to get rid of that old car.'

This is unlike topicalization, which seems to always place the topic phrase before clause-initial particles. At this point I do not have enough data to determine if there are other differences between left-dislocation for topicalization and long-distance scrambling, or even if the latter is a single phenomenon. (The Appendix will suggest that long-distance scrambling might have a movement as well as a non-movement parse.)

### 3.5.3 Rightward Dislocation

It is possible to have right-dislocation locally:

(467) WN8:5.9

- a. Wot olu skitap, Mali ' -kis-onuhmuw-ew-a-n tapakon.  
this Top man M. 3-Perf-buy-App-Dir-N car  
'This man, Mary bought a car.'
- b. Mali ' -kis-onuhmuw-ew-a-n tapakon, wot olu skitap.  
M. 3-Perf-buy-App-Dir-N car this Top man  
'Mary bought a car for him, this man.'

<sup>36</sup>At the same time, however, these informants judged scrambling to a clause-internal position to be grammatical, contradicting the judgements given above:

(i) AH,SN 10:7.14

- a. Ma=te **nit** **kani-atomupil** litahasi-w ' -cuwi-semahtun.  
Neg=Emph that.Inan old-car think.3-Neg 3-must-get.rid.of  
'He doesn't think he has to get rid of that old car.'
- b. Wen **nit** **kani-atomupil** 't-iy-a-l k-cuwi-pilehtun.  
someone that.Inan old-car 3-say.to-Dir-Obv 2-must-remove.TI  
'Someone that old car told him you have to remove.'

Such examples require a pause, and pointing (with the lips, according to this informant; Passamaquoddy people use their lips to point).

The long-distance version of right-dislocation apparently does not exist, in contrast with left-dislocation. Here it is impossible to right-dislocate across an adjunct:

(468) AH6:2.22

- a. Kisi-pisuwi-tqon-a-wa-l Piyel-ol wen kisi-komutonom-at pahtoliyas-ol.  
 Perf-mistake?-arrest-Dir-3P-Obv P.-Obv someone Perf-rob-3Conj priest-Obv  
 ‘They mistakenly arrested Piyel when someone robbed the priest.’
- b. \*Kisi-pisuwi-tqon-a-wa-l wen kisi-komutonom-at pahtoliyas-ol, Piyel-ol.  
 Perf-mistake?-arrest-Dir-3P-Obv someone Perf-rob-3Conj priest-Obv P.-Obv  
 ‘They mistakenly arrested him when someone robbed the priest, Piyel.’

### 3.5.4 Conclusion

Unlike *wh*-movement, long-distance scrambling or left-dislocation does not involve movement, as shown by its ability to violate islands. In Chapter 5, this property will be shown to contrast with another type of movement affecting NPs, raising to object, which does obey islands.

## 3.6 Appendix: Movement Parse of Left-Dislocation?

In Section 3.5 I argued that left-dislocation, or long-distance scrambling, did not involve movement, as it showed no obedience to island constraints. However, there are some conflicting indications that long-distance scrambling might, at least sometimes, be derived by movement.

### 3.6.1 Islands Revisited

First, speakers do reject some island violations, such as this Complex NP Constraint violation:

(469) Complex NP Island (AH,SN 8:5.7)

- a. Nonuw-a skitap ito-k eli kisi-maton-at mawsuwinu-w-ol muwin.  
 know-Dir man say-3Conj C Perf-fight-3Conj person-Obv bear  
 ‘I know the man who said that the bear attacked a person.’
- b. \*Wot olu muwin nonuw-a [<sub>NP</sub> skitap ito-k eli kisi-maton-at mawsuwinu-w-ol ] .  
 this Top bear know-Dir man say-3Conj C Perf-fight-3Conj person-Obv  
 ‘This bear, I know the man who said that it attacked a person.’

Here a *wh*-island violation was rejected:

(470) WH-Island

- a. Piyel ma=te wewitaham-a-wiy-il wen-il kisi-mil-uk atomupil.  
 Piyel Neg=Emph remember.TA-Dir-Neg-Obv who-Obv Perf-give-1Conj car  
 ‘Piyel doesn’t remember who I gave a car.’

- b. ?? **Atomupil** Piyel ma=te wewitaham-a-wiy-il wen-il kisi-mil-uk.  
 car Piyel Neg=Emph remember.TA-Dir-Neg-Obv who-Obv Perf-give-1Conj  
 ‘A car, Piyel doesn’t remember who I gave.’

The following wh-island was also rejected, this one involving long-distance dislocation of the object of an AI+O verb:

(471) AH,SN 5:11.8

- a. Ma=te k-wewitaham-ol-u keq mehsi pcitahk-in tatwikhikon.  
 Neg=Emph 2-remember.TA-1/2-Neg why send.AI+O-2Conj letter  
 ‘I don’t remember why you sent the letter.’
- b. \* **Tatwikhikon** ma=te k-wewitaham-ol-u keq mehsi pcitahk-in.  
 letter Neg=Emph 2-remember.TA-1/2-Neg why send.AI+O-2Conj  
 ‘I don’t remember why you sent the letter.’
- c. \* **Not uwikhom-on tatwikhikon** ma=te k-wewitaham-ol-u keq mehsi  
 Dem write-2Conj letter Neg=Emph 2-remember.TA-1/2-Neg why  
 pcitahk-in.  
 send-2Conj  
 ‘I don’t remember why you sent the letter you wrote.’ (AI+O)

In some cases speakers will initially reject long-distance dislocation, but then will accept it if the dislocated NP is made heavy or deictic, using demonstratives, even pointing. However, this strategy did not improve the example in 471.

There is not simply a problem with AI+O verbs, however. The following example of an AI+O verb was able to violate a wh-island:

(472) AH,SN 5:11.8

- a. **Utapakon-ol** Susehp nt-iy-oq tama ’-tli-kisi-miluwa-n-ol.  
 3.car-InanP S. 1-tell-Inv where 3-there-Perf-give.away.AI+O-N-InanP  
 ‘Susehp told me where he gave away his cars.’
- b. **Utapakon-ol** Susehp nt-iy-oq mehsi miluwe-t.  
 3.car-InanP S. 1-tell-Inv why give.away.AI+O-3Conj  
 ‘Susehp told me why he gave away his cars.’

In the following, speakers rejected an adjunct island violation:

- (473) \* **Wot Sapet** n-uci-maceha [ mesq mace-ntu-hk ].  
 this.An S. 1-from-leave not.yet start-sing-3ConjNeg  
 ‘Sapet, I left before she started singing.’ AH,SN 10:7.13

Many of the examples that were rejected involved dislocation of a subject, such as the above adjunct island violation. The following two examples are of this type:

- (474) a. \* **Wot (olu) muwin**, nonuw-a [<sub>NP</sub> skitap ito-k kisi-maton-ac-il ] .  
 this.An (Top) bear know-Dir man say-3Conj Perf-fight-3Conj-PartObv  
 ‘This bear, I know a man who said it attacked him.’ AH,SN 10:7.13
- b. \* **Pilips Estela usam-aqosa** [<sub>NP</sub> ptoqonikonek wika-hp-ac-ihi ] .  
 Phil Stella excessive-cook dumplings like-eat-3Conj-ObvP  
 ‘Phil, Stella cooked too much of the dumplings that he likes.’

However, it cannot be the case that subject dislocation is ungrammatical across island boundaries. An example of a scrambled subject was given above in 453:

- (475) **Wot olu muwin** n-kosiciy-a wen itom eli kisi-maton-at (po)mawsuwinu-ol.  
 this.An Top bear 1-know-Dir who say.3 C Perf-fight-3Conj person-Obv  
 ‘This bear, I know who said that it attacked a person.’ AH,SN 8:5.7

At present, I do not know why some island violations would be rejected while others would be accepted. It may be that movement and non-movement parses of long-distance scrambling are available, and island violations are rejected when the speaker does not consider the non-movement parse (for whatever reason).

### 3.6.2 Hitchiking Clitics

A second indication that long-distance scrambling might involve movement comes from second-position clitics. Passamaquoddy possesses a series of clitics that appear in second-position within a clause, freely disrupting constituents:

- (476) a. **K-tomokuhu-ku-k=c** naka k-tomokipil-ku-n.  
 2-crush?-Inv-3P=**Fut** and 2-trample?-Inv-N  
 ‘They’ll crush you and trample you.’ (Mitchell 1921/1976d, 12)
- b. Ali **yaq** nit wiwn-uhse-t, ma **yaq** ote kosicihtu-w-on keq **oc** olluhke.  
 around **Quot** there circle-walk-3Conj Neg **Quot** Emph know.TI-Neg-N what **Fut** do  
 ‘As he walked around in circles he didn’t know what to do.’ (Newell 1974b, 2)
- c. [<sub>NP</sub> Yuhk **yaq ona** Skicinu-**ok**] sikte-hpay-ultu-wok.  
 these **Quot also** Indian-3P to.death-be.scared-Plural-3P  
 ‘The Indians are scared to death.’ (Newell 1974b, 11)

Note in particular the last example, where two second-position clitics appear within an NP.

These clitics can apparently move with a hosting NP:

- (477) WN8:5.9
- a. N-tepita<sup>h</sup>atom [<sub>NP</sub> wot **oc** skitap] ’t-l-ewestuwam-a-l Piyel-ol.  
 1-think this.An Fut man 3-thus-talk.to-Dir-Obv P.-Obv  
 ‘I think this man will talk to Piyel.’
- b. [<sub>NP</sub> Wot **oc** skitap] n-tepita<sup>h</sup>atom ’t-l-ewestuwam-a-l Piyel-ol.  
 this.An Fut man 1-think 3-thus-talk.to-Dir-Obv P.-Obv  
 ‘This man, I think will talk to Piyel.’



However, they cannot if the NP is moved out of an island:

(478) WN8:5.9

- a.  $[_{NP}$  Wot olu skitap] n-kosiciy-a  $\boxed{\text{wen-il}}$  **oc** el-ewestuwam-ac-(il).  
 this.An Top man 1-know.TA-Dir who-Obv Fut IC.thus-talk.to-3Conj-PartObv  
 ‘This man, I know who he’s going to talk to.’
- b. \*  $[_{NP}$  Wot **oc** skitap] n-kosiciy-a  $\boxed{\text{wen-il}}$  el-ewestuwam-ac-(il).  
 this.An Fut man 1-know.TA-Dir who-Obv IC.thus-talk.to-3Conj-PartObv  
 ‘This man, I know who he’s going to talk to.’

The dislocation itself is grammatical, as shown in 478a; but not if the clitic tags along with the NP in 478b.

A similar example appears in 479, where the NP hosting the clitic dislocates out of a complex NP:

(479) WN8:5.9

- a. Nonuw-a  $[_{NP}$  skitap  $[_{NP}$  yut **oc** ahsosuwon] pessiko-k] .  
 know-Dir man this.Inan Fut hat IC.wear-3Conj  
 ‘I know the man who this hat is going to wear.’
- b. \*  $[_{NP}$  Yut **oc** ahsosuwon] nonuw-a  $[_{NP}$  skitap pessiko-k] .  
 this.Inan Fut hat know-Dir man IC.wear-3Conj  
 ‘This hat, I know the man who’s going to wear.’

These data might indicate that long-distance dislocation of NPs at least can take place via movement, and must involve movement if a second-position clitic is to tag along with an NP it disrupts.

However, Phil LeSourd (p.c.) points out that there may be another explanation for the good examples of hitchhiking clitics, in 477. Instead of the clitic moving with the NP, it might instead be climbing on its own into the higher clause. Such “clitic climbing” would be grammatical just across clause boundaries that are of the less opaque variety, like ‘think’ here. (The English verb *think*, for example, permits negative raising.) The ungrammatical example in 478b would be ruled out by reason of the factivity and opacity of the verb ‘know’. And relative clause boundaries simply would not permit clitic climbing to cross them, in 479b. I do not have the data at present to address this suggestion and distinguish between the “hitchhiking” account and the clitic climbing account.

### 3.7 Appendix: Relative Root Questions and Negation

There are some interesting facts in Passamaquoddy concerning the scope of negation and adjuncts. Adjuncts in general are ambiguous with respect to negation and negative quantifiers, even where they are not in English, such as in preverbal position:

(480) AH,SN 9:6.10

- a. Ma=te wen macehe-w ’sami Mali ’t-olintu.  
 Neg=Emph someone leave.3-Neg because M. 3-sing  
 ‘No one left because Mary was singing.’ (ambiguous)

- b. 'Sami Mali 't-olintu ma=te wen macehe-w.  
 because M. 3-sing Neg=Emph someone leave.3-Neg  
 'Because Mary was singing no one left.' (also ambiguous)

The sentence in 480a, for example, can be clarified as the following:

- (481) Peskuwok macehi-k kenoq olu ma=te wen macehe-w 'sami Mali 't-olintu.  
 some.3P leave-3P however Emph Neg=Emph someone leave.3-Neg because M. 3-sing  
 'Some people left, but no one left because Mary was singing.'

This is the reading where the adjunct takes scope below 'no one'. The sentence can also mean that no one left at all; and the fact that everyone stayed was due to Mary being the one singing. This is the opposite scope relation.

Unlike English, 480b is ambiguous in the same way. The English translation does not have the first reading, and can only mean that no one left at all. This is the reading where the adjunct takes scope over the negative quantifier. The opposite reading is not available. It is in the Passamaquoddy, however; informants judge 480b to be synonymous with 480a. 480b can also be clarified as 481.

Relative root questions are also ambiguous:

- (482) Mehsi skat wen maceha-hq?  
 why Neg someone leave-3ConjNeg  
 'Why did no one leave?' (ambiguous) AH,SN 9:6.10

It is possible for this question to have the meaning where some people left for other reasons, but no one left for the reason that is the answer to this question. This reading is represented by negation taking scope over 'why'. This is not possible in English; the English sentence can only mean that no one left, and asks the reason why everyone stayed.

I suggest that this ambiguity follows from the structure of relative root questions (and relative root arguments generally). As hypothesized above, relative root arguments (including reasons and manners) start out in a low position, and move to their surface position before or after the verb, or in CP if they are *wh*-phrases (see Section 3.4). They can then take scope in a low or a high position, by virtue of their trace low in the VP.

## Chapter 4

# Scope Marking and Operator Movement

### 4.1 Introduction

Chapters 1 and 2 of this work introduced the basic syntactic phenomena of Passamaquoddy and established tests for binding and hierarchical structure. Chapter 3 turned to extraction phenomena and the theory of phases and Agree. The present chapter aims at accomplishing two things: first, to extend the work of Chapter 3 by examining in detail successive-cyclic movement and the phenomenon of operator agreement, and second, to use this to analyze the construction known as *wh-scope marking*.

Wh-scope marking is currently the topic of much theoretical investigation and debate (see the papers in Lutz, Müller, and von Stechow 2000). This phenomenon involves a cross-clausal dependency of a very interesting kind—a matrix question is created by partial movement of a wh-phrase to some embedded Comp position, while a wh-scope marker, typically the wh-phrase meaning ‘what’, occupies the matrix Comp position:

- (483) **Keqsey** kisi-yuhu-sk [CP **wen-ih<sub>1</sub>** ali-wiciyem-ac-ih<sub>i</sub> Tihtiyas *t<sub>1</sub>* ] ?  
what Perf-say.to-2ConjInv who-ObvP around-go.with-3Conj-PartObvP T.  
‘Who all did he tell you that Tihtiyas is going around with?’ AH,SN 10:7.16

The question in 483 is literally ‘What did he tell you who all is Tihtiyas going around with?’, but its meaning is that of the corresponding long-distance matrix question: ‘Who all did he tell you that Tihtiyas is going around with?’

The debate in the recent syntactic literature has centered around the question of how, semantically and syntactically, such a structure comes to be interpreted as a matrix question. There are two competing analyses: the Direct Dependency Approach (van Riemsdijk 1983, McDaniel 1989, and numerous others), which holds that the contentful wh-phrase in embedded position moves at LF to replace the scope-marker ‘what’, which is analyzed as a purely expletive element; and the Indirect Dependency Approach (Dayal 1994, 2000), which argues that the clause containing the scope marker is interpreted as a question over propositions, restricted by the embedded wh-question (hence the matrix interpretation is only indirect).

Passamaquoddy is of potential significance for this debate. Wh-scope marking is a robust phenomenon in the language, and takes (at least) two different forms. Chief among them is the use of the wh-phrase

meaning ‘what’ as the scope marker, as in 483. This construction has all the defining characteristics of wh-scope marking, as illustrated below. As it happens, Passamaquoddy has a morphological means of marking successive-cyclic operator movement, including covert movement, which results in agreement in phi-features on every verb along the path of movement. This agreement indicates that covert movement of the contentful wh-phrase does not take place: verbs higher than the contentful wh-phrase may not agree with it. This morphological argument, as well as several others to be presented in Section 4.5, shows that the Direct Dependency analysis could not be correct for this type of scope marking. A version of the Indirect Dependency analysis that does account for the properties of wh-scope marking in Passamaquoddy is given in Section 4.5.

However, Passamaquoddy has another type of scope marking, using the default wh-phrase *tan* (also a non-wh quantifier) that is used to question various types of adjuncts. In exactly one context—when the matrix verb includes a relative root—*tan* may be used as a scope marker, with *tan* repeated, along with the rest of the wh-phrase, in a lower clause. An example appears below:

- (484) **Tan** kt-oli-wewitaham-a-n      **tan tuci**-molikikona-n-ess?  
 WH 2-thus-remember.TA-Dir-N WH X.extent-be.strong.3-N-DubPret  
 ‘How strong do you remember he was?’ AH,SN 10:7.13

This second construction *does* permit agreement on the matrix verb with the lower wh-phrase, indicating that covert movement takes place in this construction, as argued by the Direct Dependency Approach. The fact that *tan* is a default (rather than the wh-phrase used to question propositions) suggests that just for this construction the Direct Dependency Approach is correct: the wh-scope marker is an expletive, replaced by covert movement of the real wh-phrase.

It follows that both the structure argued by the Direct Dependency analysis to underly wh-scope marking and that argued by the Indirect Dependency analysis to underly wh-scope marking are actually realized in a single language, meaning that they are both correct. That is, wh-scope marking is not a unitary phenomenon, a conclusion independently reached by a number of researchers (e.g., Beck and Berman 2000, Horvath 2000, von Stechow 2000). Instead languages make use of direct and indirect dependencies to achieve the same semantic effect. Within a single language, even, both mechanisms can be exploited.

The significance of wh-scope marking in the context of the present study is threefold. First, it is another phenomenon that involves cross-clausal dependencies, in this case either (or both) long-distance movement and a dependency between a matrix constituent and an embedded clause itself. Second, in order to establish that the agreement pattern of such significance for the correct account of wh-scope marking does in fact mark the path of operator movement, both overt and covert, it will be necessary to study in some detail three types of operator movement: wh-questions, relative clause formation (both externally and internally headed), and focus movement. All of these can be long-distance, providing fruitful ground for the study of cross-clausal dependencies and successive-cyclic movement. Finally, wh-scope marking is sensitive to syntactic context, specifically to the verbs and clause types involved. For example, it is ungrammatical with raising-to-object verbs, which has the potential to elucidate both the syntax of wh-scope marking and of raising to object, the subject of Chapter 5.

I begin with an overview of wh-scope marking in Passamaquoddy, followed by a detailed study of agreement triggered by successive-cyclic operator movement. The chapter ends with analyses of the two types of scope marking investigated here, illustrating direct and indirect dependencies.

## 4.2 Wh-Scope Marking

Many languages have a strategy for long-distance question formation that involves partial or no movement of the wh-phrase, plus a wh-element in the matrix clause marking the scope of the lower wh-phrase. For example, in Passamaquoddy, long-distance questions can be formed either via long-distance movement, or by partial movement to an embedded Spec-CP plus the wh-phrase *keq(sey)* marking its scope in the matrix CP:<sup>1</sup>

(485) DD6:3.1

- a.   Wen-il<sub>1</sub> itom nemiy-ac-il                    *t*<sub>1</sub>?  
       who-Obv say IC.see-3Conj-PartObv  
       ‘Who did he say he saw?’
- b.   **Keq** itom wen-il<sub>1</sub> nemiy-ac-il                    *t*<sub>1</sub>?  
       what say who-Obv IC.see-3Conj-PartObv  
       ‘Who did he say he saw?’

This construction, first discussed for German by van Riemsdijk (1983), has been attested in Hindi, Hungarian, Frisian, Romani, Iraqi Arabic, and other languages. There is a similar construction involving partial wh-movement without an overt scope marker in languages such as Ancash Quechua, Slave, Normalem Ulem, Malay, and Kikuyu. For references and further information on these languages see the papers collected in Lutz, Müller, and von Stechow (2000).

### 4.2.1 Analyses of Wh-Scope Marking

There are two main types of analyses of wh-scope marking, usually termed the Direct Dependency analysis and the Indirect Dependency analysis.

#### The Direct Dependency Analysis

According to the Direct Dependency approach (van Riemsdijk 1983, McDaniel 1989, Beck and Berman 2000, and numerous others), the contentful wh-phrase in embedded CP position moves at LF to replace the expletive:

(486)   [<sub>CP</sub> ‘what’ ... [<sub>CP</sub> wh-phrase ... ] ]  
                                   ↑  
                                   LF movement

<sup>1</sup>The wh-elements *wen* and *keq* are glossed as ‘who’ and ‘what’, respectively, but they are more precisely [+animate] and [-animate]. *Keq* alternates, apparently freely, with an apparently synonymous longer form *keqsey*.

The LF of scope-marking structures, according to this approach, is identical to long-distance movement of the contentful *wh*-phrase. Hence the dependency is *direct*: the *wh*-phrase achieves matrix scope directly by moving, just as in a long-distance *wh*-question.

### The Indirect Dependency Analysis

In contrast with the Direct Dependency approach, the Indirect Dependency analysis (as propounded by Dayal 1994, 1996, 2000; Horvath 1997; Lahiri 2000; and others) claims that the embedded *wh*-phrase does not directly achieve matrix scope. Instead the embedded clause, a basic *wh*-question denoting a set of propositions (on the theory that the semantic value of a question is the set of possible answers to it; Hamblin 1973), serves to restrict the denotation of the scope marker, a *wh*-phrase in its own right varying over propositions. Thus, schematically, a *wh*-scope marking question of the form ‘what did he say who he saw?’ can be paraphrased as ‘what proposition in the form of an answer to the question “who did he see?” did he say?’ Thus, the Indirect Dependency approach claims that *wh*-scope marking is not analogous to long-distance movement, but is instead a restricted version of a simple question like ‘what did he say?’.

Proponents of this analysis point out that the scope marker is usually the *wh*-phrase that a language uses to question propositions (we will see this in Passamaquoddy). It also demonstrably occurs in argument position in Hindi (a *wh*-in-situ language), and has been argued to undergo extraction from argument position in Hungarian (Horvath 1997), meaning that it is a genuine *wh*-phrase and not an expletive. Proponents also point out differences in grammaticality between long-distance extraction and scope marking, which argues that they should not be reduced to the same LF, as the Direct Dependency approach does. Differences in scope interpretation, as discussed in Lahiri (2000), argue the same point. Some of these arguments will be given in Passamaquoddy in Section 4.5.

The syntax of the Indirect Dependency approach is not predetermined by the main claims of the approach. Different authors argue for different structures. What is common to all accounts is a structure in which the scope marker begins as complement to the matrix proposition-embedding verb and undergoes *wh*-movement to the matrix CP, while the embedded *wh*-phrase independently undergoes *wh*-movement in the lower clause:

$$(487) \quad \left[ {}_{\text{CP}} \text{ what}_1 \dots \text{Verb } t \right] \sim \left[ {}_{\text{CP}} \text{ who } \dots t \dots \right]_1$$

$\uparrow$   
 $\text{wh-mvmt}$

$\uparrow$   
 $\text{wh-mvmt}$

The relation between this *wh*-phrase and the embedded *wh*-question, which serves as its restriction, is indicated by coindexing them; what this means semantically and syntactically is unclear (as indicated in the diagram by the symbol  $\sim$ ). In some versions the embedded *wh*-question must adjoin to the matrix CP either overtly or at LF in order to restrict the matrix question; in others, it starts out as a constituent with the scope marker. I will argue in Section 4.5 that the facts of Passamaquoddy point to the latter approach.

#### 4.2.2 Properties of Wh-Scope Marking

*Wh*-scope marking constructions share several characteristics cross-linguistically. I list a few below (partly based on the discussion in Beck and Berman 2000), using Passamaquoddy to illustrate the basic facts.

**Any Wh-Phrase Is Possible**

First, any wh-phrase may be associated with a scope marker:

- (488) a. Keqsey cel elitahasi-t wen-il nemiy-ac-il?  
 what even IC.think-3Conj who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’ DF6:3.1
- b. Keqsey itom Tihtiyas keqsey wesam-aqosom-uw-at Pilips-ol?  
 what say.3 T. what IC.excessive-cook-App-3Conj Phil-Obv  
 ‘What did Tihtiyas say that she cooked too much of for Phil?’ AH,SN 3:9.28
- c. Keqsey itom Susehp tan-iyuhtol muwinuw-ol kisi-peskh-at Piyel?  
 what say.3 S. WH-that.Obv bear-Obv Perf-shoot-3Conj Piyel  
 ‘Which bear did Susehp say Piyel shot?’ AH,SN 4:10.17
- d. Keq kt-itom **tan** tuwihput likon?  
 what 2-say WH table look.thus.II  
 ‘What did you say this table looks like?’ AH,SN 6:2.24
- e. Keqsey itom Pil tan kehson ehcuwi-monuw-ok wikhikon-ol?  
 what say Bill WH X.many must-buy-3Conj book-InanP  
 ‘How many books did Bill say he has to buy?’ AH,SN 6:2.24
- f. Keqsey itom tan tuciya-n motorcycle  
 what say.3 WH go.by-N m.  
 ‘How fast did he say the motorcycle could go?’ AH1:9.7
- g. Keq kt-itom tama kt-oli-nomiy-a ’Tolitolitoli?  
 what 2-say where 2-there-see-Dir T.  
 ‘Where did you say you’re meeting ’Tolitolitoli?’ AH,SN 9:6.11

These examples illustrate wh-questions meaning ‘who’, ‘what’, ‘how many’, ‘where’, and various uses of the wh-phrase *tan* (see Chapter 3 and Section 4.5). Similar examples can be given for ‘why’, or any other wh-question.

**Yes-No Questions**

In some languages, for example Hindi, an embedded yes-no question can appear in the scope-marking construction, but in other languages, for example German, they cannot. Passamaquoddy does permit yes-no questions with scope marking:

- (489) Keq itom Tihtiyas ’-kisi-peskh-a-l cuspes-ol kosona tan?  
 what say.3 T. 3-Perf-shoot-Dir-Obv porpoise-Obv or WH  
 ‘What did Tihtiyas say, did she shoot the porpoise or not?’ AH,SN 6:3.3

However, these are very restricted, and require the tag *kosona al tan*, ‘or what?’. Without this tag, they cannot be interpreted as yes-no questions; instead what would be the complement clause must be interpreted as an adjunct to the main verb:

(490) AH,SN 10:7.14

- a. Keq kt-iy-oq kisi-pson-at muwinuw-ol kosona al tan?  
 what 2-say.to-Inv Perf-catch-3Conj bear-Obv or Uncertain WH  
 ‘What did he tell you, did he catch the bear, or not?’
- b. Keq kt-iy-oq kisi-pson-at muwinuw-ol?  
 what 2-say.to-Inv Perf-catch-3Conj bear-Obv  
 ‘What did he tell you when he caught the bear?’ NOT ‘Did he tell you he caught the bear?’

(491) AH,SN 10:7.14

- a. Keqsey kt-iy-oq apsoqe-t kosona al tan?  
 what 2-say.to-Inv check.traps-3 or Uncertain WH  
 ‘What did he tell you, did he check the traps, or not?’
- b. Keq kt-iy-oq apsoqe-t?  
 what 2-say.to-Inv check.traps-3Conj  
 ‘What did he tell you when he went to check the traps?’ NOT ‘Did he tell you (if) he went to check the traps?’

For this reason it is doubtful that these are true scope-marking constructions. Instead they seem to have the meaning indicated by the English translation—a sequence of questions or an appositive.

### Multiple Questions

In languages that permit multiple questions, any number of wh-phrases may be associated with a single scope marker. Passamaquoddy, however, does not permit multiple questions (see Chapter 3). In the same way, it does not permit multiple wh-phrases to be associated with a single scope marker:<sup>2</sup>

(492) \* **Keq** itom [<sub>CP</sub> **wen** elitahasi-t [<sub>CP</sub> **tan kehsi-li-n** cuspes nehpah-ac-ihi  
 what say who IC.think-3Conj WH X.many-ObvS-N porpoise.ObvP shoot-3Conj-ObvP  
 Tihtiyas ] ] ?

T.

‘Who did he say thinks that Tihtiyas shot how many porpoises?’ AH,SN 6:3.3

### Iterative Scope Marking

An embedded wh-phrase can take scope across more than one clause, as in successive-cyclic long-distance movement, if a scope marker appears in Spec-CP of each intervening clause:

(493) **Keqsey** elitahas-iyin **keq** itom Piyel **wen-il** meskuw-ac-il psahkihikon-ok?  
 what IC.think-2Conj what say P. who-Obv IC.find-3Conj-PartObv ditch-Loc  
 ‘Who do you think Piyel said he found in a ditch?’ AH,SN 6:2.28

<sup>2</sup>It is plausible (but incorrect) to suppose that multiple questions are disallowed in Passamaquoddy because most wh-phrases are only interpreted as such by overt movement to Spec-CP (otherwise they are indefinites), and only one such movement is permitted (unlike, say, the Slavic languages). Example 492 shows that, even when all the wh-phrases are able to move overtly to a specifier of CP, a multiple question reading is still ungrammatical.



The wh-phrase can move partially, to a higher embedded Spec-CP, but each Spec-CP intervening between it and the matrix clause where it takes scope must be occupied by a scope marker:

- (494) a. **Keq** elitahas-iyin [<sub>CP</sub> **wen-il** itom Piyel [<sub>CP</sub> meskuw-ac-il psahkihikon-ok  
what IC.think-2Conj who-Obv say P. IC.find-3Conj-PartObv ditch-Loc  
]] ?

‘Who do you think Piyel said he found in a ditch?’ AH,SN 6:2.28

- b. \***Keqsey** kt-itom [<sub>CP</sub> not elitahasi-t [<sub>CP</sub> **tan** kehsi-lin nehpah-ac-ih  
what 2-say this IC.think-3Conj WH X.many-? shoot-3Conj-ObvP  
cuspes Tihtiyas] ] ?  
porpoise.ObvP T.

‘How many porpoises did you say this person thinks Tihtiyas shot?’ AH,SN 6:3.3

This is generally the case in other languages. However, Beck and Berman (2000) note that different authors give different judgements for German; apparently there is some speaker variation, with some speakers accepting structures in which intermediate scope markers are missing. In fact, there is some variation in Passamaquoddy as well, even among the same speakers. The intermediate scope marker, in contrast to the example above, is optional in some contexts:

- (495) **Keqsey** itom Susehp [ eli kisi-yah-at Tihtiyas-ol [<sub>CP</sub> **tan-iyuhtol muwinuw-ol**  
what say.3 Jos. C Perf-tell-3Conj T.-Obv WH-that.Obv bear-Obv  
kisi-peskh-at Piyel ] ] ?  
Perf-shoot-3Conj P.

‘Which bear did Joseph say he told Tihtiyas that Piyel shot?’ AH,SN 4:10.17

- (496) **Keq** kt-olitahas [<sub>CP</sub> (**keq**) itom taktal [<sub>CP</sub> **tan** kt-olessi-n ] ] ?  
what 2-think (what) say.3 doctor WH 2-happen.to-N

‘What do you think the doctor said happened to you/ is wrong with you?’ AH,SN 10:7.15

At this point I do not have enough data to determine where the intermediate scope marker is required and where it is optional.

### Restrictions on the Matrix Predicate

Different languages impose different restrictions on which embedding predicates permit wh-scope marking. German seems to be the most restrictive, while languages like Hindi apparently permit scope marking with most embedding verbs (see, e.g., Beck and Berman 2000, Dayal 2000). The one restriction that appears to hold cross-linguistically is that the embedding verb be one that permits [–wh] complements. That is, wh-scope marking is ungrammatical with verbs like ‘wonder’ or ‘ask’ that require [+wh] complements.

Passamaquoddy does not appear to possess any such verbs; at least I have been unable to find any. Verbs that do often occur with embedded questions, such as verbs that can translate roughly as ‘wonder’ or ‘ask’, also permit declarative complements. As expected, these verbs permit wh-scope marking:

- (497) Keqsey kisi-qecimul-at pilsqehsis-ol keq kis-aqos-ok?  
 what Perf-ask-3Conj girl-Obv what Perf-cook-3Conj  
 ‘What did he ask the girl if she cooked?’ AH,SN 8:5.8

There are other restrictions on the matrix predicate in Passamaquoddy, however. Wh-scope marking is incompatible with both raising to object verbs and perception verbs:

- (498) a. \* Keqsey piluwitaham-ot wen nemiy-at Piyel-ol?  
 what suspect.TA-2Conj who IC.see-3Conj P.-Obv  
 ‘Who do you suspect saw Piyel?’ AH,SN 6:3.1 Raising to Object
- b. \* Keqsey nemiht-uwon wen kisi-komutonato-k man?  
 what IC.see.TI-2Conj who Perf-steal-3Conj money  
 ‘Who did you see steal the money?’ WN9:6.13 Perception Verb

For both of these cases it is possible that there is simply a mismatch in animacy. In 498a, the matrix verb agrees with an animate object (here agreeing with the embedded wh-phrase, which is independently possible; see Chapter 5), but the matrix wh-phrase is inanimate.<sup>3</sup> 498b shows the reverse: the verb is inanimate, in agreement with the scope marker, but the embedded wh-phrase is animate.

However, animacy cannot be the whole story; even matching for animacy, perception verbs are ungrammatical in scope-marking structures, despite the well-formedness of both matrix and embedded questions, and long-distance questions:

- (499) Perception Verbs (AH,SN 9:6.15)
- a. Keq<sub>1</sub> nemiht-uwon t<sub>1</sub>?  
 what IC.see.TI-2Conj  
 ‘What did you see?’
- b. Nomihtun [<sub>CP</sub> keqsey<sub>1</sub> etoli-komutonato-k mahtoqehs t<sub>1</sub> ] .  
 see.TI what IC.Prog-steal-3Conj rabbit  
 ‘I saw what the rabbit stole.’
- c. \* **Keqsey** nemiht-uwon [<sub>CP</sub> **keqsey**<sub>1</sub> mahtoqehs etoli-komutonato-k t<sub>1</sub> ] ?  
 what see-2Conj what rabbit IC.Prog-steal-3Conj  
 ‘What did you see the rabbit stealing?’
- d. Keqsey<sub>1</sub> nemiy-ot mahtoqehs [ etoli-komutonato-k t<sub>1</sub> ] ?  
 what IC.see-2Conj rabbit IC.Prog-steal-3Conj  
 ‘What did you see the rabbit stealing?’

Scope marking with raising to object verbs will be taken up in Section 4.5 (and again in Chapter 5). Raising to object verbs do permit wh-scope marking if the matrix verb agrees with the inanimate wh-scope marker *keq(sey)*:

<sup>3</sup>On the Direct Dependency analysis, which treats the scope marker as an expletive, it should not matter that the scope marker does not match the verb in animacy.

- (500) Keqsey Tihtiyas wawitahato-k wen-il mace-wici-yem-ku-n Sipayik?  
 what T. remember.TI-3Conj who-Obv go-with-go-Inv-N S.  
 ‘Who does Tihtiyas remember went with her to Sipayik?’ AH,SN 4:10.17

One other restriction constrains wh-scope marking in Passamaquoddy: TA+O verbs do not permit wh-scope marking. These are verbs that are morphologically ditransitive—they have the Applicative morpheme /-uw-/, and they inflect for two objects. They take one NP object, which agrees as the primary object, and they take a CP object (perhaps as secondary object). For most of these verbs, the primary object is identical to an argument in the embedded clause (“Object Control”)<sup>4</sup>

- (501) a. Tihtiyas ’-pawatom-uw-a-n Mihkuw-ol naci-kospal-a-n olomuss-ol.  
 T. 3-want-App-Dir-N M.-Obv go.do-wash-Dir-N dog-Obv  
 ‘Tihtiyas wants Mihku to go wash the dog.’ AH,SN 6:3.4
- b. Susehp ’-kolam-uw-a-n ’-tus-ol ’t-amkekh-a-n tolehp.  
 S. 3-forbid-App-Dir-N 3-daughter-Obv 3-play-Dir-N card.ObvP  
 ‘Susehp forbids his daughter to play cards.’ AH,SN 9:6.13

The CP complement can be questioned, and long-distance wh-movement is possible:

- (502) Keqsey kiseltom-uw-at ’-tus-ol?  
 what permit-App-3Conj 3-daughter-Obv  
 ‘What does he permit his daughter?’ WN9:6.13
- (503) a. Keq(sey)<sub>1</sub> skat kiseltom-a-luhk k-nisuwiyek kt-itom-on *t*<sub>1</sub>?  
 what Neg allow-App-2ConjInvNeg 2-spouse 2-say-N  
 ‘What doesn’t your husband let you say?’ AH,SN 6:2.24
- b. Wen-il<sub>1</sub> kelam-uw-at/c-il ’-tus-ol ’t-ali-wiciyem-a-n *t*<sub>1</sub>?  
 who-Obv IC.forbid-App-3Conj-(PartObv) 3-daughter-Obv 3-around-accompany-Dir-N  
 ‘Who does he forbid his daughter to go around with?’ AH,SN 9:6.14
- c. [ Kehsonu-l atomupil-ol ]<sub>1</sub> kis-eh-t-a-sk k-tuss-ok k-monuhmuw-ew-a-n  
 X.many-InanP car-InanP Perf-make-App-2ConjInv 2-daughter-3P 2-buy-App-Dir-N  
*t*<sub>1</sub>?  
 ‘How many cars did your daughters make you buy them?’ AH,SN 5:11.11

But these verbs cannot participate in wh-scope marking:

- (504) a. \*Keqsey kiseltom-uw-at ’-tus-ol [ <sub>CP</sub> wen-il nemiy-at /nomiy-a-n ] ?  
 what permit-App-3Conj 3-daughter-Obv who-Obv IC.see-3Conj /see-Dir-N  
 ‘Who does he permit his daughter to see?’ WN9:6.13
- b. \*Keq pawatom-a-sk ’Tolitolu [ <sub>CP</sub> tama kt-oli-nomiy-a-n ] ?  
 what want-App-2ConjInv T. where 2-there-see-Dir-N  
 ‘Where does ’Tolitolu want you to meet her?’ AH,SN 9:6.11

These restrictions will be taken up again in Section 4.5.

<sup>4</sup>Identity is not required: the primary object can also be a subset of an argument in the lower clause. See Chapter 5 on subset relations in Passamaquoddy and other Algonquian languages.

### Intervention

Another property of wh-scope marking is the fact that it is subject to intervention effects (first noted by Rizzi 1992). For example, sentential negation does not prevent long-distance extraction, but it does render scope marking ungrammatical:<sup>5</sup>

(505) WN4:10.18

- a. **Tan kehson(u-l) atomupil-ol skat** wewitahatom-uhk Piyel [<sub>CP</sub> kisi-mil-uk  
WH X.many-(InanP) car-InanP Neg remember.TI-3ConjNeg Piyel Perf-give-1Conj  
Susehp *t*] ?  
S.  
'How many cars does Piyel not remember that I gave to Susehp?'
- b. \***Keqsey skat** wewitahatom-uhk Piyel [<sub>CP</sub> **tan kehson(u-l) atomupil-ol**  
what Neg remember.TI-3ConjNeg Piyel WH X.many-(InanP) car-InanP  
kisi-mil-uk Susehp *t*] ?  
Perf-give-1Conj S.  
'How many cars doesn't Piyel remember that I gave to Susehp?'

One account of this fact is that of Beck (1996), who argues that negation (and other types of quantificational operators) block LF movement across them. On the Direct Dependency approach this would be LF movement of the contentful wh-phrase to replace the scope marker in the matrix CP. Different accounts of intervention have been given in the Indirect Dependency analysis, for instance in Dayal (1994), Dayal (2000), Horvath (1997), and Lahiri (2000). For example, Dayal (2000) suggests that Beck's theory can be imported directly into the Indirect Dependency analysis, if the embedded question is forced to undergo LF movement to adjoin to the matrix CP. Negation would block this movement in the same way it would block movement of just the wh-phrase.

Passamaquoddy will have some evidence bearing on this phenomenon, presented in Section 4.5.4. This evidence indicates that intervention cannot be as simple as preventing LF movement.

### Embedded Questions

Embedded scope marking constructions are also attested, and occur in Passamaquoddy:

(506) Ma=te n-wewitahatom-uw-on [<sub>CP</sub> **keq** kt-itom [<sub>CP</sub> **tan** tuci-molikikona-n muwin  
Neg=Emph 1-remember.TI-Neg-N what 2-say WH X.extent-be.strong.3-N bear  
]] .

<sup>5</sup>According to Horvath (1997), wh-scope marking is grammatical with matrix sentential negation with certain presuppositional verbs like 'admit' and 'deny' in Hungarian. This is not true of Passamaquoddy—negation always results in ungrammaticality:

- (i) \*Keqsey skat Mihku ikonewatom-uhk wen-il kisi-komutonom-ac-il?  
what Neg M. deny-3ConjNeg who-Obv Perf-rob-3Conj-PartObv  
'Who didn't Mihku deny that he robbed?' AH,SN 9:6.10

It is also not true of German, where these predicates permit only an echo-question interpretation of wh-scope marking, with or without negation (M. Wagner, p.c.).

'I don't remember how strong you said the bear is.' AH,SN 10:7.13

In such cases the scope of the question is not the matrix clause, but is instead an embedded position. In all other respects these structures are identical to matrix scope marking questions.

Various other characteristics of scope-marking constructions have been discussed for German, Hindi, Hungarian, and other languages. Their Passamaquoddy counterparts, as well as some other characteristics specific to Passamaquoddy, will be discussed in Section 4.5.

### 4.2.3 Passamaquoddy and Operator Agreement

Passamaquoddy has the means to decide between the two competing analyses of wh-scope marking, the Direct and the Indirect Dependency analyses. As will be shown in detail in the next section, Passamaquoddy possesses a type of agreement that is triggered by operator movement: wh-operators, relative operators, and focus operators. It can also be shown to be triggered by covert movement: when an operator occurs in situ, verbs up to its scopal position may agree with it, even across clause boundaries. An example of an internally-headed relative clause is given in 507, with the agreement morphemes in boldface:

(507) Not nit [CP elitahasi-c-**il** [CP kisi-pson-ac-il **otuhk-ol** ] ] .  
 that.An that IC.think-3Conj-PartObv Perf-catch-3Conj-PartObv deer-Obv  
 'This is the deer that he thought he was going to catch.' AH,SN 10:7.13

(508) This is [NP [ he thought-**Agr**<sub>1</sub> [ he was going to catch-**Agr**<sub>1</sub> deer<sub>1</sub> ] ] ]  
 LF mvmt

The Direct Dependency approach, we saw, posits LF movement of the embedded wh-phrase in wh-scope marking constructions, to the matrix CP. If such LF movement takes place, wh-scope marking structures in Passamaquoddy should permit this pattern of agreement between the matrix verb and the embedded wh-phrase:

(509) [CP 'what' ... Verb+**Agr**<sub>1</sub> [CP wh-phrase<sub>1</sub> ... ] ]  
 LF movement

However, agreement of this sort is sharply ungrammatical in the scope marking constructions illustrated above:

(510) \* Keqsey cel elitahasi-c-**il** **wen-il** nemiy-ac-**il**?  
 what even IC.think-3Conj-PartObv who-Obv IC.see-3Conj-PartObv  
 'Who did he think he saw?' AH,SN 6:3.1

This is strong evidence that the Direct Dependency analysis is incorrect for these constructions. Instead a version of the Indirect Dependency approach must be involved; one is proposed in Section 4.5.

Interestingly, however, Passamaquoddy possesses another type of scope-marking construction, one with a very limited distribution. This construction *does* permit agreement with the embedded wh-phrase, indicating that LF movement does take place. In addition, the scope-marker is the default *tan*, not the wh-phrase

used to question propositions, suggesting that it is in fact an expletive rather than a question over propositions.

Thus both the Indirect and Direct Dependency analyses are clearly instantiated in the languages of the world. Passamaquoddy shows that both can be realized in the grammar of a single language.

### 4.3 Participle Agreement

The agreement pattern to be explored here I will refer to as *participle agreement*, due to the fact that it appears exclusively on a verbal form known as the participle. This form uses the Changed Conjunct: agreement with arguments appears as suffixes only (no prefix; the suffixes are portmanteau morphemes, indicating agreement, Voice, and Negation all at once), and an ablaut process known as Initial Change affects the first syllable of the verb complex (not always visibly, depending on the initial vowel). These forms are known as participles because they can be used as nominals, a construction in which they are probably headless relative clauses:

- (511) a. 'T-itom-on, "Nomiya **pawatom.**"  
 3-say-N see-Dir want.1Conj  
 'He says, "I see **the one I want.**"' (Mitchell 1921/1976d, 8)
- b. Bobby **keti-sakoma-wi-t.**  
 B. IC.Fut-governor-be-3Conj  
 'Bobby is **the future governor.**' AH,SN 9:6.14
- c. 'T-iy-a-n **pemhul-ac-il,** "Keq olu etoli-ntuwato-k ess?"  
 3-say.to-Dir-N IC.carry-3Conj-PartObv what Emph IC.Prog-sing.TI-3Conj clam  
 'She says to **her passenger,** "What is the clam singing?"' (Mitchell 1921/1976b, 11)

Initial change affects the vowel /o/ (schwa) of *koti-* and *pomhul-*, ablauting it to an /e/ (the vowel /a/ is unaffected in 511a), and the verb is used syntactically as a noun (direct object in 511a and 511c).

Many participles can clearly be seen to be verbal, taking the full range of tense, aspect, and other morphology particular to verbs. However, many nouns (particularly common nouns) are historically (and possibly even synchronically) participles in origin, but they behave for all intents and purposes like nouns. For example, the noun *ehpit*, 'woman', takes verbal obviative endings (*ehpi-li-c-il*, woman-ObvS-3Conj-PartObv), but in current use is never anything other than a noun. Goddard (1987) refers to the participle endings as "nominal" endings, regarding participles as nominal in function and distribution (while recognizing that they are built of verbal syntactic material). I will use the term *participle endings* here, since, as illustrated below, they do not always occur in nominal environments. As we will see, a better name might be "operator agreement."

The agreement pattern we are concerned with here is realized as a suffix, always final within the participle verb complex. In the examples it will be glossed as "PartX," where X will be the particular features involved; for instance, in 511c, the participle ending *-il* is glossed as "PartObv," for an obviative antecedent. The participle endings are almost identical to suffixes that occur elsewhere, except that they always have the

vowel /i/: /-il/ Obv, /-ik/ 3P, /-ihi/ ObvP, /-il/ InanP. They also cause palatalization of a preceding /t/, to /c/. Thus they are always easily recognizable.

The chief use of participles is in relative clauses (hence the idea that they are always nominal). The ending usually indexes the head of the relative clause, as illustrated below (though not always; the exceptions are not well understood, but may involve focus).

### 4.3.1 Relative Clauses

The head of the relative clause is indexed by this participle agreement suffix, even when it is redundant to do so. For example, in the following sentence from a story about the culture hero Koluskap, the whale is head of the relative clause ‘whale that hears him’:

- (512) ’-Pecim-a-n [NP putep-ehsis-ol nut-ahc-**il** ] , ’-pet-oqotaha-n  
 3-attract-Dir-N whale-Dim-Obv hear-3ConjInv-**PartObv** 3-come-swim-N  
 eyi-li-t Koluskapiy-il.  
 IC.be-ObvS-3Conj K.-Obv  
 ‘He attracts **a little whale that hears him**; he swims up to Koluskap.’ (Mitchell 1921/1976b, 8–9)

The whale is obviative within the relative clause (‘him’ is proximate), meaning that the participle ending takes the form appropriate for an obviative head noun, *-il*. In this particular case this would already be signalled by the preceding suffix, which indicates an obviative subject acting on a proximate object. For instance, the following non-participle (but still Conjunct) form is completely unambiguous:

- (513) Putep-ehsis-ol nut-aht, ...  
 whale-Dim-Obv hear-3ConjInv  
 ‘If the little whale (Obv) heard him (Prox)...’ (constructed)

The head of the relative clause can be indexed by the participle ending even when it is an argument that would not normally agree with the verb. For example, direct objects of ditransitive verbs are not indicated in conjunct morphology at all:

- (514) Kisi-yah-at Muwinuw-ol Susehp eli **kisi-mil-at** Wiphun-ol akòm.  
 Perf-tell-3Conj M.-Obv S. C Perf-give-3Conj W.-Obv snowshoe.ObvP  
 ‘Susehp told Muwin that he gave Wiphun snowshoes.’ AH,SN 3:9.27

The ending /-at/ only indicates a proximate subject acting on an obviative object, in a ditransitive the primary object (here *Wiphun-ol*). The obviative plural ‘snowshoes’ (snowshoes are animate in Passamaquoddy) are not marked on the verb at all; if they were singular, *peskuwol akomal*, ‘one snowshoe (Obv)’, the agreement would not change. But where they are the head of a relative clause they *are* indexed by the participle ending:<sup>6</sup>

- (515) Nihiht nit akom kisi-mil-ac-**ih**i.  
 these.ObvP that snowshow.ObvP Perf-give-3Conj-PartObvP  
 ‘These are the snowshoes he gave her.’ (constructed)

<sup>6</sup>Goddard (1987) cites examples from Fox in which the head of the relative clause is not actually an argument of the verb, but is instead the possessor of one of the arguments (most often the subject; the possessor of an object usually undergoes possessor raising, in which case it becomes an argument of the verb).

### 4.3.2 Long-Distance Relativization

When the relative clause is formed over a longer distance, participle endings can appear on verbs above the argument position of the relative operator:

- (516) a. Yuktok nit skitapiy-ik [ Piyel kesiciy-ac-**ih** [ keti-tqon-ac-**ih** Susehp  
 these that man-3P P. IC.know.TA-3Conj-ObvP IC.Fut-arrest-3Conj-ObvP S.  
 ] ] .

‘These are the men that Piyel knows Susehp will arrest.’ AH,SN 6:2.21

- b. Wot nit pahtoliyas [ Mali elitahasi-c-**il** [ eli wen  
 this that priest M. IC.think-3Conj-PartObv C someone  
 kisi-komutonom-ac-**il** ] ] .  
 Perf-steal.from-3Conj-PartObv

‘This is the priest that Mary thinks someone robbed.’ AH6:2.22

Participle endings are often optional; they can be left off of both verbs in each of the above examples, or off of either. In 516b, the head of the relative clause, ‘priest’, is not in any way an argument of the higher verb ‘think’ (this verb is morphologically intransitive). Yet it can be marked by the participle agreement suffix.

Across multiple clauses, all of the verbs along the path of agreement may be marked with the participle ending; in such cases the endings are fully optional in all of the clauses.<sup>7</sup>

- (517) N-musal-a [<sub>NP</sub> wot skitap [<sub>CP</sub> Piyel ito-k-(**il**) [<sub>CP</sub> elitahasi-t/c-**il** [<sub>CP</sub>  
 1-like-Dir this.An man P. say-3Conj-(PartObv) IC.think-3Conj-(PartObv)  
 kisi-komutonom-ih/c-**il** ] ] ] ] .  
 Perf-rob-3ConjInv-(PartObv)

‘I like [<sub>NP</sub> the man that Piyel said he thought robbed him] .’ AH,SN 10:7.14

It should be noted that the form of the agreement—obviative vs. proximate—is usually determined locally and is not simply agreement with features of the head. In both of the examples in 516, for example, the head nouns are proximate, but the participle agreement indexes an obviative. This is because, in the clause where the agreement appears, another proximate is already present; any other third person must necessarily be obviative.

An initial hypothesis about the generation of this agreement is that it results from successive-cyclic operator movement. In the relative clause examples considered so far, a relative clause operator must move successive-cyclically through each clause (at least via Spec-CP and possibly also via Spec-*v*P; see Chomsky 1998). As it does so it can trigger participle agreement.

That this is correct is shown by the fact that participle endings cannot appear in clauses that the relative operator has not moved through:

<sup>7</sup>I mark the optionality of the participle ending where it would cause palatalization as “t/c-il,” indicating that when the *-il* is present it causes the final /t/ to become /c/.



- (518) Yuktok nit mahtoqehsuw-ok [<sub>NP</sub> malsom [<sub>CP</sub> ecitawel-uk-(\*ihi) ] ]  
 these.3P that rabbit-3P wolf IC.trick-1Conj-(\*PartObvP)  
 meson-ac-ih.  
 IC.catch-3Conj-PartObvP  
 ‘These are the rabbits that the wolf that I tricked caught.’

In this example, the relative operator does not move through the CP that modifies the subject of the main verb. Hence, agreement with that relative operator is ungrammatical.

### 4.3.3 Analysis

I will spell out a minimal analysis of participle agreement that will generalize to the other instances of operator movement discussed below. As shown in Chapter 3, relative clauses involve successive-cyclic movement, of either a null operator coindexed with the external head of the relative clause, or of the head itself:

- (519) Wot nit pahtoliyas Mali elitahasi-c-**il** eli wen kisi-komutonom-ac-**il**.  
 this that priest M. IC.think-3Conj-PartObv C someone Perf-steal.from-3Conj-PartObv  
 ‘This is the priest that Mary thinks someone robbed.’ AH6:2.22

- (520) a. [<sub>NP</sub> priest<sub>t1</sub> [<sub>CP</sub> OP<sub>1</sub> Mary thinks [<sub>CP</sub> t<sub>1</sub> someone robbed t<sub>1</sub> ] ] ]  
 b. [<sub>NP</sub> priest<sub>t1</sub> [ Mary thinks [<sub>CP</sub> t<sub>1</sub> someone robbed t<sub>1</sub> ] ] ]

As discussed in Chapters 1 and 3, I will adopt the theory of successive-cyclic movement proposed by Chomsky (1998). This theory divides the syntactic derivation into *phases*. Once a phase is built it is spelled out—sent to the LF and PF interfaces. Any material that is spelled out is no longer accessible to the syntax; it has been converted into a form suitable for those interfaces. Only the edge of a phase—the head of the phase and its specifiers—is not spelled out, remaining accessible to further derivation. On this theory, an element that is to undergo long-distance movement will have to move to the edge of the current phase in order to move further. Hence, long-distance wh-movement must stop in intermediate CP positions because CP constitutes a phase.

Chomsky hypothesizes that, in addition to CP, *v*P also constitutes a phase. The head *v* is what introduces the external argument of the verb; it is at this point that the clause first becomes a complete propositional entity. Therefore, long-distance movement must also take place via the edge of *v*P, as illustrated below for movement of the relative clause operator:

- (521) [<sub>NP</sub> priest<sub>t1</sub> [<sub>CP</sub> OP<sub>1</sub> [<sub>vP</sub> t<sub>1</sub> Mary thinks [<sub>CP</sub> t<sub>1</sub> [<sub>vP</sub> t<sub>1</sub> someone robbed t<sub>1</sub> ] ] ] ] ] ]

I will hypothesize that it is through movement to Spec-*v*P that an operator triggers agreement on the verb. As Chomsky theorizes, an abstract Agree relation is a prerequisite for movement. In order to move to Spec-*v*P, an operator must first enter into an Agree relation with *v*. It is this relation that permits morphological agreement: the operator “values” the uninterpretable  $\phi$  features of the verb, which are spelled out as agreement morphology.

I will have nothing to say about why it is *operators* that trigger this particular pattern of agreement. The fact is that they do, however, as can be shown by examining wh-questions and association with focus.

#### 4.3.4 Questions

Wh-questions formed via movement of argument NPs also trigger participle agreement (again optionally, though to what extent is not clear). Some examples of both matrix and embedded questions follow:

- (522) a. **Wen-il** pihce mecimiw weskuwim-ahtic-il?  
 who-Obv long ago formerly IC.talk.about-3PConj-PartObv  
 ‘Who did they use to talk about?’ AH,SN 3:9.23
- b. **Wen-il** kisi-milakotim-ahtic-il?  
 who-Obv Perf-tell.stories-3PConj-PartObv  
 ‘Who are they telling stories about?’ AH,SN 3:9.24
- (523) a. Muwin ma=te wawitaham-a-w **wen-il** Susehp elmi-wici-yem-ac-il.  
 M. Neg remember.TA-Dir-Neg who-Obv S. IC.away-with-go-3Conj-Obv  
 ‘Muwin doesn’t remember who Susehp left with.’ AH,SN 4:10.16
- b. N-kisi-yaha-n Mali **wen-il** kisi-komutonom-ihc-il.  
 1-Perf-tell-N M. who-Obv Perf-steal.from-3ConjInv-PartObv  
 ‘I told Mary who robbed her.’ AH6:2.22

#### 4.3.5 Questions Are Not (All) Relative Clauses

The questions above could conceivably be relative clauses in an equational structure with a question word: ‘who is [the one they used to talk about]?’ One could argue that all occurrences of participle endings mark the head of a relative clause; where they appear in wh-questions, they must be equationals. Hence, as Goddard claims, participle endings are “nominal” endings. On such a story, participle endings would be irrelevant to the correct analysis of wh-scope marking, since the matrix clause could not possibly form part of a relative clause with the embedded wh-phrase:

- (524) **Keqsey** kisi-yuhu-sk [<sub>CP</sub> **wen-ih**i ali-wiciyem-ac-ih*i* Tihtiyas *t*] ?  
 what Perf-say.to-2ConjInv who-ObvP around-go.with-3Conj-PartObvP T.  
 ‘Who all did he tell you that Tihtiyas is going around with?’ AH,SN 10:7.16
- (525) a. What did he tell you [<sub>CP</sub> who are [<sub>NP</sub> the ones Tihtiyas is going around with ] ] ?  
 b. \* What are [<sub>NP</sub> the ones he told you [<sub>CP</sub> who Tihtiyas is going around with ] ] ?

A wh-scope marking question like that in 524 could conceivably have the structure in 525a, in which the embedded question includes a relative clause, but the structure in 525b is simply incoherent. There is no relative clause that could include both the matrix verb and the embedded verb.

There are two arguments against such a proposal. The first is that participle endings *are* grammatical on the higher verb in the alternative scope marking pattern to be discussed in Section 4.4.5. A preview of this type of scope marking appears in 526:

- (526) Tan elitahasi-yin-(ik)      **tan kehsi-n**    nemiy-oc-ik      **apiqsehsuw-ok?**  
 WH IC.think-2Conj-(Part3P) WH X.many-N IC.see-2Conj-Part3P rat-3P  
 ‘How many rats do you think you saw?’ AH,SN 10:7.16

As shown in Chapter 3 and below, ‘how many’ questions *do* involve equational structures, as ‘how many are [the rats that you saw]?’ The scope marking question in 526 involves such a relative clause, but it could *not* involve a relative clause containing both the matrix verb and the embedded verb:

- (527) \* WH are [the rats you think how many you saw]?

As shown in Chapter 3 and below, the head of the relative clause in ‘how many’ questions is what is the restriction of ‘how many’ in English; here, ‘rats’. ‘How many’ would have to move out of a complex NP in 526 in order to take scope, but movement in Passamaquoddy strictly obeys the Complex NP Constraint, as shown in Chapter 3.

The correct structure for 526, as shown in Section 4.4.5, is one that involves LF movement of just ‘how many’:

- (528)  $[_{CP} \text{ how many do you think } [_{CP} t_1 \text{ are } [_{NP} \text{ the rats that you saw } ] ] ] ?$   
↑  
LF mvmt

LF movement of ‘how many’ here is able to trigger participle agreement, even though ‘think’ is not part of any relative clause.

The second argument is the fact that many questions are not equational structures (with a relative clause). They can be shown to differ in many crucial ways from questions like ‘how many’ that do appear to be equational. Instead they must involve wh-movement of the usual sort, without any relative clause that could account for the participle ending.

For example, ‘which’ questions appear to involve relative clauses:

- (529) a. Tan wot    nit muwin kisi-maton-at    nihiht    mawsuwinu?  
 WH this.An that bear    Perf-fight-3Conj those.ObvP person.ObvP  
 ‘Which bear attacked those people?’ AH,SN 3:9.26
- b. Tan wot    nit elitahasi-t    muwin keti-maton-at    Susehp-ol?  
 WH this.An that think-3Conj bear    IC.Fut-fight-3Conj S.-Obv  
 ‘Which bear thinks he’s going to attack Susehp?’ AH,SN 3:9.26
- c. Tan-iyut    utapakon ap-uwehk-iyin    Kehlisk-k?  
 WH-this.Inan car    around-use-2Conj Calais-Loc  
 ‘Which car did you drive to Calais?’

‘Which’ questions use the all-purpose wh-morpheme *tan*, followed by the demonstrative appropriate to the NP being questioned. This can also be followed by *nit*, an inanimate demonstrative that is used in nominal predication (even with animates; I gloss it simply as ‘that’):

- (530) a. Yut    nit atomupil kis-onuhmuw-ew-at    Can Piyel-ol.  
 this.Inan that car    Perf-buy-App-3Conj J.    P.-Obv  
 ‘This is the car that John bought for Piyel.’ AH1:9.7

- b. Yuhtol nit Entoni puwato-k-il ahahs-is-ol.  
 this.Obv that Anthony want-3Conj-Obv horse-Dim-Obv  
 ‘This is the pony that Anthony wants.’ AH,SN 5:11.11
- c. Nekom nit kisi-komutonato-k man.  
 3 that Perf-steal-3Conj money  
 ‘He’s the one who stole the money.’ AH,SN 9:6.13

What follows *nit* is always a relative clause, either externally or internally headed. ‘Which’ questions, then, have the appearance of nominal equational structures (see Chapter 3).

Questions like these have several properties that follow from their status as nominal equationals. However, other questions lack these properties, even when they use participle endings. Hence, the latter cannot be assimilated to equationals involving relative clauses.

### Obviation Domains

The first property that distinguishes the two types of questions is the way obviation domains are partitioned. In externally-headed relative clauses, the head of the relative clause may be proximate even though it would be obviative in its trace position:

- (531) a. Kat=op not n-kot-uhp-a-w mus skitap nehpah-ac-il.  
 Neg=would this 1-Fut-eat-Dir-Neg moose man kill-3Conj-Part**Obv**  
 ‘I wouldn’t eat the moose (Prox) that this man (Prox) killed *t(Obv)*.’ AH,SN 6:2.27
- b. Wol-ihpuksu-wok musuw-ok kis-ewestuwam-uk pilsqehsis kis-aqos-ac-ih.  
 good-taste-3P moose-3P Perf-talk.to-1Conj girl Perf-cook-3Conj-Part**ObvP**  
 ‘The moose (Prox PI) taste good that the girl (Prox) I talked to cooked *t(Obv PI)*.’ AH,SN 8:5.8
- c. Yuktok nit mahtoqehsuw-ok malsom ecitawel-ac-il Pokomk  
 these.3P that rabbit-3P wolf IC.trick-3Conj-PartObv Fisher  
 meson-ac-ih.  
 IC.catch-3Conj-PartObvP  
 ‘These are the rabbits (Prox) that the wolf (Prox) that Fisher (Prox) tricked *t(Obv)* caught *t(Obv PI)*.’ AH,SN 10:7.15

In 531a, for example, ‘moose’ would be obviative in the clause ‘the man killed the moose’. It is in fact marked as obviative in this clause, by the participle ending *-il*. As an external head of a relative clause, however, it can be proximate, as though it were only part of the higher clause, where no other third person forces it to be obviative (first persons do not—cannot—force obviation).

In other words, relative clauses count as domains separate from the rest of the sentence in computing obviation (obviation domains indicated by curly brackets):

- (532) { I wouldn’t eat [<sub>NP</sub> the moose ] { [<sub>CP</sub> OP<sub>1</sub> this man killed *t*<sub>1</sub> ] } }

Now, in the questions above that appear to be nominal equationals—‘which’ questions—the *wh*-phrase can also be proximate even though it is obviative in its trace position:

(533) AH,SN 10:7.14

- a. Tan-iyuhtol pilsqehsis-ol kisi-wapolehl-ac-il?  
 WH-this.Obv girl-Obv Perf-treat.wrongly-3Conj-PartObv  
 ‘Which girl (Obv) did he (Prox) treat badly *t(Obv)?*’
- b. Tan-uwot pilsqehsis kisi-wapolehl-ac-il?  
 WH-this.An girl Perf-treat.wrongly-3Conj-PartObv  
 ‘Which girl (Prox) did he (Prox) treat badly *t(Obv)?*’

(534) {which is [<sub>NP</sub> the girl ] { [<sub>CP</sub> OP<sub>1</sub> he treated badly *t<sub>1</sub>* ] } }

‘How many’ questions, as shown above, are also equational. They are constructed, in fact, of two verbs, where ‘be X many’ is one; the resulting structure is something like ‘[How many] are [the apples that he gave to each girl]’. The NP here can be proximate even though its argument position is obviative:

(535) Tan=oc kehson-ya cikony-ik keti-mil-ot yatte wen pilsqehsis?  
 WH=Fut X.many-3P apple-3P IC.Fut-give-2Conj each someone girl  
 ‘How many are the apples (Prox) that you will give each girl (Prox) *t(Obv)?*’ WN1:9.8

(536) AH,SN 10:7.14

- a. Kehsu pilsqehsis kisi-nicankew-ac-ih?  
 X.many.ObvP girl.ObvP Perf-impregnate-3Conj-PartObvP  
 ‘How many girls (ObvP) did he (Prox) get pregnant *t(ObvP)?*’
- b. Kehsu-wok pilsqehsis-ok kisi-nicankew-ac-ih?  
 X.many-3P girl-3P Perf-impregnate-3Conj-PartObvP  
 ‘How many girls (Prox) did he (Prox) get pregnant *t(ObvP)?*’

(537) {how many are [<sub>NP</sub> the girls ] { [<sub>CP</sub> OP<sub>1</sub> he got pregnant *t<sub>1</sub>* ] } } ?

In contrast, when we turn to simple questions, which are not obviously equational, we find that the question word may *not* be proximate if its trace position is obviative:

(538) AH,SN 10:7.14

- a. Wen-il kisi-wapolehl-ac-il?  
 who-Obv Perf-treat.wrongly-3Conj-PartObv  
 ‘Who (Obv) did he (Prox) treat wrongly *t(Obv)?*’
- b. Wen kisi-wapolehl-ac-il?  
 who Perf-treat.wrongly-3Conj-PartObv  
 ‘Who (Prox) treated her (Obv) wrongly?’ NOT ‘Who (Prox) did he (Prox) treat wrongly *t(Obv)?*’

(539) \* {who is [<sub>NP</sub> the one ] { [<sub>CP</sub> OP<sub>1</sub> he got pregnant *t<sub>1</sub>* ] } }

Thus simple questions could not be equational, and include a relative clause<sup>8</sup>. This means that participle agreement with wh-questions can not be reduced to agreement with the head of a relative clause.

<sup>8</sup>As in English, it *is* possible to cleft such questions: ‘Who was it that he got pregnant?’ Such questions are usually recognizable as such, often containing *nit*, for instance.

### Second-Position Clitics

Further evidence against an equational analysis comes from second-position clitics. In the case of the ‘which’ questions that we saw above to be equational, second-position clitics associated with the second part of the equation come after the demonstrative, not after the *wh*-morpheme:

(540) AH1:9.7

- a. Tan-iyut **yaq** kis-ankuwehto-k utapakon Piyel?  
 WH-this.Inan Quot Perf-sell-3Conj 3.car Piyel  
 ‘Which car did Piyel sell?’
- b. Tan-iyut=**oc** atomupil mac-ehkom-on Kehlisk-k?  
 WH-this.Inan=Fut car start-drive-2Conj Calais-Loc  
 ‘Which car will you drive to Calais?’

This is not due to an inability of the second-position clitic to break up *tan* + demonstrative; when these clitics occur with *tan* in other environments they do immediately follow *tan*:

- (541) ’-Tiy-a-pon-ihl, “Tan **oc** wot wen qiluwih-it, pesqon=c tan wen  
 3-tell-Dir-Pret-ObvP WH Fut this.An someone search.for-1ConjInv one.Inan=Fut WH someone  
 eli-pawato-k nt-oli-mil-a-n pskuw-it, tan tehpu keq.  
 IC.thus-want-3Conj 1-thus-give-Dir-N find-1ConjInv whatever something  
 ‘He had told them, “Whoever seeks me, I shall give one thing that he wants when he finds me,  
 whatever it may be.’ (Mitchell 1921/1976c, 10)

Where *tan* introduces a free relative, for instance, a second-position clitic that semantically belongs to that free relative immediately follows *tan*, not the demonstrative. Note that 541 contains the same sequence of *tan* plus the demonstrative *wot* that appears in the cleft in 529.

Therefore we can conclude that in real equational questions, second-position clitics must follow the first element of the second part of the equation, not the first element of the first part:

- (542) [<sub>CP</sub> WH be [<sub>NP</sub> this=**CLITIC**] car [<sub>CP</sub> OP<sub>1</sub> you will drive to Calais ] ] ?

Turning to simple *wh*-questions, then, we would expect these clitics to be unable to immediately follow the *wh*-phrase if it is the first part of an equational sentence. This is not the case, however; second-position clitics consistently follow the *wh*-phrase:<sup>9</sup>

- (543) a. Tama=c kt-oli-ya-pon wolakuk?  
 where=Fut 2-there-go-12 tonight  
 ‘Where should we (Incl) go tonight?’ AH1:9.7
- b. Wen **op** ankum-osk nuhu akom?  
 who would sell-2ConjInv three.ObvP snowshoe.ObvP  
 ‘Who would sell you three snowshoes?’ AH,SN 9:6.12

<sup>9</sup>I do not include judgements of ungrammaticality, because speakers will generally assent to any position of these clitics. In production, however, they are very consistent in where they put the clitics.

- c. Wen-ih*i* **oc** elewestuwam-ac-ih*i*?  
 who-ObvP Fut talk.to-3Conj-PartObvP  
 ‘Who all will he talk to?’ WN8:5.9
- d. Wen-ih*i* **op** elewestuwam-ac-ih*i*?  
 who-ObvP Would talk.to-3Conj-PartObvP  
 ‘Who all would he talk to?’ WN8:5.9

(544) \* [<sub>CP</sub> who is [<sub>NP</sub> Ø [<sub>CP</sub> OP<sub>1</sub> sell=CLITIC three snowshoes ] ] ] ?

### Inherently Relative Roots

A final argument against an equational and hence relative clause analysis of questions comes from a difference between relative clauses and questions with certain types of verbs. As discussed in Chapter 3, certain verbs do not take normal internal arguments, but instead act as though they take oblique arguments, called “relative root arguments” (see, e.g., Rhodes 1990b, 1998). Such arguments are normally introduced by a preverb on the verb. For example, in order to specify or to ask ‘where’, a relative root (here *toli*) must be added to a verb:

(545) AH,SN 9:6.11

- a. N-qecimul-ku-n ’Tolitol*i* n-**toli**-nomiy-a-n **Malikons-ok**.  
 1-ask-Inv-N T. 1-there-see-Dir-N Mulligan’s-Loc  
 ‘Tolitol*i* asked me to meet her at Mulligan’s.’
- b. Keqsey kisi-qecimul-osk ’Tolitol*i* **tama** k-**toli**-nomiy-a-n?  
 what Perf-ask-2ConjInv T. where 2-there-see-Dir-N  
 ‘Where did ’Tolitol*i* ask you to meet her?’

These verbs are inflected with Independent morphology even when part of a question.

Certain verbs appear to be inherently specified for this type of relative root argument (Bloomfield 1927, 205, Voorhis 1974, 46–52, 76–78, as cited in Goddard 1987). In the domain of locative adjuncts, for example, verbs of location inherently specify a relative root argument, and do not need to be prefixed with a relative root in order to specify the location:

(546) Otuhk **yuk kcihku-k iyu** ’sami tahk sakoli-pskuw-a.  
 deer here forest-Loc be.3 because ? hard-find-Indef/3  
 ‘There’s a deer **here in the forest** that’s hard to find.’ AH,SN 10:7.13

Like relative root arguments added by an overt relative root, when the argument of an inherently relative root is questioned the verb appears in the Independent rather than the Conjunct form; compare the relative clause in 548:

(547) a. Ma=te n-kosiciy-a-w tama **iyu**.  
 Neg=Emph 1-know.TA-Dir-Neg where be.3  
 ‘I don’t know where he is.’ AH,SN 10:7.15

Independent

- b. Itom yaq, “Tama nil **nt-i**?  
say.to Quot where 1 1-be  
‘He said, “Where am I?”’ (Newell 1974b, 2) Independent
- (548) on saku nt-ol-ahka-n-en otuhk nit-te qihiw **eyi-t**, naka  
then therefore 1-there-throw-N-1P deer there-Emph near IC.be-3Conj and  
n-uc-qi-phuwa-ne-n.”  
1-from-turn?-run-N-1P  
‘so we threw away the deer right there near **where he was** and turned and ran.’ (Newell 1974b, 6) Conjunct

Now, it turns out that there are several verbs whose clausal argument acts like it is an inherently specified relative root argument, similar to the locatives illustrated above. When their CP argument is questioned, for example, they use the Independent rather than the Conjunct. Compare ‘tell’ (or ‘say to’) and ‘say’, inherently relative roots, with ‘ask’ and ‘deny’, which are not inherently relative:

- (549) a. Keq kt-iy-oq Piyel?  
what 2-say.to-Inv P.  
‘What did Piyel tell you?’ AH,SN 9:6.15 Independent
- b. Keqsey kisi-qecimul-osk ’Tolitolil?  
what Perf-ask-2ConjInv T.  
‘What did ’Tolitolil ask you?’ AH,SN 9:6.11 Conjunct
- (550) a. Keq itom Scooby-Doo?  
what say.3 S.  
‘What does Scooby-Doo [a watch] say?’ AH,SN 9:6.13 Independent
- b. Keq Mihku ikonewato-k?  
what M. deny-3Conj  
‘What did Mihku deny?’ AH,SN 9:6.10 Conjunct

It is only this one particular argument—the CP complement—that behaves like a relative root argument. If the subject, for example, is questioned, the Conjunct form is used; compare the pair below:

- (551) AH,SN 9:6.13
- a. Keq Pil kt-iy-oq?  
what B. 2-say.to-Inv  
‘What did Bill say to you?’
- b. Wen nit yuhu-sk?  
who that.Inan say.to-2ConjInv  
‘Who said that to you?’

Several other facts indicate that these verbs are inherently relative, and differ from other verbs taking clausal complements. For instance, only they permit long-distance adjunct extraction from their clausal complement (other verbs must add an additional relative root; see Chapter 3).

Questions involving these verbs could not possibly be analyzed as equational (hence relative clauses), since when they are relativized they *do* take Conjunct morphology. Contrast 550a with the following:



- (552) Keq ito-k Scooby-Doo cu leyu.  
 what say-3Conj S. surely happen.II  
 ‘Whatever Scooby-Doo says must be true.’ AH,SN 9:6.14

One could, of course, say that just questions with relative root verbs are not equational, thereby attempting to maintain the analysis of participle endings as appearing only in relative clauses. However, this will not work, since the distinction between Independent and Conjunct morphology is maintained with long-distance movement across these verbs. A long-distance relative clause triggers Conjunct agreement, but a long-distance question triggers Independent. Note, however, that in both cases participle agreement appears in the lower clause:

- (553) a. Tan elik-on tapakon-ol **ito-k** ketuw-onuwo-k-(**il**)?  
 WH kind-II car-InanP say-3Conj IC.Fut-buy-3Conj-(PartInanP)  
 ‘What kind are the cars that he said he will buy?’ WN8:5.9 Conjunct
- b. Wen-il **itom** nemiy-ac-**il**?  
 who-Obv say.3 IC.see-3Conj-PartObv  
 ‘Who did he say he saw?’ DD6:3.1 Independent

If 553b involved a relative clause, as ‘who is [the one he said he saw]?’ , the verb *itom* would be in its Conjunct form, as in 553a. The latter is one of the complex questions that do use relative clauses.

Together with the differences in obviation domains and placement of second-position clitics, the evidence from inherently relative root verbs indicates that simple questions (not the ‘which’ or ‘how many’ kind) do not involve relative clauses. The fact that questions cannot be reduced to equational sentences with a relative clause means that at least two types of operator movement, movement of a relative operator and movement of a question operator, can trigger participle agreement. This agreement pattern is not simply “nominal,” that is, with the head of a relative clause. It will therefore be relevant to determining the LF of scope-marking structures.

#### 4.3.6 Long-Distance Questions

Like long-distance relative clauses, long-distance questions can trigger participle agreement all along the path of movement:

- (554) a. Wen-ihl piluwitaham-oc-**ihl** Piyel kisi-komutonom-ac-**ihl**?  
 who-ObvP suspect-2Conj-PartObvP P. Perf-rob-3Conj-PartObvP  
 ‘Who all do you suspect that Piyel robbed?’ AH,SN 6:3.2
- b. Wen-ihl tepitaham-oc-**ik** ketuw-ewestuwam-ac-**ihl**?  
 who-ObvP think.TA-2Conj-Part3P IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’

If the operator (here, the *wh*-phrase) never passed through a clause, agreement on the verb of that clause is ungrammatical:<sup>10</sup>

<sup>10</sup>For a brief period of time, two informants judged as grammatical participle endings, within a relative clause modifying a preverbal subject, being controlled by an object or other operator that crossed the preverbal subject:

(555) AH,SN 8:5.10

- a. Wen-ihì keti-mil-ic-ihì skitap nenuw-uk?  
 who-ObvP IC.Fut-give-1ConjInv-PartObvP man IC.know-1Conj  
 ‘What (An.) all is [ the man that I know ] going to give me?’
- b. \* Wen-ihì keti-mil-ic-ihì skitap nenuw-uk-ihì?  
 who-ObvP IC.Fut-give-1ConjInv-PartObvP man IC.know-1Conj-PartObvP  
 ‘What (An.) all is [ the man that I know ] going to give me?’

The postverbal subject is a complex noun phrase, itself a relative clause. The *wh*-phrase does not pass through this clause, and cannot trigger agreement. (We saw the same fact above with relative operators.) It seems to be true that participle endings can be triggered only in clauses through which an operator has passed.

#### 4.4 Covert Movement

The obvious question to ask now is, does covert movement of operators trigger participle agreement? That is, when an operator occurs in situ but takes scope several clauses higher, will the verbs in those higher clauses

(i) AH,SN 8:5.10

- a. **Keqseyal** [<sub>NP</sub> skitap kesiciy-oc-il ] kisi-ht-aq-il *t*?  
 what.InanP man IC.know-2Conj-PartInanP Perf-make-3Conj-PartInanP  
 ‘What all did the man you know make?’
- b. **Wen-ihì** [<sub>NP</sub> wot skitap nenuw-uk-ihì ] keti-messunom-uw-ac-ihì Piyel-ol *t*?  
 who-ObvP this.An man IC.know-1Conj-PartObvP IC.Fut-show-App-3Conj-PartObvP P-Obv  
 ‘What (An.) all is this man that I know going to show Piyel?’

If the subject was postverbal, they judged the agreement ungrammatical:

(ii) AH,SN 8:5.10

- a. Wen-ihì keti-mil-ic-ihì skitap nenuw-uk?  
 who-ObvP IC.Fut-give-1ConjInv-PartObvP man IC.know-1Conj  
 ‘What (An.) all is the man that I know going to give me?’
- b. \* **Wen-ihì** keti-mil-ic-ihì [<sub>NP</sub> skitap nenuw-uk-ihì ] ?  
 who-ObvP IC.Fut-give-1ConjInv-PartObvP man IC.know-1Conj-PartObvP  
 ‘What (An.) all is the man that I know going to give me?’

However, on later occasions the same informants rejected all such examples, meaning that it was impossible to explore this phenomenon further. There is reason to believe that it is real, however; such examples came up because of an example sent to me by Phil LeSourd, from a completely different speaker (Dave Francis):

- (iii) Nihìht n-itàp ’-kis-onuw-à **tapì** [<sub>NP</sub> kesiciy-uk-ihì skitap ] kis-iy-ac-ihì  
 those.Obv 1-friend 3-Perf-buy-Dir.ObvP bow.ObvP IC.know-1Conj-PartObvP man Perf-make-3Conj-PartObvP  
*t.*

‘My friend brought those bows that I know the man that made (them).’ (D. Francis)

Phil LeSourd translated this as a CNPC violation, but it could also (and probably does) have the parse that I give (using brackets) for the Passamaquoddy: ‘My friend bought [the bows that [the man I know] made *t*.’ If this is correct, the participle ending on the preverbal subject, ‘the man I know’, is controlled by the relative operator associated with ‘bows’.

be able to agree with the operator? If they can, then we have an important test for the Direct vs. the Indirect Dependency analysis of wh-scope marking, since the former but not the latter posits covert movement of the embedded wh-phrase.

It is simply impossible to test participle endings with covert movement using questions in Passamaquoddy. Wh-phrases never occur in situ—wh-movement is obligatory, and multiple questions are ungrammatical. However, there are two other places to look for covert operator movement: focus movement and internally-headed relative clauses. Both, we will see, permit participle endings to occur up to the scope position, even in clauses higher than the surface position of the operator.

#### 4.4.1 Focus

There seem to be (at least) two positions for focus. One, which will not be explored in detail here, is at the left edge of the clause, apparently left-dislocated. NPs marked with the contrastive marker *kahk* appear here:

(556) **Nihtol kahk** musqitaham-a-l eli qeci-nehpih-iht.  
 this.Obv Foc hate-Dir-Obv C try-kill-3ConjInv  
 ‘THIS one he hates because he tried to kill him.’ (pointing at one of two people) AH,SN 8:5.7

(557) AH8:5.6

- a. Susehp nomiy-a-l musuw-ol on macephuwa-n.  
 S. see-Dir-Obv moose-Obv then run.away-N  
 ‘Susehp saw a moose and ran away.’
- b. **Nil kahk** nitte n-maceptun peskuwat.  
 I Foc right.away I-take.TI gun  
 ‘But I immediately grabbed a gun.’

In 557b, the particle *nitte* consistently marks the left edge of the clause: elements that appear before it are left-dislocated, and nonreferential quantifiers, for example, cannot appear to its left (see Chapters 1 and 2). The NP marked with *kahk* in 557b is therefore left-dislocated.<sup>11</sup>

<sup>11</sup>The type of focus marked by *kahk* is not informational but contrastive (in the sense of É. Kiss 1998). Thus it cannot appear on the answer to an information question:

(i) AH,SN 9:6.15

- a. Q: Wen-il Albert kisi-kolul-ac-il?  
 who-Obv A. Perf-scold-3Conj-PartObv  
 ‘Q: Who did Albert scold?’
- b. \* A: Nihtol kahk kisi-kolul-ac-il.  
 that.Obv Foc Perf-scold-3Conj-PartObv  
 ‘A: He scolded HIM.’

The element focussed with *kahk* does not have to be an NP; here it is a particle:

- (ii) **Toke kahk** cel ’-kophomon khakon wesuwessi-t wahsiw.  
 now Emph even 3-shut door go.back-3Conj into.other.room  
 ‘And now she closed the door when she came into the other room.’ (Gabriel 1979, 3)

The other position is also preverbal, but is within the clause rather than left-dislocated. The subject, if different from the focus, can and frequently does come before this position, as do various other kinds of clausal material. Wh-phrases and sentence-initial particles always come before this position; hence it is not left-dislocated. Some examples from texts appear below, showing contrastive elements:

- (558) a. Itom yaq, “Ska kisi kotunke-hq wapeyit, mehsi=hp=al **Skicin**  
 say.3 Quot Neg Perf hunt-3ConjNeg white.man why=would=Uncertain Indian  
 cikitw-ut?  
 leave.alone-Indef/3Conj  
 ‘He said, “If a white person can’t hunt, why should an Indian be allowed to?” (Newell 1974b, 1)
- b. **Skinuhsis-ok** nihkan-apasuw-ok, **Mikcic** asit naka-hkal-su.  
 youth-3P ahead-walk-3P M. behind slow?-hide.TA-Refl.3  
 ‘The young men walk ahead, Mikcic hides himself behind.’ (Mitchell 1921/1976d, 17)
- c. Apc **kotok wikuwam** ’-peciya-n, etol-elu-c-ik ehpic-ik.  
 again other house 3-come-N where-be.many?-3Conj-3P woman-3P  
 ‘Again he comes to another *wikuwam*, where there are many women.’ (Mitchell 1921/1976a, 18)

Focussed or contrastive elements may also occur postverbally, a topic to which we will return; in such cases they appear to undergo LF movement.

In elicitation, a contrastive possessor splits off its NP and appears to the left of the verb:

- (559) Nopal Piyel **nekom te** al-k-ok utapakon naka n-cikihtm-a-ku-n nil.  
 if.only P. 3 Emph around-drive-3Conj 3.car and leave.alone-App-Inv-N 1  
 ‘I wish Piyel would drive **his own** car and leave mine alone.’ AH,SN 9:6.12

Similarly, contrastive topics usually appear in preverbal position:

- (560) (Pokomk:) “Kehsuw-ok olu **nil** keti-yih-in coqols-ok meson-oc-ik?”  
 (Fisher:) X.many-3P Emph 1 IC.Fut-tell-2/1Conj frog-3P IC.catch-2Conj-Part3P  
 ‘(Fisher:) “How many frogs are you going to tell ME that you caught?”’ AH,SN 7:4.6

It appears that splitting a numeral off of its NP, to an immediately preverbal position, also often achieves a focussed or contrastive reading for the numeral. For instance, split numerals are appropriate answers to ‘how many?’ questions, where the NP itself is old information:

- (561) WN8:5.9
- a. Tan kehson ahsosuwon tepeltom-on?  
 WH X.many hat IC.own-2Conj  
 ‘How many hats do you own?’
- b. **Nisonul** tepeltom ahsosuwon-ol.  
 two.InanP IC.own.1Conj hat-InanP  
 ‘I own **two** hats.’

Similarly, split numerals are appropriate for explicitly contrasting numbers:

- (562) **Nisonul** tepeltom *ahsowon-ol* makahk newonol.  
 two.InanP IC.own.1Conj hat-InanP but.not four.InanP  
 ‘I own **two** hats, not four.’ WN8:5.9

Importantly, focus often (but not always) occurs with the Conjunct form of the verb. Participle endings also often appear:

- (563) **Piyel** mesk-ok-**il** nisonu-l wapeyik-il wawon-ol, Sapet olu  
 P. IC.find-3Conj-PartInanP two-InanP white-InanP egg-InanP S. Top  
 mesk-ok-**il** nisonu-l mehqapskesk-il.  
 IC.find-3Conj-PartInanP two-InanP red-InanP  
 ‘Piyel found **two white eggs** and Sapet found **two red ones**.’ AH,SN 7:4.7

The participle ending agrees with the NP that is in focus. For example, it can co-occur with the particle *kahk* that we saw before. Here we have two indications of which NP is focussed: *kahk* explicitly marks that NP, and the participle ending agrees with that NP. In 564a, ‘two’ is focussed, and the participle ending indexes an inanimate plural. In the otherwise identical 564b, *Piyel* and *Sapet* are in focus, and the respective verbs lack a participle ending, or have zero for a proximate singular:

- (564) AH,SN 7:4.7
- a. **Nisonu-l kahk** Piyel mesk-ok-**il** (wawon-ol).  
 two-InanP Foc P. IC.find-3Conj-PartInanP (egg-InanP)  
 ‘It was two (eggs) Piyel found.’
- b. **Piyel kahk** mesk-ok nisonu-l, **Sapet kahk** mesk-ok nohonu-l.  
 P. Foc IC.find-3Conj two-InanP S. Foc IC.find-3Conj three-InanP  
 ‘PETER found two, and SAPET found three.’

An example of focus with *kahk* from a text appears below:

- (565) **Nilun kahk** oli-ya-yek, nitte=hc nona-ku-ne-n, naka [’]-kosicihtun eli nilun  
 1P Emph there-go-1PConj right.away=Fut recognize-Inv-N-1P and 3-know.TI ELI 1P  
 kisi nehpeh-ek not otuhk.  
 Perf kill-1PConj this deer  
 ‘If WE (Excl) went, he’d recognize us right off, and know that WE (Excl) killed that deer.’ (Newell 1974b, 6–8)

The Changed Conjunct form of the verb is used in the clauses containing the focused first person plural. No participle ending appears, because participle endings only agree with third persons.

The patterns of focus illustrated above are difficult to control. In particular, the scope of the focus, if not indicated by overt movement (or left dislocation as with *kahk*), is difficult to determine. However, in association with focus we have a very similar pattern that is almost always explicitly marked. The scope is the position of the element that associates with focus: the particle meaning ‘only’.

#### 4.4.2 Association With Focus

The particle *tehpu*, meaning ‘only’, is like its English counterpart in associating with a focussed element. It can appear with the focussed NP, sometimes postverbally but most often preverbally. The preverbal NP with *tehpu* is then marked on the verb by the participle ending:

- (566) a. Piyel litahasu **tehpu Maliw-ol** kesi-iyw-ihc-il.  
P. think.3 only M.-Obv IC.like-have-3ConjInv-PartObv  
‘Piyel thinks only **Mary** likes him.’ AH,SN 9:6.12
- b. **Nihtol tehpu** kisapem-ac-il.  
that.Obv only rely.on-3Conj-PartObv  
‘**He**’s the only one she can rely on.’ AH,SN 9:6.13

Some examples from texts follow. Some points to note are that *tehpu* occurs with the Changed Conjunct form of the verb, and the participle ending agrees with the focussed NP:

- (567) a. **Tehpu motehsan-ol** putoma-c-il: mesq na ’-tawe-w.  
only youngest.child-Obv lose.AI+O-3Conj-Obv not.yet also 3-can.talk-Neg  
‘The youngest is the only one he does not get, but he does not know how to talk yet anyway.’  
(Mitchell 1921/1976a, 11)
- b. **Pesq tehpu** apaci-ya-t wik-ok apc — wot nit kotunkewin.  
one only return-go-3Conj 3.house-Loc again this.An that hunter  
‘Only one makes it back to his house—this is the hunter.’ (Mitchell 1921/1976c, 18)
- c. ’-Tiyu-ku-l yaq, “**Kil** ehta=hc **tehpu** kiki-hin.  
3-say.to-Inv-Obv Quot 2 Emph=Fut only heal-2/1Conj  
‘“You’re the only one that can heal me,” (Newell 1979, 16)

All of these examples have the focussed phrase in preverbal position, with *tehpu*.

#### Focus: In-Situ

There is another pattern, however, which is what I will investigate in detail here. In this pattern *tehpu* appears alone in preverbal position, and the NP it associates with is postverbal. In this respect it resembles English examples like *He only sold me three snowshoes, (not the four I wanted)*, where the NP that *only* associates with is marked by stress. In Passamaquoddy, which NP *tehpu* associates with is marked not by stress but by the participle ending:

- (568) a. Mali **tehpu** kesi-iyw-ac-il **Piyel-ol** ma=te=apc wen-il.  
M. only IC.like-have-3Conj-PartObv P.-Obv Neg=Emph=again someone-Obv  
‘Mary only likes PIYEL, no one else.’ AH,SN 9:6.12
- b. Wot skitap **tehpu** kis-ankum-ic-ih **nuhu akom**.  
this man only Perf-sell-1ConjInv-PartObvP three.ObvP snowshoe.ObvP  
‘This man only sold me THREE SNOWSHOES.’ AH,SN 9:6.12

Hence the participle ending serves the function of marking the focussed element. If the ending were to be left off of the verb in 568a, for example, the meaning would be ‘only Mary likes Piyel’, with ‘only’ associating with ‘Mary’ instead of ‘Piyel’ (or with the entire VP). A minimal pair is the following:

(569) AH,SN 9:6.12

- a. (Nil) **tehpu** kisi-wicuhkem-uk Piyel mihtaqs-ol kespahl-at ’-temis-ol.  
 (1) only Perf-help-1Conj P. 3.father-Obv IC.wash-3Conj 3-dog-Obv  
 ‘Only I helped Piyel’s father wash his dog.’
- b. **Tehpu** kisi-wicuhkem-uk-**il** **Piyel mihtaqs-ol** kespahl-at ’-temis-ol.  
 only Perf-help-1Conj-PartObv P. 3.father-Obv IC.wash-3Conj 3-dog-Obv  
 ‘I helped only Piyel’s father wash his dog.’

The first sentence lacks an ending, meaning that *tehpu* must be associating with the subject, which is registered only by a zero morpheme. In the second sentence, the participle ending indexes an obviative, indicating focus on *Piyel’s father*.<sup>12</sup>

### Movement: Islands

We saw above that participle endings occur in environments where operator movement takes place: relativization and wh-questions. We might hypothesize the same here—the participle ending results from movement of the focussed NP to some kind of focus projection, perhaps where *tehpu* occurs overtly. As we saw, the focussed NP could appear in this position with *tehpu*; without *tehpu*, focussed elements often occurred preverbally by themselves. We might suppose that this focus movement can take place either overtly or covertly, giving the difference between preverbal and postverbal focus.

An easy way to test this is to test for constraints on movement. For instance, both wh-question and relative clause extraction obey islands in Passamaquoddy, as was illustrated in Chapter 3. If focus movement is indeed movement, it should also be constrained by island conditions. This is in fact the case: overt focus movement to the position of *tehpu* must obey islands, here the Complex NP Constraint:

(570) AH,SN 10:7.13

- a. N-musqitaham-a not ehpit peciph-iht Piyel-ol.  
 1-hate-Dir that.An woman bring-3ConjInv P.-Obv  
 ‘I hate the woman that Piyel brought.’
- b. \*Tehpu Piyel-ol musqitaham-uk-il (not) ehpit peciph-ihc-il.  
 only P.-Obv hate-1Conj-PartObv (that.An) woman bring-3ConjInv-PartObv  
 ‘I only hate the woman that PIYEL brought.’

When the focussed phrase is postverbal, it also must obey islands. For example, if the island is a complex NP, only the complex NP itself can be interpreted as the focus:

<sup>12</sup>It might be surprising that the ending on ‘help’ is obviative, given that the only other argument of this verb is first person. However, the possessor of ‘father’, *Piyel*, is also third person, which might be enough to make ‘father’ obviative, even though it is not itself an argument of the verb.

- (571) Tehpu musqitaham-uk ehpit peciph-ac-il Piyel.  
 only hate-1Conj woman bring-3Conj-PartObv P.  
 ‘I only hate the woman that Piyel brought.’ (focus: woman) AH,SN 10:7.13

Similarly, in the following only the VP (or possibly the adjunct) can be interpreted as the focus; if participle endings are added to indicate that the focus is an NP within the adjunct clause, the result is ungrammatical:<sup>13</sup>

- (572) AH,SN 10:7.13
- a. Tehpu nekom musqitaham-uk eli peciph-at ehpicil-il.  
 only 3 hate-1Conj C bring-3Conj woman-Obv  
 ‘I only hate him because he brought a woman.’
- b. \*Tehpu musqitaham-uk-il (eli) peciph-ac-il ehpicil-il.  
 only hate-1Conj-PartObv (C) bring-3Conj-PartObv woman-Obv  
 ‘I only hate him because he brought A WOMAN.’

Therefore we can conclude that both pre- and post-verbal foci move to a focus position, perhaps the position normally occupied by *tehpu*. Preverbal foci move overtly, while postverbal foci move covertly.<sup>14</sup>

### Focus is Not Clefting

One might also entertain the hypothesis that association with *tehpu* is a clefting strategy, and the participle ending results from movement of a relative operator. Indeed focus most certainly *can* have the appearance of a cleft; in the following, for instance, the focussed phrase appears even to the left of the subject, and was translated by the informant as a cleft:<sup>15</sup>

- (573) Nikt tehpu nil kesiciy-uk-ik ap-am-hoti-c-ik.  
 those.An only 1 IC.know-1Conj-Part3P go.and.back-fish-Plural-3Conj-Part3P  
 ‘Those are the only ones I know went fishing.’ WN9:6.13

For the cases seen above, where the focussed NP is postverbal, we would have to say that the cleft involves an internal head; internally-headed relative clauses, as will be shown in more detail below, are attested in Passamaquoddy:

- (574) Yuhtol nit Entoni puwato-k-il ahahs-is-ol.  
 this.Obv that Anthony want-3Conj-Obv horse-Dim-Obv  
 ‘This is the pony that Anthony wants.’ AH,SN 5:11.11

<sup>13</sup>The fact that the subject is first person does not render an obviative participle ending ungrammatical; the higher clause does have a third person argument, the object of ‘hate’; hence any operator passing through the clause will be forced to be obviative.

<sup>14</sup>Another alternative, suggested by D. Pesetsky (p.c.), is that *tehpu* is what moves, either by itself or as the visible part of a remnant phrase after the NP moves out of it. I have no empirical arguments against this alternative, but it is superfluous: focussed elements without *tehpu* can occur in postverbal position and trigger participle agreement. If focus movement is a unitary phenomenon, we would expect such elements to undergo covert movement to the focus position. Since covert movement is necessary for this case, there is no reason to hypothesize another mechanism (movement of *tehpu*).

<sup>15</sup>Translating focus as clefting in English does not indicate that we are dealing with clefts in Passamaquoddy, however. É. Kiss (1998), for example, argues that clefting in English is equivalent in semantics but not in syntax to focus movement in Hungarian. The Passamaquoddy speakers are all bilingual, and quite aware of the fact that clefting is the focus strategy in English; they would naturally switch syntactic structures in translation to give the same semantic force.



However, as in the case of questions, there are reasons to think that the focus pattern illustrated above is not (always) clefting. For one thing, there are examples where it would be impossible for a cleft parse to work for an example including focus movement, such as in the complement of a perception verb:

- (575) Ma=te nomiy-a-w skitap **nisu** kisi-nehpah-ac-**ihi** **mahtoqehsu**.  
 Neg=Emph see-Dir-Neg man two.ObvP Perf-kill-3Conj-PartObvP rabbit.ObvP  
 ‘I didn’t see the man kill two rabbits.’ AH,SN 6:3.1

Here, ‘man’ is the object of ‘see’, which is morphologically not such that it could part of a relative clause (‘two were the rabbits which I didn’t see the man kill’); and it would not make sense syntactically for ‘two’, the verb ‘kill’, and ‘rabbits’ to form a relative clause (‘two were the rabbits he killed’). The result would be something incoherent like ‘I didn’t see the man two were the rabbits he killed’.

For another thing, focus sentences differ from clefts in that other material can appear to the left of the focussed NP. Both the subject and various types of particles, including negation, can appear to the left:

- (576) a. Piyel oc **tehpu** ketunkahl-ac-**ihi** **otuhk** ma=te=apc keq.  
 P. Fut only IC.hunt-3Conj-PartObvP deer.ObvP Neg=Emph=again something  
 ‘Piyel will only hunt deer, nothing else.’ AH,SN 9:6.14
- b. Ma=te wen **tehpu** ketunkahl-ahq-**ihi** **otuhk**.  
 Neg=Emph someone only IC.hunt-3ConjNeg-PartObvP deer.ObvP  
 ‘No one hunts only deer.’ AH,SN 9:6.14

For cases where the subject is to the left (576a), we would probably have to suppose that it is left-dislocated, for instance: ‘Piyel, it will only be deer that he hunts, nothing else’. However, it is impossible to have singular nonreferential quantifiers in left-dislocated position:

- (577) AH7:4.5
- a. Nitte psi=te wen ’-peci-naciph-a-n nomehs-um-ol.  
 right.away all=Emph someone 3-come-take-Dir-N fish-Poss-Obv  
 ‘Right away everyone<sub>1</sub> comes to get his<sub>1</sub> fish.’
- b. \* Psi=te wen nitte ’-peci-naciph-a-n nomehs-um-ol.  
 all=Emph someone right.away 3-come-take-Dir-N fish-Poss-Obv  
 ‘Right away everyone<sub>1</sub> comes to get his<sub>1</sub> fish.’

But they can occur to the left in the focus construction, as illustrated by 576b.<sup>16</sup>

<sup>16</sup>P. LeSourd (p.c.) suggests that 576b has the parse ‘there is no one who hunts only deer’, meaning that one could try to maintain that participle endings only occur in relative clauses. This would require—and he suggests this for the examples below—that the participle ending can agree with something other than the head of the relative clause. LeSourd suggests that participle endings are currently in a state of flux (in older texts they apparently never failed to mark the head of a relative clause, in contrast with the optionality in the current language), and speakers will sometimes use them in contexts that independently require the Changed Conjoint to pick out some salient NP other than the head of a relative clause. In response, I would point out that the theory given in the text unifies all of the examples of focus, and provides a syntactic reason for participle endings to agree with something other than the head of a relative clause. If the arguments in the text that focus cannot be reduced to relative clause formation (e.g., clefting) are sound, then there are many cases of focus where the Changed Conjoint is not independently motivated. The focus movement theory provides a reason for the Changed Conjoint in these cases. Moreover, it unifies the occurrence of participle endings with focus under the larger heading of operator agreement, which includes wh-questions as well as relative clauses (and the arguments given above show that questions with participle endings cannot be reduced to relative clauses).

An even stronger argument comes from the possibility of the co-occurrence of wh-questions and focus. Wh-extraction strictly obeys the Complex NP Constraint, meaning that it is impossible to extract out of a relative clause:

- (578) a. \* *Wen kis-uwikh-ot* [<sub>NP</sub> *muwin kisi-siktehpawl-at t*] ?  
 who Perf-photograph-2Conj bear Perf-scare-3Conj  
 ‘Who did you take a picture of the bear that scared?’ WN1.9.8
- b. \* *Wen-il ma=te k-musaci-w-on* [<sub>NP</sub> *matuwehs kisi-lahk-ew-at t kawihi*] ?  
 who-Obv Neg=Emph 2-like-Neg-N porcupine Perf-throw-App-3Conj quill.ObvP  
 ‘Who don’t you like the porcupine that threw quills at?’ AH2:9.14

But wh-questions can freely co-occur with focus:

- (579) a. *Wen tehpu kesi-iyw-ac-il Piyel-ol?*  
 who only IC.like-have-3Conj-PartObv P.-Obv  
 ‘Who likes only Piyel?’ AH,SN 9:6.12
- b. *Wen-il tehpu niktok nemiy-ahtic-il?*  
 who-Obv only those.An IC.see-3PConj-PartObv  
 ‘Who did only they see?’ AH,SN 9:6.15

If this focus construction with *tehpu* were a cleft, it should be impossible to extract from it.

The same fact holds for focus without *tehpu*, with and without overt movement of the focussed phrase (here a split numeral and a preverbal object):

- (580) AH,SN 9:6.12
- a. *Nisonul kis-onuhmuw-ew-uk-il Pil atomupil-ol.*  
 two.InanP Perf-buy-App-1Conj-PartInanP Bill car-InanP  
 ‘I bought Bill two cars.’
- b. *Wen kis-onuhmuw-ew-oc-il nisonul atomupil-ol?*  
 who Perf-buy-App-2Conj-PartInanP two.InanP car-InanP  
 ‘Who did you buy two cars for?’
- c. *Wen nisonul kis-onuhmuw-ew-oc-il atomupil-ol?*  
 who two.InanP Perf-buy-App-2Conj-PartInanP car-InanP  
 ‘Who did you buy two cars for?’
- (581) *Keqsey itom Mihku wen ’-sukolopan-is-om nekka-hl-ac-ihl?*  
 what say M. who 3-cake-Dim-Poss.ObvP IC.completely-eat-3Conj-PartObvP  
 ‘Who did Mihku say ate his cookies?’ AH,SN 6:2.28

Finally, we saw above that clefted material could be proximate even though its source position is obviative. However, like simple questions, focussed NPs may not be proximate when their trace is obviative:

- (582) AH,SN 10:7.14

- a. **Tehpu Maliw-ol** kisi-wapolehl-ac-il.  
only M.-Obv Perf-treat.wrongly-3Conj-PartObv  
'He (Prox) only treated MARY (Obv) wrongly.'
- b. \***Tehpu Mali** kisi-wapolehl-ac-il.  
only M. Perf-treat.wrongly-3Conj-PartObv  
'He (Prox) only treated MARY (Prox) wrongly.'

If 582 were a cleft, with the structure 'It is only Mary that he got *t* pregnant,' it should be able to have the obviation pattern 'It is only Mary (Prox) that he (Prox) got *t*(Obv) pregnant'. The fact that this is impossible shows that focus movement is not a clefting strategy.

Because association with focus, like wh-questions, cannot be reduced to relativization, we have a third type of operator movement that triggers participle endings, focus movement. This movement can crucially be covert, with the NP appearing in situ but agreement appearing on the verb over which it must move (to the position of *tehpu*). This means that covert operator movement triggers agreement, which means that the possibility of agreement in wh-scope marking is relevant to the question of whether covert movement takes place in that construction.

One could try to maintain that there is no movement in in-situ focus examples, but that instead the NP that is agreed with is sufficiently local to trigger the agreement in this construction. The island violations used above to argue for movement would then be ruled out by simple distance (the Phase Impenetrability Condition of Chomsky 1998, in the framework of this thesis). However, it turns out that agreement can be long distance as well. This means, in conjunction with the island facts, that we must be dealing with movement: agreement could simply not be local.

#### 4.4.3 Long-Distance Association with Focus

The construction with preverbal *tehpu* and postverbal focussed NP is in many ways a scope-marking construction, as can be seen when we consider multi-clausal examples. The position of *tehpu* marks the scope of the focus and 'only':

- (583) **Tehpu** skat kesiciy-ahq-il **Weyn-ol** kisapem-ac-il.  
only Neg IC.know.TA-3ConjNeg-PartObv W.-Obv rely.on-3Conj-PartObv  
'She only doesn't know about WAYNE whether she can rely on him.' AH,SN 9:6.13

Here the scope of the focus is above the matrix verb 'know': Wayne is the only one she doesn't know this about. Scope can also be below 'know':

- (584) '-Kosiciy-a-l **Weyn-ol tehpu** kisapem-ac-il.  
3-know.TA-Dir-Obv W.-Obv only rely.on-3Conj-PartObv  
'She knows that she can only rely on WAYNE.' AH,SN 9:6.13

Long-distance focus movement may take place overtly:

- (585) **Nihtol tehpu** skat kesiciy-ahq-il [<sub>CP</sub> kisapem-ac-il ] .  
that.Obv only Neg IC.know.TA-3ConjNeg-PartObv rely.on-3Conj-PartObv  
'She only doesn't know about HIM whether she can rely on him.' AH,SN 9:6.13

- (586) **Tehpu Maliw-ol** kesiciy-uk-**il** [<sub>CP</sub> wisukiluwohehtw-ac-**il** ] .  
 only M.-Obv IC.know.TA-1Conj-PartObv make.angry-3Conj-PartObv  
 ‘I only know that he made MARY mad.’ AH,SN 10:7.13

Focus movement can also be partial:

- (587) **Tehpu** skat kesiciy-ahq-**il** **Weyn-ol** kisapem-ac-**il**.  
 only Neg IC.know.TA-3ConjNeg-PartObv W.-Obv rely.on-3Conj-PartObv  
 ‘She only doesn’t know about WAYNE whether she can rely on him.’ AH,SN 9:6.13

Finally, it is also grammatical for no overt movement to take place:

- (588) **Tehpu** kisi-wicuhkem-uk-**il** Piyel kespahl-ac-**il** **’-temis-ol**.  
 only Perf-help-1Conj-PartObv P. IC.wash-3Conj-PartObv 3-dog-Obv  
 ‘I only helped Piyel wash HIS DOG.’ AH,SN 9:6.12
- (589) **Tehpu** elitahas-iyān-**il** ya Petak peciph-ac-**il** **’-temis-ol**.  
 only IC.think-1Conj-PartObv Hes.An P. bring-3Conj-PartObv 3-dog-Obv  
 ‘I only think Petak brought HIS DOG.’ AH,SN 10:7.13
- (590) **Tehpu** kesiciy-uk-**il** wisukiluwohehtw-ac-**il** **Maliw-ol**.  
 only IC.know.TA-1Conj-PartObv make.angry-3Conj-PartObv M.-Obv  
 ‘I only know that he made MARY mad.’ AH,SN 10:7.13

The important thing to note about such examples is that participle endings occur on all the verbs up to the scope of *tehpū*. This means that there is some kind of relation between this position and the NP after the embedded verb. This relation, as we saw, can be one of overt movement; to give another example, 588 alternates with 591:

- (591) **Tehpu ’-temis-ol** kisi-wicuhkem-uk-(**il**) Piyel kespahl-at/c-**il**.  
 only 3-dog-Obv Perf-help-1Conj-(PartObv) P. IC.wash-3Conj-(PartObv)  
 ‘I only helped Piyel wash HIS DOG.’ AH,SN 9:6.12

The island facts given above argue that the relation when there is no overt movement is still movement, that is, covert movement. This means that covert movement of operators does in fact trigger participle agreement on higher verbs, up to the scope position of the operator, just as overt movement does.

Finally, the fact that participle endings appear on verbs located across clause boundaries from the surface position of the NP they agree with shows that agreement could not just be a local relation that does not involve movement.

#### 4.4.4 Internally-Headed Relative Clauses

The same argument can be made on the basis of internally-headed relative clauses (IHRCs). As shown briefly above, these do occur in Passamaquoddy:

- (592) a. Not nit kisi-pson-at **otuhk-ol**.  
 that.An that Perf-catch-3Conj deer-Obv  
 ‘This is the deer that he caught.’ AH,SN 10:7.13

- b. [NP Susehp kis-onuhmuw-ew-it **atomupil**] kakawiye.  
S. Perf-buy-App-1ConjInv car go.fast.3  
'The car that Joseph bought for me goes really fast.' AH1:9.7
- c. Wen kis-ankum-ot [NP Piyel **tuwihput** kisi-ht-aq ] ?  
who Perf-sell-2Conj P. table Perf-make-3Conj  
'Who did you sell the table Piyel made?' AH,SN 6:2.21

They also permit participle endings, just like externally-headed relative clauses (again they are optional):

- (593) Not nit kisi-pson-ac-**il** **otuhk-ol**.  
that.An that Perf-catch-3Conj-PartObv deer-Obv  
'This is the deer that he caught.' AH,SN 10:7.13

IHRCs can be long distance:

- (594) Not nit [CP elitahasi-t [CP kisi-pson-at **otuhk-ol** ] ] .  
that.An that IC.think-3Conj Perf-catch-3Conj deer-Obv  
'This is the deer that he thought he was going to catch.' AH,SN 10:7.13

The crucial fact is that such long-distance IHRCs permit participle endings on the higher verbs, agreeing with the internal head (again, these are optional):

- (595) Not nit [CP elitahasi-c-**il** [CP kisi-pson-ac-il **otuhk-ol** ] ] .  
that.An that IC.think-3Conj-PartObv Perf-catch-3Conj-PartObv deer-Obv  
'This is the deer that he thought he was going to catch.' AH,SN 10:7.13

The default hypothesis is that these involve covert movement. This is supported by the fact that IHRCs must obey islands; here, a negative island formed by the verb 'deny' that also blocks overt question formation:

- (596) a. \* Nihtol nit ikonewato-k Petak eli kisi-komutonom-ac-il **pahtolias-ol**.  
that.Obv that deny-3Conj P. C Perf-rob-3Conj-PartObv priest-Obv  
'That's the priest that Petak denied that he robbed.' AH,SN 10:7.13
- b. \* Wen-il Mihku ikonewato-k eli kisi-komutonom-at?  
who-Obv M. deny-3Conj C Perf-rob-3Conj  
'Who did Mihku deny that he robbed?' AH,SN 9:6.10

IHRCs, then, show evidence of covert movement. Together with association with focus, they show that covert movement triggers participle agreement on higher verbs.<sup>17</sup>

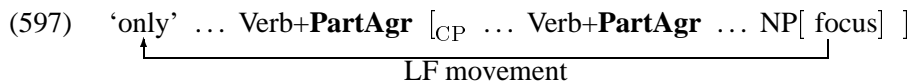
<sup>17</sup>It is possible that what moves in IHRCs is not the internal head noun, but a null operator. In this case movement would not be covert but overt (though still invisible). There are some facts from obviation patterns that suggest that the head of a relative clause can move, however. First, an external head can be proximate even though the trace position is obviative, as shown above and in (ia) below. However, an internal head *must* be obviative:

(i) WN1:9.8

#### 4.4.5 Agreement in Scope Marking

Wh-scope marking is very similar to the association with focus pattern we have just seen. The scope of the question is marked by a wh-element in matrix CP, while the contentful wh-phrase occurs in an embedded CP. In long-distance association with focus, the scope of the focus is marked by *tehpu*, while the focussed phrase occurs in a lower position. Both wh-scope marking and covert focus movement alternate with overt long-distance movement.

As described above, one of the main analyses of wh-scope marking, the Direct Dependency approach, hypothesizes that the contentful wh-phrase undergoes covert movement to matrix CP, just as the correct account of focussed phrases in situ involves covert movement. According to this theory, the contentful wh-phrase moves at LF to replace the wh-scope marker, analyzed as a purely expletive element. The Pas-samaquoddy association with focus construction seems to be entirely analogous: a focussed NP can move either overtly, partially, or only at LF to its scope position, marked by *tehpu*. Like other types of operator movement, focus movement triggers participle agreement along its path. We saw, in particular, that covert movement of the focussed phrase could trigger participle endings on higher verbs, as diagrammed below:



Wh-movement, we saw, also triggers participle agreement. It also has the option of being only partial, in the wh-scope-marking construction. If there really is a direct, LF dependency between the contentful wh-phrase and matrix CP, we should see participle endings in the matrix clause. Just like long-distance association with focus, covert movement of the wh-phrase in embedded Spec-CP should be able to trigger higher participle agreement:

- 
- a. Tan=oc kehs-oni-ya **cikoniy-ik** keti-mil-ot yatte wen pilsqehsis?  
 WH=Fut X.many-N-3P apple-3P IC.Fut-give-2Conj each someone girl  
 ‘How many are the apples (Prox) that you will give each girl (Prox) *t(Obv)*?’
- b. Tan=oc kehs-oni-ya keti-mil-ot yatte wen pilsqehsis-ok **cikonih!**  
 WH=Fut X.many-N-3P IC.Fut-give-2Conj each who girl-3P apple.ObvP  
 ‘How many are the apples that you will give to each girl?’

As was shown above (e.g., in 533), there is an additional option: for the external head to be obviative, like its trace. It happens that there are differences in grammaticality between the two external options—in (ii), only the obviative external head is grammatical in extraction across the negative verb ‘deny’:

(ii) AH,SN 10:7.14

- a. \*Not nit pahtoliyas ikonewato-k Petak eli kisi-komutonom-ac-il.  
 that.An that priest deny-3Conj P. C Perf-rob-3Conj-PartObv  
 ‘That’s the priest (Prox) that Petak (Prox) denied that he (Prox) robbed *t(Obv)*.’
- b. Nihtol nit pahtoliyas-ol Petak ikonewato-k eli kisi-komutonom-at.  
 that.Obv that priest-Obv P. deny-3Conj C Perf-rob-3Conj  
 ‘That’s the priest (Obv) that Petak (Prox) denied that he (Prox) robbed *t(Obv)*.’

This difference suggests two different derivations of externally headed relative clauses: one involving operator movement, and one involving movement of the head itself. Only the latter is grammatical across ‘deny’. If correct, this means that, in principle, movement of the head itself rather than a null operator is available. (On movement of the head noun from within a relative clause, see Kayne 1994.)

- (598)  $[_{CP} \text{ 'what' } \dots \text{ Verb+PartAgr } [_{CP} \text{ wh-phrase } \dots ] ]$   
└──────────────────────────────────┘  
LF movement

It is possible, as would be expected, to have participle endings on verbs lower than the position of the contentful wh-phrase in scope-marking constructions:

- (599) a. Keqsey cel itom **wen-il** nemiy-ac-il?  
 what even say who-Obv IC.see-3Conj-PartObv  
 ‘Who did he say he saw?’ DF6:3.1
- b. Keqsey cel elitahasi-t **wen-il** nemiy-ac-il?  
 what even IC.think-3Conj who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’ DF6:3.1
- c. Keqsey tepitahatom-on **wen-ih**i ketuw-ewestuwam-ac-(**ih**i)?  
 what think.TI-2Conj who-ObvP IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’ WN8:5.9

(600) AH,SN 6:2.28

- a. Keq itom Piyel **wen-il** meskuw-ac-il psahkihikon-ok?  
 what say P. who-Obv IC.find-3Conj-PartObv ditch-Loc  
 ‘Who did Piyel say he found in a ditch?’
- b. Keqsey elitahas-iyin keq itom Piyel **wen-il** meskuw-ac-il psahkihikon-ok?  
 what IC.think-2Conj what say P. who-Obv IC.find-3Conj-PartObv ditch-Loc  
 ‘Who do you think Piyel said he found in a ditch?’

It is absolutely impossible, however, for agreement to appear above the position of the contentful wh-phrase. This contradicts the hypothesis that LF movement takes place:

(601) AH,SN 6:3.1

- a. Keqsey cel elitahasi-t **wen-il** nemiy-ac-il?  
 what even IC.think-3Conj who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’
- b. \*Keqsey cel elitahasi-c-**il** **wen-il** nemiy-ac-il?  
 what even IC.think-3Conj-PartObv who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’

(602) WN8:5.9

- a. Keqsey tepitahatom-on **wen-ih**i ketuw-ewestuwam-ac-(**ih**i)?  
 what think.TI-2Conj who-ObvP IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’
- b. \*Keqsey tepitahatom-on-**ik** **wen-ih**i ketuw-ewestuwam-ac-(**ih**i)?  
 what think.TI-2Conj-Part3P who-ObvP IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’

Compare the possibility of participle agreement with these embedding verbs with long-distance movement:

- (603) **Wen-ih** tepitaham-oc-**ik** ketuw-ewestuwam-ac-(**ih**)?  
 who-ObvP think.TA-2Conj-Part3P IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’ WN8:5.9

In other words, the analogy with association with focus breaks down. In the focus cases, long-distance movement, partial movement, and covert movement all patterned together in triggering participle agreement up to the scope position. In wh-scope marking, however, partial movement does not pattern with overt long-distance movement.

This morphological evidence thus argues against LF movement of the contentful wh-phrase to replace the “expletive.” Such movement, if it took place, should be able to trigger participle agreement on the matrix verb (at least optionally), given that LF movement in focus constructions and IHRCs does seem to trigger this agreement. This means that the hypothesized LF movement does not take place after all:

- (604) \* [<sub>CP</sub> ‘what’ ... Verb+**PartAgr** [<sub>CP</sub> wh-phrase ... ] ]  
└──────────────────────────────────┘  
LF movement

One might argue that it is the presence of *keq(sey)*, ‘what’, that blocks agreement with the embedded wh-phrase in wh-scope marking. That is, the contentful wh-phrase still moves at LF to replace the expletive, but the agreement slot has already been taken by the inanimate singular ‘what’, which takes zero agreement.

There are two arguments against this possibility. First, if *keq(sey)* is truly an expletive that is inserted directly in the matrix CP, there is no way it could trigger agreement on the verb. On the theory of Agree adopted here, Agree is a relation between a functional head (*v*) and some NP that it c-commands. The head *v* does not c-command the matrix CP, meaning that it is impossible for it to enter into an Agree relation with anything represented solely in CP.

The second argument is that, when two operators could in principle control participle agreement on a given verb, it is possible for either to control agreement (there seems to be a preference for the structurally lowest argument to control the agreement). The relevant examples are the cases of the co-occurrence of wh-questions and association with focus that were discussed above (in 579). They are repeated below:

- (605) a. **Wen** tehpu kesi-iyw-ac-**il** **Piyel-ol**?  
 who only IC.like-have-3Conj-PartObv P.-Obv  
 ‘Who likes only Piyel?’ AH,SN 9:6.12
- b. **Wen-il** tehpu niktok nemiyahtic-**il**?  
 who-Obv only those.An IC.see-3PConj-PartObv  
 ‘Who did only they see?’ AH,SN 9:6.15

Consider first 605b. The wh-phrase is obviative, demanding an obviative participle ending. On the other hand, ‘only they’ is proximate plural (3P), demanding a proximate plural ending. Here the wh-phrase is the one that agrees: the ending is /-il/, for an obviative singular. Looking only at this example, we might think that a wh-operator takes precedence over a focus operator. But now consider 605a. Here again there are two operators, a wh-phrase and a focussed phrase. But now the participle ending agrees with the focussed phrase, not the wh-phrase. That is, either the focus operator or the wh-operator can control agreement.



Similar examples reveal the option of agreeing with either operator. In the following pairs, agreement can be with either the *wh*-phrase or the focussed phrase.<sup>18</sup>

(606) AH,SN 10:7.14

- a. **Wen-il** tehpu skitapiy-ik musal-ahtic-**il**?  
 who-Obv only man-3P like-3PConj-PartObv  
 ‘Who do only men like?’
- b. Wen-il **tehpu skitapiy-ik** musal-ac-**ik**?  
 who-Obv only man-3P like-3Conj-Part3P  
 ‘Who do only men like?’

(607) AH,SN 10:7.14

- a. **Wen-il** elitahasi-c-**il** Pokomk tehpu Muwin naka Malsom  
 who-Obv IC.think-3Conj-PartObv Fisher only Bear and Wolf  
 witapehkam-ahtic-**il**?  
 make.friends-3PConj-PartObv  
 ‘Who does Fisher think that only Bear and Wolf made friends with?’
- b. Wen-il elitahasi-c-il Pokomk **tehpu Muwin naka Malsom**  
 who-Obv IC.think-3Conj-PartObv Fisher only Bear and Wolf  
 witapehkam-ac-**ik**?  
 make.friends-3Conj-Part3P  
 ‘Who does Fisher think that only Bear and Wolf made friends with?’

In 607b, the *wh*-phrase controls agreement in the higher clause, while the focussed NP controls agreement in the lower clause.

In principle, then, participle agreement can be controlled by either of two present operators.<sup>19</sup> This

<sup>18</sup>As is usually the case, when the Conjunct Ending and the Participle Ending both agree with the same, plural, NP, the Conjunct Ending becomes singular.

<sup>19</sup>One possibility was ruled out by these informants. This was a case where a relative operator and a focus operator occurred together. The relative operator had to control agreement:

(i) AH,SN 10:7.14

- a. Wot nit **ehpit** tehpu skitapiy-ik musal-ahtit/c-**il**.  
 this.An that woman only man-3P like-3PConj-(PartObv)  
 ‘This is the woman that only men like.’
- b. \* Wot nit ehpit **tehpu skitapiy-ik** musal-ac-**ik**.  
 this.An that woman only man-3P like-3Conj-Part3P  
 ‘This is the woman that only men like.’

However, in another case the focus operator was permitted to agree:

(ii) AH,SN 10:7.14

- a. Yuktok nit **akoma-k** kisi-messunom-uh-uk-(**ih**i) n-tus-ok.  
 these.3P that snowshoe-3P Perf-show-App-1Conj-(PartObvP) 1-daughter-3P  
 ‘These are the snowshoes that I showed my daughters.’
- b. Yuktok nit akoma-k **tehpu n-tus-ok** kisi-messunom-uh-uk-**ik**.  
 these.3P that snowshoe-3P only 1-daughter-3P Perf-show-App-1Conj-Part3P  
 ‘These are the snowshoes that I only showed my daughters.’

means that, in wh-scope marking, there is no reason the matrix verb could not agree with the embedded wh-phrase, despite the presence of the inanimate wh-phrase in the matrix CP.

It should also be noted that there seems to be a preference for agreement to be controlled by the structurally lowest argument. In 606 and 607, for instance, the first member of each pair was what was produced by the informant, and the second assented to after prompting. In each of these, the agreement produced is with the operator that is the object, in preference to the operator that is the subject. This same preference is evident in 605: the operator that agrees in 605a is the focussed object rather than the questioned subject, and the operator that agrees in 605b is the questioned object rather than the focussed subject. (The one case that violates this generalization is (iib) in footnote 19.) We might explain this as a preference principle in spelling out abstract Agree relations: if a head enters into more than one Agree relation, the one that is established *last* is the one that is spelled out. (Cf. Bruening and Rackowski 2000 for a generalization of this sort in multi-object constructions in the related language Wampanoag.) If this preference is correct, agreement with the embedded wh-phrase in wh-scope marking should actually be preferred, over agreement with the higher scope marker.

An alternative characterization that fits these data is that the most marked form of agreement is spelled out. In 605a and 605b, marked obviative agreement is spelled out in preference to unmarked proximate agreement (which would be zero). In the following ditransitive case, marked inanimate plural agreement (with the focussed phrase) is spelled out over unmarked proximate singular agreement (zero) with the wh-phrase (note that this case also fits the hypothesis that it is the lowest argument that controls agreement):

(608) AH,SN 9:6.12 (=580)

- a. Wen kis-onuhmuw-ew-oc-**il**                    **nisonul**    **atomupil-ol**?  
 who Perf-buy-App-2Conj-PartInanP two.InanP car-InanP  
 ‘Who did you buy two cars for?’
- b. Wen **nisonul**    kis-onuhmuw-ew-oc-**il**                    **atomupil-ol**?  
 who two.InanP Perf-buy-App-2Conj-PartInanP car-InanP  
 ‘Who did you buy two cars for?’

The optional cases in 606–607 would then involve competition between two marked categories. In such a case agreement with either is permitted.

Returning to wh-scope marking, agreement with the inanimate singular *keq(sey)* would be unmarked (zero), while agreement with the embedded wh-phrase would be a marked category. The examples from above are repeated here; in the first set, agreement would be obviative singular, in the second proximate plural. Both categories are marked, and should be able to be spelled out.

(609) AH,SN 6:3.1

- a. Keqsey cel elitahasi-t                    **wen-il**    nemi-y-ac-**il**?  
 what    even IC.think-3Conj who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’

---

I do not have an explanation for these cases; clearly much more work must be done here.

- b. \* Keqsey cel elitahasi-c-**il**                      **wen-il**    nemiy-ac-**il**?  
 what    even IC.think-3Conj-PartObv who-Obv IC.see-3Conj-PartObv  
 ‘Who did he think he saw?’

(610) WN8:5.9

- a.    Keqsey tepitahatom-on **wen-ih**    ketuw-ewestuwam-ac-**(ih)**?  
 what    think.TI-2Conj who-ObvP IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’
- b.    \* Keqsey tepitahatom-on-**ik**        **wen-ih**    ketuw-ewestuwam-ac-**(ih)**?  
 what    think.TI-2Conj-Part3P who-ObvP IC.Fut-talk.to-3Conj-PartObvP  
 ‘Who all do you think he’ll talk to?’

On any characterization of the multiple operator data, then, agreement with the embedded wh-phrase in wh-scope marking cases should be possible.

Note also that in 608a, it is covert movement that triggers the agreement, in contrast with the overt movement of the question phrase. Therefore there is not an overt/covert distinction to appeal to in claiming that agreement with *keq(sey)* might rule out agreement with the embedded wh-phrase in wh-scope marking cases.

In conclusion, the morphological evidence that Passamaquoddy’s pattern of operator agreement makes available can actually decide between the two competing analyses of wh-scope marking: LF movement (of the embedded wh-phrase) does not take place. If it did, there would be the option of a higher verb agreeing with it. This means that some version of the Indirect Dependency analysis must be correct for this pattern of scope marking, for the Direct Dependency analysis is not correct.

#### 4.4.6 Contrast: Another Pattern of Scope Marking

The above pattern of wh-scope marking, the usual one, can be contrasted with another pattern that turns out to have the properties that the Direct Dependency analysis attributes to scope-marking constructions cross-linguistically. This pattern is much rarer, and can, in fact, only arise in certain syntactic configurations. The pattern involves using what will be shown below to be a default wh-element, *tan*.

For reasons discussed in Chapter 3, long-distance relative root argument extraction can only take place via the addition of relative roots to higher verbs, *unless* the higher verb is inherently relative. In certain kinds of *tan* questions, *tan* can be repeated in the matrix clause and in the lower clause, when the matrix clause either contains a relative root or the matrix verb is inherently relative:

- (611) a.    **Tan** kt-**oli**-wewitaham-a-n                  **tan** **tuci**-molikikona-n-ess?  
 WH 2-thus-remember.TA-Dir-N WH X.extent-be.strong.3-N-DubPret  
 ‘How strong do you remember he was?’ AH,SN 10:7.13                                  relative root
- b.    **Tan** elitahasi-yin    **tan** **keh**s-n    nemiy-oc-ik                  apiqsehsuw-ok?  
 WH IC.think-2Conj WH X.many-N IC.see-2Conj-Part3P rat-3P  
 ‘How many rats do you think you saw?’ AH,SN 10:7.16                                  inherently relative

This pattern has the properties of wh-scope marking: a wh-element *tan* marks the scope of the question as the matrix clause, while the contentful part of the wh-phrase appears in a lower Spec-CP. In 611a, *tan* quantifies over degrees of strength, explicitly added to the argument structure of the embedded verb by the relative root *tuci-*, ‘to X extent/degree’. Matrix scope is licensed not just by the scope marker, but also by the relative root *oli-*, usually glossed ‘thus’; this relative root is, like the wh-quantifier *tan*, a default, specifying manners, reasons, and various other kinds of adjuncts. It seems to be used when more specific relative roots, such as *tuci-*, are not appropriate. The relative root *tuci-* is not repeated in the higher clause, even though it would, presumably, be appropriate, indicating that what appears in the higher clause is empty of content, serving only to mark the scope of the lower wh-phrase (for more detail, see Chapter 3).

In 611b, ‘how many’ stands alone as a verb, in a cleft construction with an internally-headed relative clause (‘rats that you saw’), that is, ‘How many are the rats that you saw?’. Matrix scope is indicated by *tan*, licensed in the matrix clause by the inherently relative nature of ‘think’ (which happens to contain as a lexical property the same relative root (*o*)*li-* as in 611a).

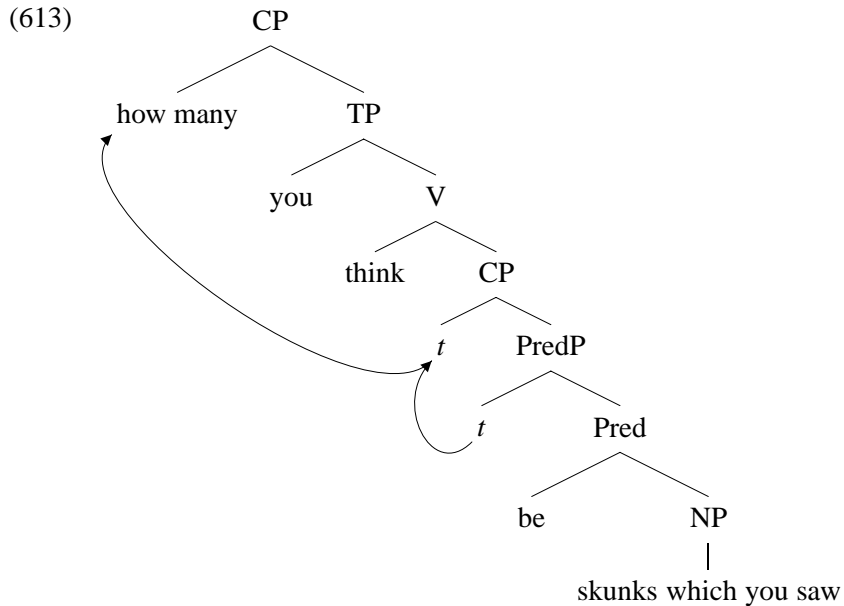
Most questions of this type, such as the question in 611a, are unable to tell us much about their LF syntax, at least through morphology: degrees do not show any sort of agreement. However, ‘how many’ phrases will show agreement for their restriction. For instance, 611b alternates with the following long-distance versions of the same question (regarding skunks rather than rats):

(612) AH,SN 10:7.15

- a. **Tan kehsi-n** elitahasi-yin-(ik)      nemiy-oc-ik      **apikciluwih-ik?**  
 WH X.many-N IC.think-2Conj-(Part3P) IC.see-2Conj-Part3P skunk-3P  
 ‘How many skunks did you think you saw?’
- b. **Tan kehsi-ni-ya** elitahasi-yin-(ik)      nemiy-oc-ik      **apikciluwih-ik?**  
 WH X.many-N-3P IC.think-2Conj-(Part3P) IC.see-2Conj-Part3P skunk-3P  
 ‘How many skunks did you think you saw?’

The difference between these two is just in whether the verb of ‘how many’ is Subordinative (612a) or Indicative (612b; apparently a free option). Both permit participle endings agreeing with a third person plural on both the embedded verb ‘see’ and the higher verb ‘think’. I will assume that these long-distance questions have the following structure, including the lower equational sentence<sup>20</sup>

<sup>20</sup>It may be that the relative clause forms the subject of the verb *kehsi-*. If this is correct it means that the entire verb can move to CP with the wh-phrase *tan* (and move further). It will not make much difference here which structure is correct, a verbal structure or an equational one.



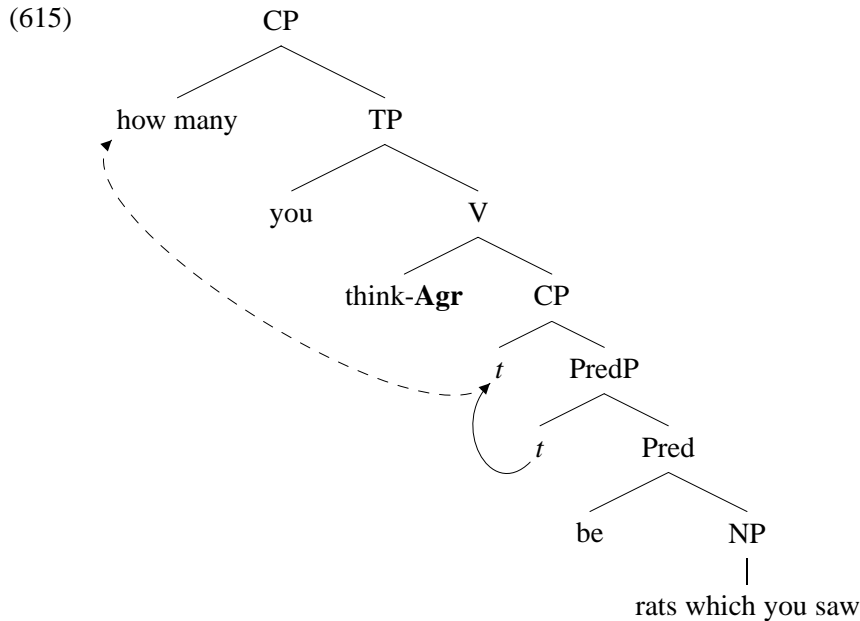
In this structure the participle ending on ‘think’ must agree with the third person plural features of ‘how many’ and not those of ‘skunks’ (these are necessarily covalued).

Now, if the long-distance questions in 612 are essentially what the LFs of scope-marking questions like 611b look like, as the Direct Dependency analysis claims, we would expect 611b to permit a participle ending on the higher verb, just as 612a–b do. With the scope marking pattern observed above, using the scope marker *keq(sey)*, we saw that this was impossible. Here, however, it turns out that participle endings agreeing with ‘how many’ (and its NP restriction) *can* appear on the matrix verb:

(614) AH,SN 10:7.16

- a. Tan elitahasi-yin-(**ik**) [CP **tan kehsi-n** nemiy-oc-**ik** **apiqsehsuw-ok**] ?  
 WH IC.think-2Conj-(Part3P) WH X.many-N IC.see-2Conj-Part3P rat-3P  
 ‘How many rats do you think you saw?’
- b. Tan elitahasi-c-**ihi** psi=te wen [CP **tan kehsi-n** **apiqsehsu**  
 WH IC.think-3Conj-PartObvP all=Emph someone WH X.many-N rat.ObvP  
 nemiy-ac-**ihi** ] ?  
 IC.see-3Conj-PartObvP  
 ‘How many rats does everyone think he saw?’

The only part of the question that is in the matrix clause on the surface is the bare wh-phrase *tan*, which, as a default, has no other features. It could not be responsible for the agreement on the matrix verb. The conclusion must be that the phrase ‘how many’ raises covertly, replacing the scope marker *tan* and triggering agreement on the higher verb:



Moreover, the fact that this agreement *is* possible here means that, if LF movement took place in the *keq(sey)* pattern of scope marking, agreement should be possible there as well.

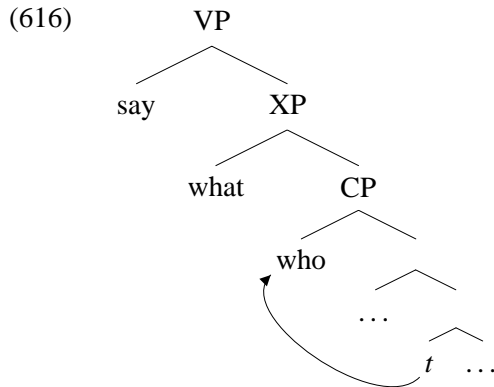
Most significantly, this contrast shows that the structures and derivations attributed by the Direct and the Indirect Dependency approaches to wh-scope marking are *both* attested; they are both instantiated within the grammar of Passamaquoddy, using different wh-phrases as the scope marker.

The next section proposes a version of the Indirect Dependency approach to wh-scope marking that will capture the properties of the *keq(sey)* scope-marking construction in Passamaquoddy, and hopefully in other languages as well. I will hereafter have little to say about the Direct Dependency construction illustrated above; it seems to have the properties one would expect of LF movement of the wh-phrase as illustrated in 615 (see, e.g., Beck and Berman 2000 for a formulation of the Direct Dependency approach).

## 4.5 Alternative Analysis of Wh-Scope Marking

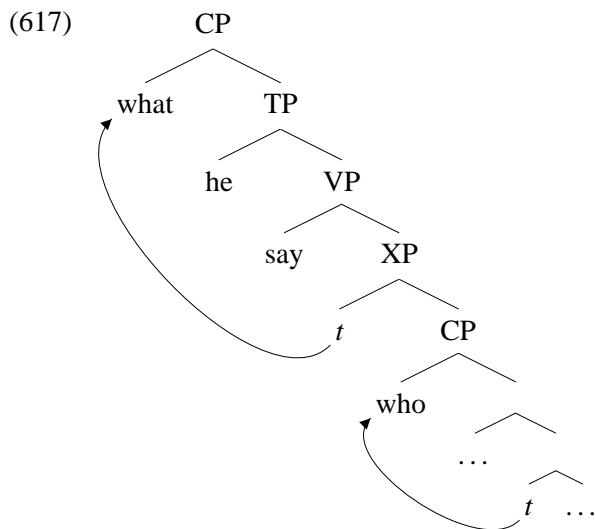
The contrast between scope marking with *tan* and scope marking with *keq(sey)* shows that no LF movement takes place in *keq(sey)* scope-marking questions, contra the Direct Dependency analysis. In addition to the morphological argument developed in detail above, several other arguments can be mustered to show that the Indirect Dependency analysis is preferable for this scope marking pattern. These will be laid out below. First it is necessary to spell out an alternative analysis of the wh-scope marking construction with *keq(sey)*.

I suggest that the structure underlying wh-scope marking is the following, where the scope marker and the embedded wh-question start out as a constituent that is complement to the matrix verb:



The matrix verb is one that takes propositional complements; XP is whatever syntactic type corresponds to a proposition. Herburger (1994) (as cited in Horvath 1997) suggests an analysis similar to this in which XP is a DP; this is possible, but XP could also be an iterated CP. The structure is basically equivalent to ‘what did he say?’, where ‘what’ questions the complement of a proposition-embedding verb. The only difference is that ‘what’ is more complex: another wh-question (its syntactic sister) serves to restrict it.

‘What’ here will split away from its restriction and move, by the normal mechanism of wh-movement, to the matrix Spec-CP:<sup>21</sup>



The embedded wh-question is also a full-fledged question, involving wh-movement of the lower wh-phrase to the highest Spec-CP within this constituent, as shown above.

I assume that the embedded question is able to combine semantically with the question word ‘what’ by virtue of being its D-structure sister. In this it is similar to split constructions generally, such as the *was-für* construction in German. LF movement of the embedded CP to rejoin ‘what’ should not be necessary; the empirical evidence, moreover, suggests that it does not take place. For instance, quantifiers in the matrix clause, in both subject and object position, bind down into the embedded wh-question:

<sup>21</sup>An alternative is that ‘what’ is the overt spell-out of the movement of the purely formal wh-features of the entire embedded CP. I will not explore this option here.

## (618) Subject (AH8:5.6)

- a. Keqsey itom psi=te wen kehsonu-l wikhikon-ol ehcuwi-monuw-ok?  
 what say all=Emph someone X.many-InanP book-InanP must-buy-3Conj  
 ‘How many books did everyone<sub>1</sub> say he<sub>1</sub> had to buy?’
- b. Keqsey itom psi=te wen kehsonu-l wikhikon-ol ehcuwi-monuhmuwa-w-at  
 what say all=Emph someone X.many-InanP book-InanP must-buy-App-3Conj  
 witapih-il?  
 3.friend-Obv  
 ‘How many books did everyone<sub>1</sub> say he<sub>1</sub> had to buy for his<sub>1</sub> friend?’

## (619) Object (AH,SN 10:7.13)

- a. Tama ’t-iy-a-l psi=te wen-il ’-tli-koti-nomiy-a-l?  
 where 3-say.to-Dir-Obv all=Emph someone-Obv 3-there-Fut-see-Dir-Obv  
 ‘Where did he tell everyone<sub>1</sub> he would meet him<sub>1</sub>?’
- b. Keqsey ’t-iy-a-l psi=te wen-il tama ’-tli-koti-nomiy-a-l?  
 what 3-say.to-Dir-Obv all=Emph someone-Obv where 3-there-Fut-see-Dir-Obv  
 ‘Where did he tell everyone<sub>1</sub> he would meet him<sub>1</sub>?’

If the embedded CP had to move at LF, it would have to reconstruct again in order for binding to hold<sup>22</sup>

I will have nothing to say about the semantic composition of the question word and its restriction, but assume that they will compose in the usual manner (for a possible semantics for indirect dependencies see, among others, Dayal 1994, Lahiri 2000).

Horvath 2000, among others, has argued against a structure in which the scope marker and the embedded question start out as a constituent on the basis that such structures are not independently attested. For instance, ‘what’ and the embedded wh-question never pied-pipe together to the matrix CP; and they never occur together in situ, even in a multiple question (Dayal 1994, fn.7, attributing the observation to Josef Bayer).

However, I would like to suggest that similar structures *are* independently attested, in many different languages, including English. First, note that the relevant property of the proposed structure is that the restriction is syntactically the same type as the whole. That is, ‘what’ can occur by itself in complement position; and the wh-question can occur by itself in complement position. Syntactically, then, we have a structure in which an element is restricted by something that is of the same type:

## (620) XP [XP ]

In wh-scope marking structures, the type is that of a proposition, or a set of propositions.

620 occurs in other contexts. For instance, in English, ‘where’ can appear in places where prepositional phrases are selected:

<sup>22</sup>The embedded wh-phrase is also unable to bind into the matrix clause, but this is expected on any approach to wh-scope marking:

- (i) Keqsey wikuwoss-ol litahasu wen-il Mali keselm-ac-il?  
 what 3.mother-Obv think.3 who-Obv M. IC.love-3Conj-PartObv  
 ‘Who<sub>1</sub> does his<sub>1</sub> mother think Mary loves?’ AH,SN 9:6.14



- (621) a. Where did you put the book?  
 b. I put the book on the table.

‘Where’ can also co-occur with a prepositional phrase:

- (622) Where in the forest did you see him?

I suggest that this is exactly the structure in 620: a PP modifies another PP. On this parse the meaning of the question is something like ‘tell me the location, such that that location is in the forest, where you saw him’. That is, the PP serves to restrict the more general question word ranging over locations.<sup>23</sup>

‘Where’ in such cases can either pied-pipe its restriction, as above, or it can leave it behind:

- (623) Where did you see him in the forest?

This option is exactly analogous to the wh-scope marking case: the head of the construction in 620 undergoes wh-movement, stranding its restriction:

- (624)  $[_{CP} \text{ where}_1 \dots \text{ see him } [_{PP} t_1 [_{PP} \text{ in the forest } ] ] ]$   
 wh-mvmt

What is particularly striking is that this type of wh-phrase cannot remain in situ in a multiple question:

- (625) a. Who did you see where?  
 b. \* Who did you see where in the forest?

Thus, this pattern is exactly like that of wh-scope marking (except that pied-piping of PPs is permitted, but not of CPs).<sup>24</sup> Wh-scope marking is simply the CP version of 620:

- (626)  $[_{CP} \text{ what did he say } [_{CP} t [_{CP} \text{ who he saw } ] ] ] ?$

Passamaquoddy has examples that are very similar to the English ‘where PP’ cases. In these a locative phrase doubles the question word *tama*, serving as its restriction:

- (627) a. **Tama=c** kt-oli-ya-pon wolakuk **etolosmutim-ok**?  
 where=Fut 2-there-go-1P tonight bar-Loc  
 ‘Which bar should we go to tonight?’ AH1:9.7  
 b. **Tama** k-toli-nomiy-a-k kehceyawih-tit weyossis-ok **kcihku-k**?  
 where 2-there-see-Dir-3P be.many-3PConj animal-3P forest-Loc  
 ‘Which forest did you see a lot of animals in?’ AH,SN 2:9.12

Like English, Passamaquoddy has a non-wh counterpart in which the locative phrase is doubled by a locative demonstrative:

<sup>23</sup>I ignore the appositive reading of PPs, where the PP modifies the event and not just ‘where’ (possibly available only in the split case and not with pied-piping). This reading is the only one that is available in situ (though it seems to require separation from ‘where’): *who did you see where yesterday in the forest?*, where *yesterday in the forest* narrows down the event under discussion.

<sup>24</sup>At this point I have no explanation for why these wh-phrases cannot occur in situ.

(628) English

- a. I saw him in the forest.
- b. I saw him **there** in the forest.

(629) Passamaquoddy (AH,SN 10:7.14)

- a. Etoli-mskuw-at nicalku-l **utene-k**.  
IC.there-find-3Conj 3.uncle-Obv town-Loc  
'He found his uncle in the town.'
- b. **Nit** etoli-mskuw-at nicalku-l **utene-k**.  
there IC.there-find-3Conj 3.uncle-Obv town-Loc  
'He found his uncle there in the town.'

In the same way, complement clauses can generally be doubled by the inanimate demonstrative; embedded questions can also be so doubled:

- (630) a. **Nit** kt-iy-uku-n Piyel [<sub>CP</sub> eli witapih-il apsoqe-li-t ] .  
that.Inan 2-say.to-Inv-N P. C 3.friend-Obv check.traps-ObvS-3Conj  
'Piyel told you it that his friend went to check the traps.' AH,SN 9:6.15
- b. Piyel **nit** nt-iy-oq [<sub>CP</sub> wen-il nat-sakiy-ac-il ] .  
P. that.Inan 1-say.to-Inv who-Obv go.do-see-3Conj-PartObv  
'Piyel told me it who he's going to see.' AH,SN 10:7.16

However, it is impossible to double the embedded question with the inanimate demonstrative when its scope is marked by *keq(sey)*, suggesting that *keq(sey)* is just the wh-version of the demonstrative:

(631) AH,SN 10:7.14

- a. Keqsey Piyel kt-iy-oq wen-il apsoqe-li-t?  
what P. 2-say.to-Inv who-Obv check.traps-ObvS-3Conj  
'Who did Piyel tell you went to check the traps?'
- b. \*Keqsey Piyel nit kt-iy-oq wen-il apsoqe-li-t?  
what P. 2-say.to-Inv who-Obv check.traps-ObvS-3Conj  
'Who did Piyel tell you it that went to check the traps?'

(632) ... [<sub>XP</sub> nit/keqsey [<sub>CP</sub> who went to check the traps ] ]

That is, the scope marker is the wh-version of a clause-doubling expletive, as suggested by Dayal (1994)<sup>25</sup>

Another argument that has been levelled against certain versions of the Indirect Dependency analysis is that non-wh quantificational versions of scope-marking apparently do not exist (Horvath 2000). If the scope marker is a wh-quantifier over propositions co-occurring with a wh-CP restriction, one might expect

<sup>25</sup>Various problems with this suggestion have been pointed out for German; see, e.g., Beck and Berman (2000) for a summary. However, as argued above, Passamaquoddy shows that both Indirect and Direct Dependency structures are instantiated in the languages of the world. It would not be surprising, therefore, if German made use of a direct dependency—LF movement of the embedded wh-phrase. If this is correct then there is no expectation of correspondence between the scope marker and a clause-doubling expletive in German.

that non-wh-quantifiers could also co-occur with wh-CP restrictions. That is, one should be able to say, in a scope-marking language, ‘he nothing said who he saw’, to mean that he did not say anything having the form of an answer to the question ‘who did he see?’.

This argument might have some force against the present analysis, which says that there are wh- and non-wh versions of the 620 structure. However, it turns out that in Passamaquoddy, it *is* possible to have non-wh quantificational scope marking:<sup>26</sup>

(633) AH,SN 10:7.14

- a. Keq kisi-qecimul-osk Susehp keqsey kisi-htu-htit skitapiy-ik?  
what Perf-ask-2ConjInv S. what Perf-make-3PConj man-3P  
‘What did Susehp ask you if the men made?’
- b. Ma=te keq kisi-qecimul-it Susehp keqsey kisi-htu-htit skitapiy-ik.  
Neg=Emph something Perf-ask-1ConjInv S. what Perf-make-3PConj man-3P  
‘Susehp didn’t ask me anything about what the men made.’
- c. Psi=te keq kisi-qecimul-it Susehp keqsey kisi-htu-htit skitapiy-ik.  
all=Emph something Perf-ask-1ConjInv S. what Perf-make-3PConj man-3P  
‘Susehp asked me everything about what the men made.’ (he wanted to know everything—  
exhaustive list—that they made)

I suggest that what makes this possible in Passamaquoddy is exactly the fact that wh-words are simply bare existential quantifiers that can be bound by other operators. In a wh-question they move to CP and are bound by a question operator; in the above examples they are bound by negation and by the universal quantifier *psi=te* (see Chapter 2). In other languages there might be morphological or syntactic reasons a more complex quantifier like ‘nothing’ or ‘everything’ could not appear in the scope-marking structure.<sup>27</sup>

In other words, wh-scope marking is simply one instance of a more widespread construction in which an element is restricted by an element of the same syntactic type. These structures come in wh- and non-wh versions, but are subject to many so far ill-understood restrictions.

<sup>26</sup>Phil LeSourd first made this discovery.

<sup>27</sup>This phenomenon is also restricted in Passamaquoddy. For instance it cannot occur long-distance, unlike wh-scope marking:

(i) AH,SN 10:7.15

- a. Ma=te keq itom-u taktal tan nt-olessi-n.  
Neg=Emph something say.3-Neg doctor WH 1-happen.to-N  
‘The doctor didn’t say anything about what’s wrong with me.’
- b. \*Ma=te keq nt-olitahasi-w (keq) itom taktal tan nt-olessi-n.  
Neg=Emph something 1-think-Neg (what) say.3 doctor WH 1-happen.to-N  
‘I don’t think anything about what the doctor said is wrong with me.’
- c. \*Ma=te keq nt-olitahasi-w ma=te keq itom-u taktal tan nt-olessi-n.  
Neg=Emph something 1-think-Neg Neg=Emph something say.3-Neg doctor WH 1-happen.to-N  
‘I don’t think anything about what the doctor said is wrong with me.’

However, the conditions on the binding of bare indefinites by negation or the universal quantifier are much more strict than by the question operator. The indefinite always occurs within the same clause as its binder, and in general is not as mobile as other arguments, in particular wh-phrases, which can move successive-cyclically.

### 4.5.1 Additional Arguments Against Direct Dependency

Arguments for an analysis along the lines proposed above, and against the Direct Dependency analysis, come from differences in grammaticality between long-distance extraction and scope marking; arguments that the scope marker is not an expletive; and arguments that the scope marker undergoes wh-movement within the matrix clause (and hence is not generated as an expletive in the matrix CP).

#### Differences in Grammaticality

The Direct Dependency analysis ends up with a logical form for wh-scope marking that is identical to long-distance extraction, as explained above. It therefore predicts that, barring independent differences between overt and covert movement, wh-scope marking should evidence the same sensitivity to islands that long-distance extraction does.

This is false, as shown by Dayal (1994) and Horvath (1997) (among others). In Passamaquoddy, overt extraction out of the complement of the negative verb ‘deny’ is blocked, but wh-scope marking is not:

(634) AH,SN 9:6.10

- a. Mihku 't-iknewatomon eli kisi-komutonom-at Piyel-ol.  
M. 3-deny.TI C Perf-rob-3Conj P-Obv  
‘Mihku denied that he robbed Piyel.’
- b. \* **Wen-il**<sub>1</sub> Mihku ikonewato-k eli kisi-komutonom-at  $t_1$ ?  
who-Obv M. deny-3Conj C Perf-rob-3Conj  
‘Who did Mihku deny that he robbed?’
- c. **Keq** Mihku ikonewato-k **wen-il**<sub>1</sub> kisi-komutonom-ac-il  $t_1$ ?  
what M. deny-3Conj who-Obv Perf-rob-3Conj-PartObv  
‘Who did Mihku deny that he robbed?’

If there were LF movement, we would expect it to be just as bad as the overt movement. For one thing, we know that in English, adjunct questions are sensitive to this island, and they are still sensitive to it when they occur in situ:

- (635) a. ?\* Where did he deny that he met Susan?  
b. ?\* Who denied that he met Susan where?

If wh-phrases that occur in situ in English undergo covert movement, as is standardly assumed, we can see that covert movement is sensitive to this island just as well as overt movement.

This argument against LF movement of the embedded wh-phrase in the Passamaquoddy scope-marking construction becomes even stronger when we compare it to focus movement and IHRCs in the language, the two constructions where we have strong evidence of covert movement. For some reason that I do not understand, both overt relativization and overt focus movement are able to cross ‘deny’, unlike wh-movement, but, significantly, the covert versions of both are ungrammatical:

(636) AH,SN 10:7.14

- a. Nihtol nit **pahtolias-ol** Petak ikonewato-k eli kisi-komutonom-at  $t_1$ .  
that.Obv that priest-Obv P. deny-3Conj C Perf-rob-3Conj  
'That's the priest that Petak denied that he robbed.'
- b. \*Nihtol nit ikonewato-k Petak eli kisi-komutonom-ac-il **pahtolias-ol**.  
that.Obv that deny-3Conj P. C Perf-rob-3Conj-PartObv priest-Obv  
'That's the priest that Petak denied that he robbed.'

(637) AH,SN 10:7.14

- a. **Tehpu pahtolias-ol<sub>1</sub>** ikonewato-k-(il) Petak eli kisi-komutonom-at/c-**il**  $t_1$ .  
only priest-Obv deny-3Conj-(PartObv) P. C Perf-rob-3Conj-(PartObv)  
'Petak only denied that he robbed the PRIEST.'
- b. **Tehpu** ikonewato-k-(il) Petak eli kisi-komutonom-ac-**il** **pahtolias-ol**.  
only deny-3Conj-(PartObv) P. C Perf-rob-3Conj-PartObv priest-Obv  
'Petak only denied that he robbed the priest.'

In 637b, participle agreement with 'priest' is ungrammatical on 'deny', indicating that the focus can only be the entire VP or its complement: the only thing that Petak denied was that he robbed the priest.<sup>28</sup>

Hence, covert extraction across 'deny'—focus movement and movement of the internal head of an IHRC—patterns with overt wh-movement, and not with wh-scope marking. Therefore wh-scope marking is unlike either, and we have another argument against covert movement of the embedded wh-phrase.

The structure advocated here for wh-scope marking can account for the ability to escape the island formed by 'deny'. It is always possible to question the complement of 'deny':

- (638) Keq Mihku ikonewato-k?  
what M. deny-3Conj  
'What did Mihku deny?' AH,SN 9:6.10

The Indirect Dependency analysis assimilates wh-scope marking to this structure and not to long-distance movement. Questioning out of the complement of 'deny' via wh-scope marking is simply questioning the complement, as in 638, and restricting the question, as explained above.

In contrast, wh-scope marking does not save sentential subject island violations:

(639) AH,SN 9:6.10

- a. N-utomeya-ku-n eli n-itapiy-ik musqitaham-ahtit n-tutem-isqih-il.  
1-bother-Inv-N C 1-friend-3P hate-3PConj 1-white.friend-Female-Obv  
'It bothers me that my friends hate my girlfriend.'
- b. \*Wen-il (nit) wetomeya-sk eli k-itapiy-ik musqitaham-ahtic-il?  
who-Obv (this.Inan) IC.bother-2ConjInv C 2-friend-3P hate-3PConj-PartObv  
'Who does it bother you that your friends hate?'
- c. \*Keq wetomeya-sk wen-il kitapiy-ik musqitaham-ahtic-il?  
what IC.bother-2ConjInv who-Obv 2.friend-3P hate-3PConj-PartObv  
'Who does it bother you that your friends hate?'

<sup>28</sup>Presumably the participle ending is grammatical on the lower verb because it can be a cleft: 'Petak only denied that it was the priest he robbed' (where focus is the entire complement of 'deny').

It is impossible to question out of a sentential subject in Passamaquoddy, whether or not the clause is doubled by an inanimate demonstrative (unlike English, where extraction is possible with *it*). It is also not possible to use *wh*-scope marking, despite the fact that it is possible to question the entire subject:

- (640) Keq wetomeya-sk?  
 what IC.bother-2ConjInv  
 ‘What bothers you?’ AH,SN 9:6.10

The difference lies in the fact that the subject of ‘bother’ is not a proposition but an NP. *Keq* in 640 is not a question of propositions, but a question of individuals. Note that, unlike the complement of verbs like ‘deny’ and ‘say’, it is also possible to ask about an animate bothering individual:

- (641) Wen wetomeya-sk?  
 who IC.bother-2ConjInv  
 ‘Who bothers you?’ AH,SN 9:6.10

If the subject of ‘bother’ is an individual, it cannot be restricted by a proposition on the schema of 620:<sup>29</sup>

### The Scope Marker is Not an Expletive

As was shown above, in the Passamaquoddy *keq(sey)* scope marking construction, the scope marker is exactly the *wh*-phrase that is used to question propositions. It is not what one would expect to be the “default” *wh*-phrase; this was suggested above to be *tan*, the scope marker that seemed to occur in a Direct Dependency-like construction involving LF movement. It is worth showing in more detail here that the *wh*-phrase *tan* is in fact a default. It appears to be some kind of bare (*wh*) quantifier, surfacing in all manner of adjunct questions, relative root questions, and free relatives:

- (642) a. Itom Henry, “I... **tan** op al k-tol-ess-ulti-n-en, kehsi-yiq?”  
 say H. Excl WH would Uncertain 2-thus-happen-Plural-N-1P  
 be.many-12  
 ‘Henry said, “Eeee... what could happen? There are so many of us.”’ (Newell 1979, 23)
- b. Nikt woli ehpic-ik ’-tiya-n-iyā, “**Tan** op olu apc tan nt-oli-kisi-kona-n-en?”  
 Dem good woman-3P 3-say-N-3PSub WH would Top else WH 1-thus-able?-raise-N-1P  
 ‘The good women say to him, “Well, how then are we to raise them?”’ (Mitchell 1921/1976a, 16)
- c. ’-Tiya-n, “**Tan** p=al kt-ol-kuw-in-iyā nil muh-ul-eq?”  
 3-say-N WH would=Uncertain 2-thus-affect?-2/1-2P 1 eat-1/2-2PConj  
 ‘He says to them, “How would you affect me if I were to eat you?”’ (Mitchell 1921/1976a, 22)

<sup>29</sup>I believe that it is impossible for an embedded question to serve as the subject of ‘bother’ in Passamaquoddy, just as it is in English: *\*it bothers me who my friends hate*.

- d. Tiya-l yaq wot mahtoqehs coqols-ol, “**Tan** op kil ktolluhkan tokec ckuwi say.to-Obv Quot Dem rabbit frog-Obv WH would 2 2-do if hither motaha-t ya malsom?”  
be.heard?-3Conj (Hes.An) wolf  
‘Rabbit said to the frog, “What would you do if a wolf were heard coming this way?”’ (Newell 1974a, 1)
- e. Nihtol kete ma te ’-koscicy-a-wi-wa-l **tan** op wecess-it.  
Dem.Obv for.example Neg TE 3-know.TA-Dir-Neg-3P-Obv WH would IC.arrive-3Conj  
‘I mean, nobody knew where he could have come from.’ (Newell 1979, 12)

## (643) Free Relatives

- a. **Tan** kahk wen piluwitposi-t, nokomasi-tahatomon tahalu eli aceht-asi-k WH Emph someone have.power-3Conj easy-think.TI.3 like C change-Refl-IIConj loqtewakon-ol.”  
clothing-InanP  
‘[**Whoever**] possesses supernatural powers thinks it an easy task to change mere clothing.’ (Mitchell 1921/1976d, 7)
- b. Etuci assok-taq-ahk, **tan** yukt nuto-k-ik mete-suwew-ik, very strange-sound-IIConj WH these.An hear-3Conj-Part3P IC.be.heard-?-IIConj cuwi-siktelomu-ltuw-ok.  
must-smile-Plural-3P  
‘It sounds so odd that **those who hear it resounding** have to laugh.’ (Mitchell 1921/1976c, 15)

We saw this element as part of a yes-no tag question above:

## (644) AH,SN 6:3.3

- a. Keq itom Tihtiyas ’-kisi-peskh-a-l cuspes-ol kosona **tan?**  
what say.3 T. 3-Perf-shoot-Dir-Obv porpoise-Obv or WH  
‘What did Tihtiyas say, did she shoot the porpoise or not?’
- b. Itom Tihtiyas kisi-peskh-a-l cuspes-ol kosona (al) **tan?**  
say T. Perf-shoot-Dir-Obv porpoise-Obv or (Uncertain) WH  
‘Did Tihtiyas say she shot the porpoise or not?’

*Tan*, then, seems to be a complete default: it is neither animate nor inanimate, it is not an argument or a non-argument. The range of contexts in which it appears is unlikely to be characterizable as a coherent class. It is, therefore, a default, and might be expected to be the expletive that would be used in a scope-marking construction. However, as shown above, it occurs only in the restricted type of wh-scope marking that occurs with relative roots. This type of scope marking, in addition, shows evidence of LF movement of the contentful wh-phrase, just as the Direct Dependency analysis claims for wh-scope marking in general. The two seem to go together: the default wh-phrase, apparently an expletive, occurs with covert movement of the lower wh-phrase, while the contentful wh-phrase, used to question propositions, does not involve LF movement of the lower wh-phrase.

The argument that *keqsey* is not a default expletive can be strengthened further. As the examples throughout have illustrated, *tan* is the wh-phrase that is generally used to question relative roots. However, we saw above that *keq(sey)* is used with inherently relative root verbs that embed propositions. This indicates that *keqsey* is specifically used to question propositions, overriding the default *tan* as the question particle for relative roots. We can conclude, therefore, that as a scope marker *keq(sey)* is not semantically empty at all, but ranges over propositions, as the Indirect Dependency analysis of wh-scope marking maintains.

### The Scope Marker Is Extracted from the Matrix Clause

As in Hungarian (Horvath 1997), it is possible to argue that the wh-scope marker must undergo extraction in the matrix clause in Passamaquoddy, and is not generated as an expletive in Spec-CP. The argument is based on the form of the matrix verb.

We saw in Chapter 3 that relative root questions, such as ‘where’ questions, always give rise to the Independent form of the verb rather than the Conjunct:

- (645) Tama=c kt-oli-ya-pon wolakuk?  
 where=Fut 2-there-go-12 tonight  
 ‘Where should we go tonight?’ AH1:9.7 Independent

This holds in long-distance extraction as well, which we saw in Chapter 3 to only be possible when the higher verb is either an inherently relative root or a relative root is added to it:

- (646) Tama ’t-otoli-kolam-uw-a-n ’-tus-ol ’t-otoli-nomiy-a-n Piyel-ol?  
 where 3-there-forbid-App-Dir-N 3-daughter-Obv 3-there-see-Dir-N P.-Obv  
 ‘Where did he forbid his daughter to see Peter?’ AH,SN 9:6.15

Both the higher verb and the lower verb here are in their Independent forms, as indicated by the prefix /’t-/ and the particular suffixes each verb carries.

In contrast, the form of the higher verb in wh-scope marking is what would be expected if the complement itself is questioned, and not what would be expected by long-distance extraction. With these same ‘where’ questions, for example, the higher verb will be in its Conjunct form, and not in the Independent form, if questioning its complement demands the Conjunct:

- (647) AH,SN 9:6.11
- a. Keqsey kisi-qecimul-osk ’Tolitolitoli?  
 what Perf-ask-2ConjInv T.  
 ‘What did ’Tolitolitoli ask you?’ Conjunct
- b. Keqsey kisi-qecimul-osk ’Tolitolitoli tama kt-oli-nomiy-a-n?  
 what Perf-ask-2ConjInv T. where 2-there-see-Dir-N  
 ‘Where did ’Tolitolitoli ask you to meet her?’ Conjunct

Similarly, a *tan* question requires the Independent, but the matrix verb is Conjunct in wh-scope marking if questioning its complement gives rise to the Conjunct:



- (648) a. Keqsey kisi-yuhu-sk?  
 what Perf-say.to-2**Conj**Inv  
 ‘What did he tell you?’ AH,SN 10:7.16 Conjunct
- b. Keq kisi-yuhu-sk Meyhsis tan ’t-oli-tkiqol-on?  
 what Perf-tell-2**Conj**Inv M. WH 3-thus-be.heavy-N  
 ‘How heavy did Meyhsis tell you she was?’ AH,SN 6:2.24 Conjunct

That it is the form determined by questioning the complement itself that matters is shown by comparing inherently relative root verbs that take CP complements. When this CP complement is questioned, they appear in the Independent form; and when they appear in wh-scope marking, they are also Independent:

- (649) Keq itom Scooby-Doo?  
 what say.3 S.  
 ‘What does Scooby-Doo [a watch] say?’ AH,SN 9:6.13 Independent
- (650) AH,SN 6:2.26
- a. Keqsey itom Mali wen-il kisi-pinuwi-li-t Sipayik?  
 what say.3 M. who-Obv Perf-bingo-ObvS-3**Conj** S.  
 ‘Who did Mary say got bingo at Sipayik?’ Independent
- b. \*Keqsey ito-k Mali wen-il kisi-pinuwi-li-t Sipayik?  
 what say-3**Conj** M. who-Obv Perf-bingo-ObvS-3**Conj** S.  
 ‘Who did Mary say got bingo at Sipayik?’ \*Conjunct

These facts indicate that wh-scope marking is exactly like extracting the CP complement of the verb, and is not like long-distance movement of the embedded wh-phrase.

#### 4.5.2 Properties of Wh-Scope Marking

Let us return to the properties of wh-scope marking listed in Section 4.2.2, and see how the proposal outlined above accounts for all of them.

First, the fact that any wh-phrase can appear in wh-scope marking simply follows from the fact that the embedded question is just a normal question; any question that can be formed can serve as a restriction in wh-scope marking.

Second, the fact that yes-no questions are possible in some languages (Hindi) but not in others (German, apparently not in Passamaquoddy either) does not follow from anything inherent in the proposal. Nothing in particular rules them out, but one could imagine that language-particular properties might render them ungrammatical. See Beck and Berman (2000), Dayal (2000) for some proposals.

Third, multiple questions being permitted in languages that have multiple questions simply follows, again, from the fact that any well-formed question can serve as the restriction in a wh-scope marking construction. Passamaquoddy does not permit multiple questions, and therefore it will not permit them in scope marking structures. Other languages do permit multiple questions, and, as expected, they permit them with scope marking.

Iterative scope marking becomes slightly more complicated. The structure suggested here, in which the scope marker splits away from its restriction, should permit long-distance scope marking both with and without intermediate wh-phrases. As stated, the scope marker moves by the normal mechanism of wh-movement to the immediately dominating Spec-CP; beyond that, it should be able to move further, as wh-phrases can, or the resulting structure can form the restriction on another scope marker:

- (651) a.  $[_{CP} \text{ what}_1 \dots [_{CP} t_1 \dots \text{Verb} [_{CP} t_1 [_{CP} \text{ who } \dots ] ] ] ] ]$   
           ↑                  ↑                  ↑  
           wh-mvmt      wh-mvmt      wh-mvmt
- b.  $[_{CP} \text{ what}_1 \dots [_{CP} t_1 [_{CP} \text{ what}_1 \dots \text{Verb} [_{CP} t_1 [_{CP} \text{ who } \dots ] ] ] ] ]$   
           ↑                  ↑                  ↑  
           wh-mvmt      wh-mvmt      wh-mvmt

If the scope marker moves successive-cyclically, there will be no intermediate scope marker; if it forms the sister to another scope marker, there will. As shown in Section 4.2.2, both possibilities are available. (Additional principles must restrict the possibilities in any given context.)

The fact that a wh-scope marking structure can be an embedded question also follows from the analysis: the structure as a whole is just a question, and may appear anywhere that a question can. Thus it can have matrix scope, or embedded scope.

Two other properties, restrictions on the embedding predicate and intervention, are taken up in more detail in the next two sections.

### 4.5.3 Restrictions on the Matrix Predicate

As we saw above, Passamaquoddy places several restrictions on which verbs can appear in wh-scope marking. The first was that wh-scope marking is ungrammatical with raising to object. That is, it is impossible to do wh-scope marking if the matrix verb agrees with an NP from the lower clause, even the embedded wh-phrase:

- (652) \* Keqsey piluwitaham-ot wen nemiy-at Piyel-ol?  
       what suspect.TA-2Conj who IC.see-3Conj P.-Obv  
       ‘Who do you suspect saw Piyel?’ AH,SN 6:3.1

The verb ‘suspect’ here is in its TA form, agreeing with an animate argument, here the embedded wh-phrase.

However, scope marking *is* grammatical if the TI form of the verb is used rather than the TA form (see Chapter 5 for more detail on these verbs):

- (653) a. Keqsey wewitahatom-on keqsey etoli-komutonato-k mahtoqehs?  
       what remember.TI-2Conj what IC.Prog-steal-3Conj rabbit  
       ‘What do you remember that the rabbit stole?’ AH,SN 9:6.15
- b. Keqsey Tihtiyas wawitahato-k wen-il mace-wici-yem-ku-n Sipayik?  
       what T. remember.TI-3Conj who-Obv go-with-go-Inv-N S.  
       ‘Who does Tihtiyas remember went with her to Sipayik?’ AH,SN 4:10.17

This fact is another argument that the scope marker is extracted from the matrix clause and is not just an expletive. If it were an expletive, it should not matter that the verb agrees with something else. In fact,

agreement with the embedded wh-phrase would be expected. As shown in Chapter 5, in a long-distance matrix question the verb *must* agree with the wh-phrase:

(654) AH,SN 6:3.2

- a. Wen kil piluwitaham-ot kisi-komutonom-uk?  
 who 2 suspect-2Conj Perf-rob-1Conj  
 ‘Who do you suspect that I robbed?’ (verb agrees with ‘who’)
- b. \*Wen kil piluwitaham-iyin kisi-komutonom-uk?  
 who 2 suspect-2/1Conj Perf-rob-1Conj  
 ‘Who do you suspect (me) that I robbed?’ (verb agrees with ‘I’)

If the embedded wh-phrase were equivalent at LF to a long-distance question, agreement with it rather than the scope marker should be possible (and possibly mandatory).

Scope marking with raising to object verbs patterns in agreement with extraction of the complement itself. Here the TI form must also be used:

- (655) a. Keqsey wewitahatom-on?  
 what remember.TI-2Conj  
 ‘What do you remember?’ AH,SN 9:6.15
- b. Keq kesiciht-uwon?  
 what IC.know.TI-2Conj  
 ‘What do you know?’ AH,SN 10:7.16

The restriction against raising to object verbs thus follows from the current theory, which assimilates wh-scope marking to extraction of the entire CP complement.

As for perception verbs, the restriction seems to be semantic in nature. The scope marker in wh-scope marking is a question over propositions, and the embedded question is a set of propositions. However, perception verbs do not embed propositions; they embed events or situations.<sup>30</sup> The question ‘what did you see?’ is therefore semantically incompatible with a set of propositions serving as the restriction of ‘what’.

One other restriction was noted above. This was that wh-scope marking is incompatible with ditransitive matrix verbs whose primary object is also an argument of the embedded clause:

- (656) a. \***Keqsey** kiseltom-uw-at ’-tus-ol [<sub>CP</sub> **wen-il** nemiy-at /nomiy-a-n ] ?  
 what permit-App-3Conj 3-daughter-Obv who-Obv IC.see-3Conj /see-Dir-N  
 ‘Who does he permit his daughter to see?’ WN9:6.13
- b. \***Keq** pawatom-a-sk ’Tolitolli [<sub>CP</sub> tama kt-oli-nomiy-a-n ] ?  
 what want-App-2ConjInv T. where 2-there-see-Dir-N  
 ‘Where does ’Tolitolli want you to meet her?’ AH,SN 9:6.11

There are several principles that rule out such sentences. First, these verbs are like perception verbs in not embedding propositions, but some other type of clausal constituent. In English, for example, the answer to

<sup>30</sup>Certain perception verbs, such as ‘see’, also have an epistemic use in which they do embed propositions. On this use, they should permit wh-scope marking.

the question ‘what does he permit his daughter?’ must be an NP (‘too much freedom’) or a nonfinite clause (‘to see whoever she likes’, ‘seeing whoever she likes’, \*‘that she see whoever she likes’). In Passamaquoddy, the complement clause can be questioned:

- (657) Keqsey kiseltom-uw-at ’-tus-ol?  
 what permit-App-3Conj 3-daughter-Obv  
 ‘What does he permit his daughter?’ WN9:6.13

But I believe the clause cannot be an embedded question, just as it cannot be in English. In addition, the embedded clause obligatorily inflects in the Subordinative paradigm; this is also incompatible with a core argument question. (This inflection may also indicate something about the C system of this type of clause: it may not host a *wh*-phrase.)

In other words, the structure of these verbs’ complements is simply incompatible with the semantics and syntax attributed to *wh*-scope marking by the present analysis.

#### 4.5.4 Intervention

As we saw in Section 4.2.2, *wh*-scope marking is blocked by matrix negation (negative quantifiers have the same effect), in every language in which *wh*-scope marking has been discovered. The leading suggestion to account for this fact is Beck’s (1996): negation creates a barrier for LF movement. On the Direct Dependency approach, this is LF movement of the embedded *wh*-phrase; on the Indirect Dependency approach, Dayal (2000) suggests that it is LF movement of the entire embedded CP.

However, Passamaquoddy suggests that LF movement is not what is at issue in intervention. As argued above, the embedded CP does not raise at LF in Passamaquoddy, because matrix quantifiers bind into it. An even stronger argument that LF movement is not crucially involved in intervention comes from contexts in which LF movement must take place, but nonetheless there is no interference by negation. For instance, IHRCs are grammatical with intervening negation:

- (658) a. Not nit skat wen kisi-pson-ahq **otuhk-ol.**  
 that.An that Neg someone Perf-catch-3ConjNeg deer-Obv  
 ‘This is the deer no one can catch.’ AH,SN 10:7.13
- b. Nihtol nit skat wen kesiciy-ahq kisi-pson-ahq **otuhk-ol.**  
 that.Obv that Neg someone IC.know.TA-3ConjNeg Perf-catch-3ConjNeg deer-Obv  
 ‘That’s the deer that no one knows how to catch.’ AH,SN 10:7.13

Island effects and successive-cyclic agreement argue that the head of an IHRC raises at LF. If this is correct, and Beck’s hypothesis that LF movement is blocked by negation is correct, the examples above should be ungrammatical. But they are not.

Association with focus makes the same point. Negation can appear between *tehpu*, which marks the scope of the focus, and the focussed phrase itself:

- (659) **Tehpu** skat kesiciy-ahq-il **Weyn-ol** kisapem-ac-il.  
 only Neg IC.know.TA-3ConjNeg-PartObv W.-Obv rely.on-3Conj-PartObv  
 ‘She only doesn’t know about WAYNE whether she can rely on him.’ AH,SN 9:6.13

The arguments given above indicate that *Weyn-ol* undergoes covert movement. Nevertheless negation does not interfere with this movement.

This means that some other explanation for the negation intervention effect must be sought. One possibility is suggested by Pesetsky (2000): intervention is something that crucially affects *split* constructions. Descriptively this covers many of the cases: the *was-fir* split in German is blocked by negation, for example. It draws the right distinction here as well: in Passamaquoddy IHRCs, the head raises in its entirety at LF, meaning that there is no split; the same happens in focus movement. In wh-scope marking in Passamaquoddy, in contrast, the scope marker splits away from its restriction. Negation does interfere with this relation.

In the same way, overtly split quantificational phrases in Passamaquoddy are blocked by an intervening negative quantifier (Bruening and Lin 2001):<sup>31</sup>

- (660) \* *Ma=te wen psi=te n-kisi-mil-a-w-on atomupil-ol.*  
 Neg=Emph someone all=Emph 1-Perf-give-Dir-Neg-N car-InanP  
 ‘I didn’t give anyone all the cars.’ DD1:8.24

Obviously we need to understand *why* negation interferes with split constituents (Honcoop 1998 argues that certain elements block the operation of Existential Disclosure, which is necessary to relate a restriction to that which it restricts), but Pesetsky’s suggestion seems to be descriptively more adequate than the theory of LF movement.<sup>32</sup>

## 4.6 Conclusion

Data from Passamaquoddy show that wh-scope marking is not a unitary phenomenon. Passamaquoddy possesses two different scope marking patterns, one of which has the properties that would be expected by the Direct Dependency approach to wh-scope marking, and the other of which has the properties that are expected by the Indirect Dependency approach. This means that both analyses are instantiated in the languages of the world, in fact within a single language. In one construction, the embedded wh-phrase moves at LF to replace an expletive wh-phrase in the matrix CP; in the other, a matrix question over propositions is created, restricted by an embedded question. The latter is the construction that is least restricted and most common in Passamaquoddy, and accounting for its properties occupied the bulk of this chapter.

The chief argument for the two different types of scope marking is morphological: Passamaquoddy marks agreement with operators that move successive-cyclically. This agreement takes place with covert movement of operators as well as with overt movement. In the construction that instantiates the Direct Dependency analysis, agreement is possible on the matrix verb, agreeing with the embedded wh-phrase, meaning that the embedded wh-phrase undergoes LF movement to the matrix CP. In contrast, the construc-

<sup>31</sup>The negative quantifier does not physically intervene between the two parts of the split NP in 660, but Bruening and Lin (2001) argue that it does intervene scopally (at LF).

<sup>32</sup>Wh-in-situ is also blocked by negation in German; this is not obviously a split construction in any sense. However, Pesetsky (2000) argues that wh-in-situ involves feature movement in German, which results in a split construction: the features separate from the rest of the phrase.

tion that instantiates the Indirect Dependency analysis does not permit this agreement, indicating that no covert movement takes place.

## Chapter 5

# Raising to Object

### 5.1 Introduction

The preceding chapters have described various cross-clausal dependencies in Passamaquoddy, in particular long-distance extraction and *wh*-scope marking. In this chapter I turn to a different type of cross-clausal dependency, one that involves sharing material between two clauses: raising to object. In this construction an argument of a complement clause raises to a position where it agrees with the embedding verb. However, constituency tests indicate that in all such cases the “raised” NP is part of the complement clause: the verb always embeds a propositional complement. Yet an NP that moves to the edge of this complement can count as part of the matrix clause for various purposes. I will suggest that this follows from the *Phase* theory of Chomsky (1998): the edges of lower phases are visible to higher phases.

Many languages have been described as possessing a construction in which some embedded constituent apparently raises out of the CP that it is a semantic and syntactic argument of. In these languages the CP is demonstrably a finite clause, with *Comp* material present (we will see examples of *wh*-phrases in Passamaquoddy, for example). The “raised” NP apparently becomes a constituent of the higher clause, as indicated by word order, Case, agreement, and/or syntactic facts such as binding. Massam (1985), for example, lists as having raising to object constructions Blackfoot and Cree (relatives of Passamaquoddy; all Algonquian languages possess a raising to object construction), Berber, Ilokano, Malagasy, Moroccan Arabic, Quechua, Standard Arabic, and Zacapoaxtla Nahuat; she also provides analyses of this phenomenon in Bauan Fijian, Kipsigis (see also Jake and Odden 1979), and Niuean. The construction has been described in other languages as well; for example Japanese (Kuno 1976, Hiraiwa 2000, Tanaka 2001), Turkish (Zidani-Eroğlu 1997, Moore 1998), and Tsez (Potsdam and Polinsky 1999, 2001).

An example of raising to object in Passamaquoddy appears in 661:<sup>1</sup>

- (661)   '-Kosiciy-**a-l**           yaq **uhsimis-ol**   <sup>eli</sup>keka   peciya-li-t.  
3-know.TA-Dir-Obv Quot 3.younger.sib-Obv C   almost come-ObvS-3Conj  
          ‘[She knew that her brother had almost arrived.]’ (Gabriel 1979, 7)

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<sup>1</sup>This sentence was translated in the text, misleadingly, as ‘She knew that it was her brother.’ I have replaced it with what I feel is a more syntactically accurate translation. The second-position clitic *yaq* shows nothing about constituency here: it simply follows the first constituent of the higher clause, the verb, and indicates nothing about the position of *uhsimisol*. See Section 5.2.10.

The NP ‘her younger brother’ appears here before the complementizer-like particle *eli* (see Chapter 3), and agrees with the matrix verb ‘know’ (by the Direct morpheme, indicating a third person object, and the obviative agreement suffix; see Chapter 1).

Of most interest is the fact that raising to object can apparently feed operations in the higher clause. For example, it can feed the Inverse, which was shown in Chapter 2 to involve A-movement, as diagrammed in 663:

(662) **Psi=te wen** ’-kosiciy-**uku-l** Maliw-ol eli nucitqonket nomiy-at.  
 all=Emph someone 3-know.TA-Inv-Obv M.-Obv C policeman see-3Conj  
 ‘Everyone is known by Mary that a policeman saw.’

(663) [ everyone Mary knows  $t$  [<sub>CP</sub> *eli* ... ] ]  
└──────────────────┘  
A-mvmt

This seems to imply that raising an NP makes it a constituent of the matrix clause, and moreover that raising is, or can be, A-movement.

The raising to object construction thus raises various questions in the context of theories of locality and the projection of arguments. Minimally, we want to understand whether the NP that agrees with the higher verb and dislocates out of the lower clause becomes an argument of the higher verb—that is, whether it really does raise to object position. We also must discover whether there are actually two separate arguments in this construction, or whether the agreeing NP moves from one argument position to another.

Different researchers have answered these questions differently for different languages. Some work has denied that there is real raising to a higher object position, or even raising across a clause boundary (Massam 1985, Potsdam and Polinsky 2001); others have claimed that, in fact, movement to an argument position *can* take place across a clause boundary (e.g., in Japanese; Tanaka 2001, and implied by Kuno 1976). What most researchers agree upon is that there are not two distinct arguments in these constructions; that is, they are not equivalent to constructions like the English ‘She knew *about her brother* that *he* had almost arrived.’

The detailed investigation of raising to object in Passamaquoddy undertaken here, supplemented with data from Japanese in Section 5.6, shows that it is correct to think that elements from a lower clause never raise to an argument position within a higher clause. However, it also shows that it is incorrect to think that there are never two distinct arguments in these constructions. Instead, raising to object constructions cross-linguistically (or, at least in the two completely unrelated and widely separated languages Passamaquoddy and Japanese) are shown here to have two different analyses. Some languages (Passamaquoddy, Japanese) possess both structures, other languages (e.g., Tsez, as described in Potsdam and Polinsky 2001) only possess one—that shown in 664b. The two analyses are the following, where the agreeing NP can be either base-generated in a higher position, labelled as a specifier of CP here, or moved there from within the lower clause:

(664) a. [<sub>CP</sub> ... V+Agr<sub>1</sub> [<sub>CP</sub> NP<sub>1</sub> [<sub>C</sub> ... pro<sub>1</sub> ... ] ] ]  
 b. [<sub>CP</sub> ... V+Agr<sub>1</sub> [<sub>CP</sub> NP<sub>1</sub> [<sub>C</sub> ...  $t_1$  ... ] ] ]  
└──────────────────┘  
movement

If NP<sub>1</sub> is generated in the Spec of CP, it is resumed by a pronoun in the embedded clause.



The base-generated structure, 664a, can only be generated when  $NP_1$  undergoes A-movement in the higher clause, as in the Inverse example above. I will show that this follows from two facts: that the complement of the higher verb is the clause, and the higher verb is incapable of checking uninterpretable features of NPs; and the theory of feature checking. In order to be syntactically visible to the operation Agree (Chomsky 1998),  $NP_1$  must have undeleted A-features in its position at CP. Following the discussion of Chapter 2, the uninterpretable A-feature that renders an NP syntactically visible in Passamaquoddy is the feature [P(roximate)]. An NP must have the feature [P] if its  $\phi$  features are to enter into any sort of syntactic relationship with a functional head, such as agreement. If an NP is generated in CP with the feature [P], this feature will need to be checked within the higher clause. Because the verb takes a clausal and not an NP complement, it is incapable of checking the feature [P]. Therefore the base-generated NP must undergo some kind of A-movement in the higher clause, to a position in which its [P] feature can be checked. If no A-movement takes place, the derivation will crash.

If  $NP_1$  raises out of the lower clause, it will have checked its [P] feature already, and will not be able to move further. Although checked in the lower clause,  $NP_1$ 's [P] feature will be "marked for deletion," and not actually deleted until the next higher phase (Pesetsky and Torrego 2001, developing suggestions of Chomsky 1998). This means that its  $\phi$  features will be accessible to Agree in the higher clause. Although the higher verb cannot check the feature [P], it still has uninterpretable  $\phi$  features that must be checked; the raised NP is able to check (and value) these. This is what is spelled out as agreement on the higher verb.  $NP_1$  need not, and indeed cannot, raise out of the lower clause to check uninterpretable features, but it is perfectly visible to the operation Agree (up until the end of the matrix  $\nu P$  phase).

Thus,  $NP_1$  can only be generated in CP when it undergoes A-movement in the higher clause. Otherwise it must move from within the lower clause to the edge of CP. This means that the properties of movement will hold in raising to object, *unless* the "raised" NP undergoes A-movement. I show this to be true in both Passamaquoddy and Japanese. That is, raising to object involves only one argument and one chain in the general case; but if A-movement takes place in the higher clause, there are two arguments:  $NP_1$  generated in CP, and *pro*, coindexed with  $NP_1$ , in the lower clause.

In both cases, however, the raised NP is a constituent with the lower CP. The whole can be replaced with a propositional *pro*-form, can be questioned as a proposition, etc. The Spec of CP,  $NP_1$  in 664, can never be excluded from this constituent, whether it is base-generated in or moved to that position. In other words, when  $NP_1$  is base-generated and not moved out of the lower clause, it is still part of the lower clause. This fact goes right along with feature checking: because the higher verb takes only a CP complement, it is unable to check uninterpretable features of NPs. In other words, there is no object position to raise to.

The phenomenon of raising to object will have repercussions for the proper analysis of proper versus improper movement. In Section 5.5.5 I will argue that the difference between A- and A-bar movement must be derivable from the features that are checked; positions themselves are not defined as A- or A-bar. The ban on improper movement is itself an epiphenomenon of the way feature checking works.

## 5.2 Raising to Object in Passamaquoddy

Passamaquoddy possesses a construction in which a verb that selects a complement clause can optionally agree with some argument of the lower clause. This argument can (also optionally) raise, apparently into the higher clause, feeding reciprocalization and the Inverse (shown in Chapter 2 to be A-movement). However, I will show here that actual raising across the clause boundary is absolutely impossible. When the NP must be a part of the higher clause (reciprocalization, Inverse), it must be generated there, coindexed with a null (sometimes overt) pronoun in the lower clause. In exactly these cases raising to object can violate islands. In Section 5.6 I turn to a similar construction in Japanese, and show that the same restriction holds there.

### 5.2.1 Raising to Object: Introduction

Various kinds of verbs in Passamaquoddy take clausal complements (see Chapter 3). The type that is of interest here comes in two varieties, like most transitive verbs: a form used with inanimate objects (TI, for Transitive Inanimate), and a form used for animate objects (TA, for Transitive Animate). The TI form simply takes a CP complement, and it is apparently the CP complement that agrees with the verb as an inanimate object (I will claim below that this is not actually the case, and the TI form is simply a default):

- (665) a. Sesolahki=te **mihqitahatomon** [<sub>CP</sub> eli keq Koluskap kisi-mil-at-pon ] .  
 suddenly=Emph recall.TI C something K. Perf-give-3Conj-Pret  
 ‘All of a sudden he remembers that Koluskap has given him something.’ (Mitchell 1921/1976c, 22)
- b. Kat=te **’-kocicihu-w-on** [<sub>CP</sub> tan oc ’t-oli-kisi-qsokassi-n ] .  
 Neg=Emph 3-know.TI-Neg-N WH Fut 3-thus-able-cross-N  
 ‘He does not know how he is to get across’ (Mitchell 1921/1976a, 21)

The TA version of the verb, in contrast, agrees with one of the arguments of the lower clause, which is interpreted as topical or focussed (see Section 5.5.2).<sup>2</sup>

- (666) a. ’-Kosiciy-a-l yaq **uhsimis-ol** [eli] keka peciya-li-t.  
 3-know.TA-Dir-Obv Quot 3.younger.sib-Obv C almost come-ObvS-3Conj  
 ‘[She knew that her brother had almost arrived.]’ (Gabriel 1979, 7)
- b. Susehp ’-kosiciy-à **akòm** [eli] Muwin kisi-mil-at Wiphun.  
 S. 3-know.TA-Dir.ObvP snowshoe.ObvP C M. Perf-give-3Conj W.  
 ‘Susehp knows that Muwin gave Wiphun snowshoes.’ AH,SN 3:9.27

This agreeing argument may, but need not, appear in the higher clause, to the left of CP elements like the complementizer *eli* in 666.<sup>3</sup> To avoid prejudging what this position is, I will draw attention to it by boxing *eli*, rather than by attempting to delimit clause boundaries with brackets.

Some examples without raising of the NP are the following:

<sup>2</sup>Wiphun in 666b would be expected to be obviative. That it is not is probably an error (either by the speakers, or in transcription).

<sup>3</sup>It is not entirely clear that *eli* should be analyzed as a complementizer, but I will assume here that it should be; see Chapter 3 for discussion. Nothing crucial hinges on this assumption.

- (667) a. N-wewitaham-a-k [<sub>CP</sub> ma=te nomiy-a-w-ik **mawsuwinuw-ok** Kehlis-k ] .  
 1-remember-Dir-3P Neg=Emph see-Dir-Neg-Part3P person-3P Calais-Loc  
 ‘I remember that I didn’t see people in Calais.’ AH,SN 4:10.20
- b. Ma=te **k-wewitaham-ol-uh-pa** [<sub>CP</sub> kt-api-kotunkal-a-n-iyā **kiluwaw Piyel**  
 Neg=Emph 2-remember-1/2-Neg-2P 2-go.and.back-hunt-Dir-N-3P 2P P.  
 otuhk ] .  
 deer.ObvP  
 ‘I don’t remember if you and Piyel went to hunt deer.’ AH,SN 10:7.15

One item to note about this agreement and associated dislocation process is that it can skip arguments in the lower clause. For instance, agreement applies across both the subject and the primary object to the secondary object in 666b.

A raised NP can also appear before wh-words in embedded questions:

- (668) N-kosiciy-a-k **nuhuw-ok muwinuw-ok** [keq] kis-temu-htit.  
 1-know.TA-Dir-3P three-3P bear-3P what Perf-eat-3PConj  
 ‘I know what the three bears ate.’ AH7:4.5

Chapter 3 showed that wh-movement is obligatory, meaning that agreeing NPs like that in 668 must be higher than wh-phrases in Spec-CP. Part of the task here will be to determine whether this position is part of the lower clause or part of the higher clause. I will argue that it is in fact part of the lower clause, and I will label it a second specifier of CP:

- (669) [<sub>CP</sub> ... Verb+Agr<sub>1</sub> [<sub>CP</sub> NP<sub>1</sub> [<sub>CP</sub> (WH) (C) ...

### 5.2.2 Complement Clause or Complement NP?

Before addressing this issue, however, we must determine whether it makes sense to speak of a complement clause in this construction. An alternative is that the complement of the higher verb is just an NP, with a relative clause. These TA verbs *can* simply take NP complements:

- (670) a. Muwin ’-piluwitaham-a-l **Susehp-ol** [eli] komutoneski-li-t.  
 M. 3-suspect-Dir-Obv S.-Obv C be.thief-ObvS-3Conj  
 ‘Muwin suspects that Susehp is a thief.’ AH,SN 4:10.17
- b. N-piluwitaham-a **wen**.  
 1-suspect-Dir someone  
 ‘I suspect someone.’ DF6:3.2

Included in the category of NP complement is the headless relative clause.<sup>4</sup>

- (671) N-kociciy-a-k [<sub>NP</sub> kisi-mil-oc-ik oqitonu-l ] .  
 1-know.TA-Dir-3P Perf-give-2Conj-Part3P canoe-InanP  
 ‘I know the ones you gave canoes to.’ DF1:7.21

<sup>4</sup>The verb ‘know’ can have either an /s/ or a /c/: *kosiciy-* TA, *kosicihu-* TI, vs. *kociciy-*, *kocicihu-*. Examples of both forms appear throughout this chapter.

One might try to suggest that there is no real raising to object; instead TA verbs always take (animate) NP complements, which very often have relative clauses modifying them. Some initial support for this position comes from the fact that the lower clause occasionally *is* a relative clause, as indicated by participle endings on the verb (see Chapter 4):

- (672) N-kociciy-a-k [<sub>NP</sub> **niktok** eli kisi-mil-ic-**ik** oqitonu-l ] .  
 1-know-Dir-3P those.An C Perf-give-1ConjInv-Part3P canoe-InanP  
 ‘I know the ones who gave me canoes.’ DF1:7.21

Such an analysis could not be made to work for most instances of raising to object, however. For one thing, relative clauses always permit participle endings, as in the example above, but participle endings are generally *ungrammatical* in RTO, even when the raised NP is a quantifier and might count as an operator to trigger participle agreement:

- (673) AH,SN 8:5.8
- a. Mali ma=te ’-piluwitaham-a-wiy-**il Piyel-ol** kisi-kikimi-ya-li-t(**\*c-il**)  
 M. Neg=Emph 3-suspect-Dir-Neg-Obv P.-Obv Perf-secretly-go-ObvS-3Conj-(\*PartObv)  
 Malikons-ok.  
 Mulligan’s-Loc  
 ‘Mary doesn’t suspect Piyel of having snuck away to Mulligan’s.’
- b. Mali ’-piluwitaham-a-l **psi=te wen-il** kisi-kikimi-ya-li-t(**\*c-il**)  
 M. 3-suspect-Dir-Obv all=Emph someone-Obv Perf-secretly-go-ObvS-3Conj-PartObv  
 Malikons-ok.  
 Mulligan’s-Loc  
 ‘Mary suspects that everyone snuck away to Mulligan’s.’

If the raised NP is something that independently gives rise to participle agreement—a question word or a focussed NP—then it can trigger participle agreement:

- (674) a. N-kosiciy-a **wen-il** Susehp kisi-mila-c-**il** ’t-akom.  
 1-know.TA-Dir who-Obv S. Perf-give-3Conj-PartObv 3-snowshoe.ObvP  
 ‘I know who Susehp gave his snowshoes to.’ AH,SN 8:5.4
- b. Tehpu kesiciy-uk **peskuhu-l ’-qoss-ol** etoli-komutonom-ihc-**il** Piyel.  
 only IC.know.TA-1Conj one-Obv 3-son-Obv IC.Prog-rob-3ConjInv-PartObv P.  
 ‘I only know about one of his sons that he’s stealing from Piyel.’ WN9:6.13

The verb of the complement clause can also occasionally be inflected in the Independent Order, something that is absolutely impossible with relative clauses:

- (675) DF6:3.2
- a. N-piluwitaham-a **Piyel** ’-kisi-komutonom-a-l wen-il.  
 1-suspect-Dir P. 3-Perf-rob-Dir-Obv someone-Obv  
 ‘I suspect that Piyel robbed someone.’ Independent

- b. N-piluwitaham-**a Piyel** *kisi-komutonom-at* wen-il.  
 1-suspect-Dir P. Perf-rob-3Conj someone-Obv  
 ‘I suspect that Piyel robbed someone.’ Conjunct

Additionally, we saw in 668 an example of an embedded wh-question co-occurring with raising to object. The example is repeated below:

- (676) N-kosiciy-**a-k nuhuw-ok muwinuw-ok** keq kis-temu-htit.  
 1-know.TA-Dir-3P three-3P bear-3P what Perf-eat-3PConj  
 ‘I know what the three bears ate.’ AH7:4.5

Such examples (many more will appear throughout this chapter) could have no coherent relative clause interpretation: ‘I know the three bears who ate what’?! Even if this were coherent, it would either be a Complex NP Constraint violation or a wh-island violation.

The embedded clause, therefore, could not be a relative clause. It is a genuine complement CP to a proposition-embedding verb.

### 5.2.3 Agreement with the Clause?

One other question needs to be addressed at this point. As suggested above, the TI form of a raising verb might take a CP complement as its inanimate argument. This would mean that the TA and TI forms are very different: the TI form takes a CP complement and agrees with it as an inanimate, while the TA form does something else (possibly making an NP object position available). I will argue here that the TA and the TI forms are exactly the same. They both simply take a CP complement. The TI form appears as a default, when the matrix verb does not agree with anything.

The first piece of evidence is merely suggestive. This is the fact that ditransitive verbs are productively formed by the addition of the applicative morpheme /-uw-/ to the TI form of a transitive verb. The actual animacy values of the internal arguments do not play a role: both arguments can be animate, and the base will still be a TI. This suggests that the TI form is a default, and does not agree with anything; if it were not, a clash in features would arise.

The second piece of evidence is the fact that it is possible for a TI form to agree with an inanimate argument within the complement clause, as indicated by inanimate *plural* agreement:

- (677) N-kosicihtun-**ol** eli Piyel nokkaht-aq **sukolis-ol** wikahtm-an-pon-il.  
 1-know.TI-InanP C P. eat.up-3Conj candy-InanP like.eat-1Conj-Pret-PartInanP  
 ‘I know that Piyel ate up the candies that I liked.’ AH8:5.3

This appears to be exactly like raising to object as described here. It is not specifically the TA form of the verb that participates in raising to object, then; the TI form can as well. This means that the TA and TI forms do not have different argument structure frames.

The TI form, however, unlike the TA, need not agree with an argument of the lower clause. I suggest that it is simply a default, appearing when there is no agreement. More evidence for this position is the fact that it is not possible for inanimate plural agreement to index agreement with two clauses:

(678) AH,SN 10:7.13

- a. Petak mecimi=te kolusku naka Mali mecimi=te w-olamsotuw-a-l.  
P. always=Emph lie.3 and M. always=Emph 3-believe-Dir-Obv  
'Petak always lies and Mary always believes him.'
- b. \*N-kosicihtun-ol Petak mecimi=te kolusku naka Mali mecimi=te w-olamsotuw-a-l.  
1-know.TI-InanP P. always=Emph lie.3 and M. always=Emph 3-believe-Dir-Obv  
'I know that Petak always lies and that Mary always believes him.'

This fact indicates that the TI form is not agreeing with the clause as an inanimate. Instead inanimate agreement is simply the default, occurring when no argument of the lower clause agrees with the higher verb.

#### 5.2.4 Dislocation (Raising)

As shown above, long-distance agreement in raising to object constructions is often accompanied by overt movement, apparently into the higher clause. The raised NP, for example, comes to the left of wh-phrases in embedded questions:

- (679) a. N-kosiciy-a **sakom nutuluhket-om-ol** [<sub>CP</sub> *wen-il* musqitahama-t ] .  
1-know.TA-Dir governor secretary-Poss-Obv who-Obv hate-3Conj  
'I know who the governor's secretary hates.' AH,SN 5:11.14
- b. Ma=te n-wewitaham-a-wiy-ik **mahtoqehsuw-ok** [<sub>CP</sub> *tama* al  
Neg=Emph 1-remember.TA-Dir-Neg-3P rabbit-3P where Uncertain  
n-toli-putoma-n-ok keihku-k ] .  
1-where-lose-N-3P forest-Loc  
'I don't remember where in the forest I lost the rabbits.' AH,SN 5:11.8
- c. Susehp '-koti-ksociy-a-l **pilsqehsis-ol** [<sub>CP</sub> *kequmehsi* skat nucitqonkec-ik  
S. 3-want-know.TA-Dir-Obv girl-Obv why Neg policeman-Part3P  
tqona-htiq ] .  
arrest-3PConjNeg  
'Susehp wants to know why the police didn't arrest the girl.' AH,SN 5:11.9
- d. **K-sesomitaham-ul-opa kiluwaw Piyel** [<sub>CP</sub> *mehsi oli-ya-yeq* Kehlis-k ] .  
2-wonder.TA-1/2-2P 2P P. why there-go-2PConj Calais-Loc  
'I wonder why you and Piyel are going to Calais.' WN5:11.15

There are two possible analyses of this dislocation: the NP is generated in the higher position, and related to some empty category in the lower clause; or it is generated in the lower clause, and moved to the higher position. All of the evidence indicates that the latter is correct.

#### 5.2.5 Arguments for Movement

Various arguments for raising in the raising to object construction have been offered, specifically for other Algonquian languages by Frantz (1978b, 1980) and Branigan and Mackenzie (1999). Many of these arguments are not directly for movement, but instead show that an alternative structure, in which a pronoun in

the higher clause is coindexed with an NP in the lower clause, is not viable. In Passamaquoddy, it is possible to argue even more directly for movement, from restrictions on quantifiers, reconstruction, and island phenomena.

### Singular ‘Every’

As shown in Chapter 2, only the subject of an intransitive can have the form *psite* + singular NP, giving a distributive reading; objects and subjects of transitives must be plural:

(680) Subject of Intransitive (AH,SN 8:5.9)

- a. Psi=te wasis kisi-ntu.  
all=Emph child Perf-sing.3  
‘Every child sang (singly).’
- b. Psi=te wasis-ok kisi-ntu-ltuw-ok.  
all=Emph child-3P Perf-sing-Plural-3P  
‘Every child sang (together or singly).’

(681) Object of Transitive (WN8:5.9)

- a. \*Mali kis-ewestuwam-a-l psi=te pomawsuwinuw-ol.  
M. Perf-talk.to-Dir-Obv all=Emph person-Obv  
‘Mary spoke with every person.’
- b. Mali kis-ewestuwam-a psi=te pomawsuwinu.  
M. Perf-talk.to-Dir.ObvP all=Emph person.ObvP  
‘Mary spoke with every person.’ (at once or separately)

(682) Subject of Transitive (AH,SN 8:5.9)

- a. \*Psi=te mus micin ’saht.  
all=Emph moose eat.TI blueberry  
‘Every moose ate a blueberry.’
- b. Psi=te musuw-ok micin-iya-l ’sathi-l.  
all=Emph moose-3P eat.TI-3P-InanP blueberry-InanP  
‘Every moose ate blueberries.’

But a singular *psi=te* subject of an intransitive can raise to object under a raising to object verb:

(683) AH,SN 8:5.10

- a. N-kosiciy-a psi=te wasis eli kisi-pokomi-t.  
1-know.TA-Dir all=Emph child C Perf-skate.3  
‘I know that every child can skate.’
- b. N-kosiciy-a psi=te wasis eli tawi-pokomi-t.  
1-know.TA-Dir all=Emph child C know.how-skate-3-Conj  
‘I know that every child knows how to skate.’

If this type of quantified NP is only licensed as subject of an intransitive verb, the raised NP in the examples above must have originated as the lower subject.

**Reconstruction: Variable Binding**

Agreeing NPs that appear to the left of CP elements (such as a *wh*-phrase) can also show reconstruction effects. If Hornstein (1984), Barss (1986), and Chomsky (1993) (among others) are correct that reconstruction is only a property of movement chains, then reconstruction in raising to object indicates that the raised NP moved out of the lower clause.

A raised NP containing a variable can be bound by a quantifier in the lower clause:

(684) AH7:3.20

- a. N-kosiciy-a eli **psi=te wen** koseloma-t **nisuwihtic-il**.  
 1-know.TA-Dir C all=Emph someone love-3Conj spouse-Obv  
 ‘I know that everyone<sub>1</sub> loves his<sub>1</sub> spouse.’
- b. N-kosiciy-a **nisuwihtic-il** eli **psi=te wen** koseloma-t.  
 1-know.TA-Dir 3.spouse-PartObv C all=Emph someone love-3Conj  
 ‘I know that everyone<sub>1</sub> loves his<sub>1</sub> spouse.’

(685) AH8:5.3

- a. N-kosiciy-a eli **psi=te wen** kselm-iht **wikuwoss-ol**.  
 1-know.TA-Dir C all=Emph someone love-3ConjInv 3.mother-Obv  
 ‘I know that his<sub>1</sub> mother loves everyone<sub>1</sub>.’
- b. N-kosiciy-a **wikuwoss-ol** eli **psi=te wen** kselm-iht.  
 1-know.TA-Dir 3.mother-Obv C all=Emph someone love-3ConjInv  
 ‘I know that his<sub>1</sub> mother loves everyone<sub>1</sub>.’

As we saw in Chapter 2, this reconstruction is blocked if the binder is a negative quantifier:

(686) AH7:3.20

- a. N-kosiciy-a eli **skat wen** musqitaham-ahq **nisuwihtic-il**.  
 1-know.TA C Neg someone hate-3ConjNeg 3.spouse-PartObv  
 ‘I know that no one<sub>1</sub> hates his<sub>1</sub> spouse.’
- b. N-kosiciy-a **nisuwihtic-il** eli **skat wen** musqitaham-ahq.  
 1-know.TA 3.spouse-PartObv C Neg someone hate-3ConjNeg  
 ‘I know that his/her<sub>1</sub> spouse doesn’t hate anyone/someone<sub>2</sub>.’ NOT ‘I know that no one<sub>1</sub> hates his<sub>1</sub> spouse.’

(687) AH7:3.20

- a. \* N-kosiciy-a **’t-akòm** eli **skat wen** ksikhahl-ahq.  
 1-know.TA-Dir 3.snowshoe.ObvP C Neg someone lose-3ConjNeg  
 ‘I know that no one lost his snowshoes.’
- b. ?? N-kosiciy-a **wikuwoss-ol skat wen** kselm-ihq.  
 1-know.TA-Dir 3.mother-Obv Neg someone love-3ConjInvNeg  
 ‘I know that no one<sub>1</sub> is loved by his<sub>1</sub> mother.’

The explanation given in Chapter 2 for the failure of binding, that negative quantifiers block reconstruction across them, accounts for the binding pattern above, on the hypothesis that the raised NP originated in a lower position to which it must reconstruct in order for binding to hold at LF.



**Reconstruction: Conjunctive ‘or’**

Two NPs disjoined with the Passamaquoddy version of ‘or’, *kosona*, can receive a conjunctive interpretation only within the scope of negation (note that the subject falls within the scope of negation, which can independently be shown with quantifiers and negative polarity items):

(688) AH,SN 7:4.9

- a. Nomiya-a [ cihpolakon kosona kuhas ] .  
 see-Dir eagle or hawk  
 ‘I saw an eagle or a hawk.’ (don’t know which) Disjunctive
- b. **Ma=te** nomiy-a-w [ cihpolakon kosona kuhas ] .  
 Neg=Emph see-Dir-Neg eagle or hawk  
 ‘I didn’t see an eagle or a hawk.’ (didn’t see either) Conjunctive

(689) AH,SN 7:4.9

- a. [ Cihpolakon kosona kuhas ] n-kisi-maton-oq.  
 eagle or hawk 1-Perf-fight-Inv  
 ‘An eagle or a hawk attacked me.’ (don’t know which) Disjunctive
- b. [ Cihpolakon kosona kuhas ] **ma=te** n-kisi-maton-okuwih-ik.  
 eagle or hawk Neg=Emph 1-Perf-fight-Inv-Neg-3P  
 ‘(Neither) an eagle (n) or a hawk attacked me.’ (neither attacked) Conjunctive

Two disjoined NPs can undergo raising to object and still receive a conjunctive interpretation if the lower clause is negated. This, again, implies that a raised object must have raised via movement, and can reconstruct at LF back to a position within the scope of the lower negation.<sup>5</sup>

- (690) a. N-wewitaham-a [ cihpolakon kosona kuhas ] eli skat kisi-maton-ihq.  
 1-remember.TA-Dir eagle or hawk C Neg Perf-fight-1ConjInvNeg  
 ‘I remember that an eagle or a hawk didn’t attack me.’ (neither did) AH,SN 7:4.9 Conjunctive
- b. [ Cihpolakon kosona kuhas ] n-wewitaham-a eli skat kisi-maton-ihq.  
 eagle or hawk 1-remember.TA-Dir C Neg Perf-fight-1ConjInvNeg  
 ‘I remember that an eagle or a hawk didn’t attack me.’ (neither did) AH,SN 7:4.9 Conjunctive

Note that in 690b a raised NP can move further, while the conjunctive interpretation remains intact. The disjoined NP must be able to reconstruct all the way to the lower clause.

**5.2.6 Islands**

The strongest piece of evidence that raising to object is movement is the fact that it obeys islands. For example, raising to object obeys adjunct islands:

(691) Adjunct Island (AH,SN 9:6.10)

<sup>5</sup>As shown in Chapter 2, only negative quantifiers block reconstruction; sentential negation does not.

- a. N-piluwitaham-**a not skitap** nipa-kotunke [ eci kukec oli-ya-t Kehlis-k ] .  
1-suspect-Dir that.An man night-hunt.3 when warden there-go-3Conj Calais-Loc  
'I suspect that that man poaches when the warden goes to Calais.'
- b. \* N-piluwitaham-**a kukec**<sub>1</sub> [eli] not skitap nipa-kotunke [ eci t<sub>1</sub> oli-ya-t  
1-suspect-Dir warden C that.An man night-hunt.3 when there-go-3Conj  
Kehlis-k ] .  
Calais-Loc  
'I suspect (of the warden) that that man poaches when he goes to Calais.'

(692) Adjunct Island (AH,SN 9:6.11)

- a. N-kosiciy-**a Mihku** koti-macehe [ mesq 'Tolitoli naka witapih-il peciya-htihq ] .  
1-know.TA-Dir M. Fut-leave.3 not.yet T. and 3.friend-Obv arrive-3PConjNeg  
'I know that Mihku is going to leave before 'Tolitoli and her friend arrive.'
- b. ?? N-kosiciy-**a-k 'Tolitoli naka witapih-il**<sub>1</sub> [eli] Mihku koti-maceha-t [ mesq t<sub>1</sub>  
1-know.TA-Dir-3P T. and 3.friend-Obv C M. Fut-leave-3Conj not.yet  
peciya-htihq ] .  
arrive-3PConjNeg  
'I know (about 'Tolitoli and her friend) that Mihku is going to leave before they arrive.'

In addition, raising to object obeys the Complex NP Constraint:

(693) Complex NP Island (AH,SN 9:6.11)

- a. Kosiciy-**ul kis-ankuweht-uwon** [<sub>NP</sub> atomupil-ol Piyel naka Susehp  
know.TA-1/2 Perf-sell-2Conj car-InanP P. and S.  
mil-osk-opon-il ] .  
give-2ConjInv-Pret-PartInanP  
'I know that you sold the cars Piyel and Susehp gave you.'
- b. \* N-kosiciy-**a-k kis-ankuweht-uwon** [<sub>NP</sub> atomupil-ol **Piyel naka Susehp**  
1-know.TA-Dir-3P Perf-sell-2Conj car-InanP P. and S.  
mil-osk-opon-il ] .  
give-2ConjInv-Pret-PartInanP  
'I know (about them) that you sold the cars Piyel and Susehp gave you.'
- c. \* N-kosiciy-**a-k Piyel naka Susehp**<sub>1</sub> kis-ankuweht-uwon [<sub>NP</sub> atomupil-ol t<sub>1</sub>  
1-know.TA-Dir-3P P. and S. Perf-sell-2Conj car-InanP  
mil-osk-opon-il ] .  
give-2ConjInv-Pret-PartInanP  
'I know (about Piyel and Susehp) that you sold the cars they gave you.'

Finally, raising to object obeys wh-islands:

(694) WH-Island (AH,SN 10:7.13)

- a. \* Ma=te n-wewitaham-a-wiy-**ik** Susehp kisi-qecimul-osk [<sub>CP</sub> *keq*  
Neg=Emph 1-remember.TA-Dir-Neg-3P S. Perf-ask-2ConjInv what  
kisi-htu-htit **skitapiy-ik** ] .  
Perf-make-3PConj man-3P  
'I don't remember (about them) if Susehp asked you what the men made.'

- b. Ma=te n-wewitahatom-uw-on [<sub>CP</sub> Susehp kisi-qecimul-osk [<sub>CP</sub> keqsey  
Neg=Emph 1-remember.TI-Neg-N S. Perf-ask-2ConjInv what  
kisi-htu-htit skitapiy-ik ] ] .  
Perf-make-3PConj man-3P  
'I don't remember if Susehp asked you what the men made.'

If raising the agreeing NP to a position to the left of complementizer elements were not movement, there would be no reason to expect it to obey islands. I conclude that raising to object is syntactic movement.<sup>6</sup> For instance, we saw in Chapter 3 that simple NP dislocation, what was referred to there as long-distance scrambling, does not have to obey islands:

- (695) a. Yut olu atomupil, ma=te n-kosiciht-uw-on [<sub>CP</sub> keqomehsi Pil  
this.Inan Top car Neg=Emph 1-know.TI-Neg-N why Bill  
monuhmuw-ew-at Maliw-ol ] .  
buy-App-3Conj Mary-Obv  
'This car, I don't know why Bill bought Mary (it).' AH,SN 8:5.7
- b. Yehtol skitapiy-il ma=te n-musaci-w-on [<sub>NP</sub> not matuwehs  
that.Obv man-Obv Neg=Emph 1-like-Neg-N that.An porcupine  
kisi-lahk-ew-at kawihi ] .  
Perf-throw-App-3Conj quill.ObvP  
'That man, I don't like the porcupine that threw quills at (him).' AH2:9.14

It should also be noted that resumptive pronouns do not save island violations in raising to object:

- (696) ?? N-kosiciy-a-k **Piyel naka Susehp** kis-ankuweht-uwon [<sub>NP</sub> atomupil-ol **nekomaw**  
1-know.TA-Dir-3P P. and S. Perf-sell-2Conj car-InanP 3P  
mil-osk-opon-il ] .  
give-2ConjInv-Pret-PartInanP  
'I know that you sold the cars Piyel and Susehp gave you.'

The ungrammaticality of 696 shows that there are not two distinct arguments in raising to object structures; there is only one, which undergoes movement. (We will see later that this situation contrasts with the one in which A-movement takes place in the higher clause, where a resumptive pronoun is grammatical.)

### 5.2.7 WH-Movement

Agreeing wh-phrases also show that movement takes place in raising to object. In indirect questions with raising-to-object verbs, the verb commonly agrees with the wh-phrase in the embedded Spec-CP. This wh-phrase must have raised to that position by wh-movement, a well-attested process in Passamaquoddy (Chapter 3). For one thing, it also obeys islands:

<sup>6</sup>On one occasion two informants accepted a wh-island violation:

- (i) N-kosiciy-a **Petak** eli nucitqonket nomiht-aq [<sub>CP</sub> keqsey *t* kisi-komutonato-k ] .  
1-know.TA-Dir P. C policeman see-3Conj what Perf-steal-3Conj  
'I know about Petak that the police saw what he stole.' AH,SN 10:7.16

It is unclear whether this is an aberration or there is some crucial syntactic difference between this example and those cited in the text. See the discussion of wh-islands below.

(697) AH,SN 9:6.11

- a. N-kosiciy-a **wen** elomi-ya-t [ mesq Mali mace-ntu-hk ] .  
1-know.TA-Dir who IC.away-go-3Conj not.yet M. start-sing-3ConjNeg  
'I know who left before Mary started singing.'
- b. \* N-kosiciy-a **wen** elomi-ya-t Mihku [ mesq t mace-ntu-hk ] .  
1-know.TA-Dir who IC.away-go-3Conj M. not.yet start-sing-3ConjNeg  
'I know who Mihku left before started singing.'

Similarly, matrix wh-questions in which the wh-phrase came from the complement of a raising-to-object verb must involve agreement between the wh-phrase and the verb (see Section 5.7); an example appears in 698a. Once again, this can be shown to be movement, since it again obeys all islands (698b):

- (698) a. **Wen** Susehp piluwitaham-at kisi-komutonatom-uw-at Piyel-ol mani-m?  
who S. suspect-3Conj Perf-steal-App-3Conj P.-Obv money-Poss  
'Who does Susehp suspect stole Piyel's money?' AH,SN 5:11.12
- b. \* **Wen-il** taktal ' -kosiciy-a-l [ <sub>CP</sub> keqsey kikiht-ih t ] ?  
who-Obv doctor 3-know.TA-Dir what cure-3ConjInv  
'Who does the doctor know what will cure?' (marginal as 'Does the doctor know what will cure someone?') AH,SN 3:9.27

From all of these considerations—the form of quantifiers, reconstruction, island phenomena—we can conclude that dislocation in the raising to object construction, associated with agreement with the higher verb, is movement.

### 5.2.8 Counterargument: Subsets

There is one argument that raising to object is *not* movement. This is that agreement on the higher verb can be with a *subset* of a lower argument (Frantz 1978b):

(699) AH,SN 8:5.4

- a. Ma=te **k-wewitaham-ol-uh-pa kt-api-coqols-uka-ni-ya Piyel.**  
Neg=Emph 2-remember-1/2-Neg-2P 2-go.and.back-frog-hunt-N-2P P.  
'I don't remember (about you guys) if you and Piyel went frog-hunting.'
- b. Ma=te **k-wewitaham-ol-u kt-api-coqols-uka-ni-ya Piyel.**  
Neg=Emph 2-remember-1/2-Neg 2-go.and.back-frog-hunt-N-2P P.  
'I don't remember (about you) if you and Piyel went frog-hunting.'

(700) AH,SN 9:6.15

- a. Kosiciy-**ul-pa** eli toli-nomiy-uti-yeq Utoqehki-k.  
(2)-know.TA-1/2-2P C there-see-Recip-2PConj G.L.S.-Loc  
'I know that you guys saw each other at Grand Lake Stream.'
- b. Kosiciy-**ul** eli toli-nomiy-uti-**yeq k-itap** Utoqehki-k.  
(2)-know.TA-1/2 C there-see-Recip-2PConj 2-friend G.L.S.-Loc  
'I know about you (sing.) that you and your friend saw each other at Grand Lake Stream.'

- c. N-kosiciy-a wot skitap eli toli-nomiy-uti-yeq (kiluwaw) Utoqehki-k.  
 1-know.TA-Dir this.An man C there-see-Recip-2PConj (2P) G.L.S.-Loc  
 ‘I know about this man that you and he saw each other at Grand Lake Stream.’

In 700a, agreement is with a second-person plural, the subject of the lower clause (a reciprocal). In 700b, however, the higher verb agrees only with a second-person singular, a subset of the lower argument ‘you and your friend.’ In 700c, the higher verb agrees with ‘this man’, which is a subset of ‘you and this man’ in the lower clause.

However, this is not an argument against movement, it is just something that the language independently allows. First, the normal way of expressing conjunctions like ‘you (Sg) and your friend’ is to simply add ‘your friend’ to a second-person plural, either an independent pronoun or just verbal agreement:

- (701) (Kiluwaw) k-itap k-toli-nomiy-uti-pa Kehlīs-k.  
 (2P) 2-friend 2-there-see-Recip-2P Calais-Loc  
 ‘You and your friend saw each other in Calais.’ AH,SN 9:6.15

Second, the grammar permits operations to pick out either of the members of such conjunctions. For instance, relative clauses can be formed based on a subset of such an argument; this is the case for what is translated as ‘enemy’ in the following text example:

- (702) ’-Keskuhtehq-a-l elomi-pusi-li-c-il Mociyehsw-ol, **kci**  
 3-come.upon-Dir-Obv IC.away-leave.by.boat-ObvS-3Conj-PartObv M.-Obv great  
**nacitaham-ti-htic-il,** naka Koluskap ’-siwiyi.  
 hate-Recip-3PConj-PartObv and K. 3-relative.ObvP  
 ‘He comes upon Mociyehs, the partridge, his great enemy, pushing off with Koluskap’s relatives.’  
 (Mitchell 1921/1976b, 7)

This is literally ‘he<sub>1</sub> comes upon [the great [one who<sub>2</sub> he<sub>2</sub> and he<sub>1</sub> hate each other<sub>1,2</sub>]].’ That is, the relative operator (a singular) is a subset of the subject of the reciprocal verb, which is necessarily plural (semantically and syntactically). This is exactly the configuration we see in 700, but in relativization rather than raising to object. There is every reason to believe that relativization involves movement; numerous reasons are listed in Chapter 3. If relativization can pick out subsets of arguments, then movement operations generally must be able to. The fact that raising to object can is therefore not surprising at all.

The example given above is by no means an isolated one. Many common nominals are formed on this pattern. For instance, ‘his/her spouse’ is literally translatable as ‘he/she<sub>q</sub> who [he/she<sub>1</sub> and someone else] (Pl) are two’:

- (703) nisuwi-htic-il  
 be.two-3PConj-PartObv  
 ‘his/her spouse’

This phenomenon appears to be pan-Algonquian. For example, Goddard and Bragdon (1988, 549) give the following example from Massachusetts (or Wampanoag): *weechaiyeuthettiche*, ‘their partners,’ schematically

‘they<sub>1</sub> who [they<sub>2</sub> and they<sub>1</sub>] were with each other<sub>1,2</sub>.’ Frantz (1978b) gives similar subset examples in raising to object structures in Blackfoot.

Operations on subsets of arguments, then, seems to be a part of Algonquian grammar. While I have no explanation for the phenomenon, I can safely conclude that it does not constitute an objection to a movement analysis of raising to object.

### 5.2.9 Arguments Against Two Distinct Arguments

In addition to giving arguments *for* movement, it is also possible to give arguments against a possible alternative, according to which there are two distinct arguments: one of the higher verb, one of the lower. Such a hypothesis would make raising to object in Passamaquoddy analogous to such English structures as ‘I know *about Susehp* that *he* went to Calais.’

We already saw one argument against this hypothesis, from the unavailability of a resumptive pronoun in the lower clause (example 696). This can be shown to be true also in cases where syntactic islands are not involved; a doubling pronoun is simply ungrammatical:

(704) AH8:5.3

- a. N-kosiciy-a eli Piyel koti-nathula-t Susehp-ol.  
 1-know.TA-Dir C P. Fut-pick.up.in.boat-3Conj S.-Obv  
 ‘I know that Piyel will pick up Susehp in a boat.’
- b. \*N-kosiciy-a nekom eli Piyel koti-nathula-t Susehp-ol.  
 1-know.TA-Dir 3 C P. Fut-pick.up.in.boat-3Conj S.-Obv  
 ‘I know about him that Piyel will pick up Susehp in a boat.’

Additional arguments are easy to muster. For one thing, indirect questions often show agreement between the matrix verb and the embedded *wh*-phrase:

- (705) Piyel ma=te wewitaham-a-wiy-il wen-il kisi-mil-uk atomupil.  
 Piyel Neg remember.TA-Dir-Neg-Obv who-Obv Perf-give-1Conj car  
 ‘Piyel doesn’t remember who I gave a car to.’ WN4:10.18

There is no coherent two-argument interpretation of such cases: \*‘Piyel doesn’t remember about him<sub>i</sub> who<sub>1</sub> I gave a car to’ (Branigan and Mackenzie 1999).

There are, therefore, very good reasons to think that raising to object involves movement of an NP out of the lower clause, and does not involve two separate arguments. The task now is to determine whether the moving NP raises into the higher clause—into object position, for instance—or only to the left edge of the lower clause. The evidence indicates that it does not move out of the lower clause.

### 5.2.10 Raising Does Not Cross the CP Boundary

The first argument comes from word order considerations. If the raised NP were really raised to a position within the higher clause, say object position, it should be able to appear in any position in which an object can appear. However, this is not true. The raised NP can only be peripheral, that is it must follow all material

belonging to the higher clause. For instance, it cannot come in between the higher verb and its subject, where this is normally a possible word order in a transitive sentence (see Chapter 1):

(706) AH,SN 5:11.8

- a. 'Piluwitaham-**a-l**    *Wiphun* **Tihtiyas-ol** eli kisi-pakotuw-iht.  
 3-suspect.TA-Dir-Obv W.    T.-Obv    C    Perf-lie.to-3ConjInv  
 'Wiphun suspects that Tihtiyas lied to her.'
- b. \*'Piluwitaham-**a-l**    **Tihtiyas-ol** *Wiphun* eli kisi-pakotuw-iht.  
 3-suspect.TA-Dir-Obv T.-Obv    W.    C    Perf-lie.to-3ConjInv  
 'Wiphun suspects that Tihtiyas lied to her.'

The raised NP can also appear initially: at the left edge of the higher clause, as in example 690b. Such positioning has the appearance of long-distance scrambling, as illustrated in Chapter 3; in the context of the theory presented below, this means that a raised NP can only undergo further A-bar movement and cannot become a constituent of the matrix clause.

In addition, second-position clitics within the lower clause generally follow the raised NP, not whatever element follows it. This indicates that the raised NP is the first element of the lower clause, and is not within the higher clause at all:<sup>7</sup>

(707) AH,SN 5:11.14

- a. N-kosiciy-a    *Susehp* **oc** eli monuwa-t    nuhu    akom.  
 1-know.TA-Dir S.    Fut C    buy-3Conj three.ObvP snowshoe.ObvP  
 'I know that Susehp will buy three snowshoes.'
- b. N-kosiciy-a    eli=**hc** *Susehp* monuwa-t    nuhu    akom.  
 1-know.TA-Dir C=Fut S.    buy-3Conj three.ObvP snowshoe.ObvP  
 'I know that Susehp will buy three snowshoes.'
- c. N-kosiciy-a-k    nuhu    **oc** akom    eli *Susehp* monuwa-t.  
 1-know.TA-Dir-3P three.ObvP Fut snowshoe.ObvP C S.    buy-3Conj  
 'I know that Susehp will buy three snowshoes.'

In 707a, the future clitic follows the raised NP *Susehp*, but in 707b, where no NP has raised, this clitic follows the complementizer *eli*. In 707c, the clitic actually disrupts the first constituent (this is the usual pattern), appearing within the raised NP. In neither 707a nor 707c does the clitic follow the complementizer as in 707b. If the raised NP were part of the higher clause, it should be ignored for the placement of the clitic in the lower clause.

### 5.2.11 Conclusion

The conclusion from everything given above is that raising to object is movement, but it is not movement into the higher clause. Instead it is to some position to the left of wh-phrases in Spec-CP. I will label this position a second specifier of CP (it could also be a projection within a more articulated CP, as in Rizzi 1997):

<sup>7</sup>I do not include judgements of ungrammatical placement of these clitics, as informants will generally assent to any position. In production, however, they are very consistent in where the second-position clitics appear.

- (708)  $[_{CP} \dots V+Agr_1 [_{CP} NP_1 [_{CP} (WH) (C) \dots t_1 \dots ] ] ]$   
↑  
movement

From CP, NP<sub>1</sub> is able to undergo further A-bar scrambling, as in 690b, but it is not a matrix constituent.

The raised position, to the left of the position where wh-phrases occur, resembles the location of left-dislocated elements (Chapter 1). It is not clear whether the two positions are the same. One argument that they are not is that singular nonreferential quantifiers cannot appear in left-dislocated position, but they can appear before wh-phrases in raising to object:

- (709) Ma=te n-wewitaham-a-w psi=te wen tama 't-oli-kis-onuw-a  
 Neg=Emph 1-remember-Dir-Neg all=Emph someone where 3-there-Perf-buy-Dir.ObvP  
 't-akom.  
 3-snowshoe.ObvP  
 'I don't remember where everyone bought his snowshoes.' AH,SN 8:5.4

The nature of the raised position I will leave open, and will refer to it simply as Spec-CP. We will see that a raised NP in this position is compatible both with topic and with focus, which means the position is unlikely to be a dedicated discourse projection.

### 5.3 Operations in the Higher Clause

So far we have seen arguments that an NP that appears to the left of the lower clause attains that position by movement, meaning that raising to object really is raising out of the lower clause. The position the NP raises to also appears to be within the lower clause, not the higher clause. As was mentioned earlier, however, there are cases where the raised NP acts like an argument of the higher clause: it can take undergo Inversion, for example, and can be part of a reciprocal. Such facts seem to imply either that raising *can* be to an argument position, contradicting the evidence given above, or that the NP in a left-peripheral position within the lower clause can move to an A-position within the higher clause, violating the ban on improper movement. However, there is a third option, which is what I will argue for: that A-movement in the higher clause begins with a different derivation.

#### 5.3.1 Argument Structure Alternations

One process within the higher clause that is apparently fed by raising to object is reciprocalization. Reciprocals are indicated by derivational morphology on the verb in Passamaquoddy rather than by an NP anaphor. A detransitivizing suffix is added to the verb, causing it to inflect like an intransitive. For instance, 710 lacks the third-person prefix that is characteristic of transitive verbs, and it also lacks the Direct or Inverse theme marker:

- (710) Susehp naka Piyel koti-tqon-tu-wok.  
 S. and Piyel Fut-arrest-Recip-3P  
 'Susehp and Piyel will arrest each other.' AH,SN 6:2.21



Raising to object apparently feeds this derivational process. In the following example, ‘Susehp and Piyel,’ the logical object of the lower verb, raises into the higher clause and becomes the subject (and object) of a reciprocal verb (derived from the TA stem).<sup>8</sup> The word order is worthy of remark: the raised NP, now the matrix subject, is preverbal, as subjects often are in Passamaquoddy:

- (711) Susehp naka Piyel mili-kciciyu-tu-wok eli Lehpit koti-tqon-at.  
 Susehp and Piyel varied-know.TA-Recip-3P C L. Fut-arrest-3Conj  
 ‘Susehp and Piyel know about each other that Lehpit will arrest them.’ AH,SN 6:2.21

It is interesting that the TA form serves as the base for reciprocalization. It is the TI form that serves as the base for applicativization, even though all the arguments of the resulting ditransitive may be animate. As discussed above, this suggests that the TI form is the default form. The fact that reciprocals are formed using the TA, then, indicates that reciprocals have an object at some level of analysis. That is, the TA form is determined, in the raising to object case, by an animate argument counting as the object of the verb. This means that raising to object feeds A-movement to the subject position of the higher verb. The NP that ends up as the matrix subject raises out of the lower clause first to object position, where it agrees with the TA stem, then to subject position, as forced by the detransitivizing reciprocal suffix.

The argument(s) of the higher reciprocal verb must still be (an) argument(s) of the lower verb:

- (712) \* Susehp naka Piyel mili-kciciyu-tu-wok eli Lehpit koti-tqon-at Sokahs-ol.  
 Susehp and Piyel varied-know.TA-Recip-3P C L. Fut-arrest-3Conj S.-Obv  
 ‘Susehp and Piyel know about each other that Lehpit will arrest Sokahs.’ AH,SN 6:2.21

That is, it could not be that just in the case of reciprocalization the link between the raised object and the lower clause disappears.<sup>9</sup>

Raising to object can also feed possessor raising in the higher clause (see Chapter 1 on this process):

<sup>8</sup>In this example speakers also prefer to add the preverb *mili-*. I do not know if this is necessary with this particular verb.

<sup>9</sup>Reflexivization is not possible:

- (i) AH,SN 6:2.21
- a. \* Nil n-kosiciy-us eli koti Susehp tqon-it.  
 1 1-know.TA-Refl C Fut S. arrest-1ConjInv  
 ‘I know about myself that Susehp will arrest me.’
  - b. Nil n-pehki-kosiciy-us eli Susehp koti-tqon-it.  
 1 1-thoroughly-know.TA-Refl C S. Fut-arrest-1ConjInv  
 ‘I know for sure that Susehp is going to arrest me.’
  - c. Nil n-pehki-kosiciy-us eli Susehp koti-tqon-at Piyel-ol.  
 1 1-thoroughly-know.TA-Refl C S. Fut-arrest-3Conj Piyel-Obv  
 ‘I know for sure that Susehp is going to arrest Piyel.’

However, the reflexive morpheme is not just a reflexive morpheme. It also appears in various kinds of intransitives that do not have reflexive meanings. This raising verb with the “reflexive” suffix, in particular, has a lexical meaning as ‘know for sure’; in this use there is no necessary connection between the “reflexivized” argument and any argument position in the lower clause (that is, it is no longer a raising to object verb). Hence it may not be surprising that reflexives cannot appear with raising to object: combining the “reflexive” suffix with one of these verbs idiosyncratically gives rise to a different type of interpretation. If this is correct, one might expect that some raising-to-object verbs will exist where the reflexive meaning can come through; these would be expected to occur in raising to object constructions without difficulty. I have so far not found any such verbs. (Reflexives are also bad, but reciprocals good, in Blackfoot, according to Frantz 1978b.)

(713) AH,SN 9:6.13

- a. N-kosiciy-a eli Piyel witapih-il molikikona-t.  
1-know.TA-Dir C P. 3.friend-Obv be.strong-3Conj  
'I know that Piyel's friend is strong.'
- b. N-kosiciht-uw-a-n-ol Piyel witapih-il eli molikikona-li-t.  
1-know.TI-App-Dir-N-Obv P. 3.friend-Obv C be.strong-ObvS-3Conj  
'I know that Piyel's friend is strong.'
- c. Piyel n-kosiciht-uw-a-n-ol witapih-il eli molikikona-li-t.  
P. 1-know.TI-App-Dir-N-Obv 3.friend-Obv C be.strong-ObvS-3Conj  
'I know that Piyel's friend is strong.'
- d. Wen kesiciht-uw-ot witapih-il eli molikikona-li-t?  
who IC.know.TI-App-2Conj 3.friend-Obv C be.strong-ObvS-3Conj  
'Whose friend do you know to be strong?'

In these cases the raised possessor acts like an independent argument of the matrix verb: it can front independently of the possessed NP, and can be questioned.

### 5.3.2 The Inverse

Raising to object also feeds the Inverse, which was shown in Chapter 2 to be an A-movement operation. In the Inverse, the logical object raises across the logical subject to a higher A-position. This movement permits it to bind into and take scope over the subject:

(714)  $[_{HP} \text{ object } H [_{vP} \text{ subject } [_{VP} t ] ] ]$   
└──────────────────┘  
A-mvmt

In raising to object, we can use the same arguments from scope and binding to show that the raised NP undergoes A-movement to a position c-commanding the subject. For example, an Inverse raising to object verb permits the raised object to bind into the higher subject:

(715) **Psi=te wen** ' -kosiciy-uku-l w-ikuwoss-ol  $[_{CP}$  etoli-koti-peciya-t  
all=Emph someone 3-know.TA-Inv-Obv 3-mother-Obv IC.there-Fut-come-3Conj  
etolonukahk ] .  
gathering  
'His<sub>1</sub> mother knows that everyone<sub>1</sub> is coming to the gathering.' AH8:5.3

This means that raising to object can feed what is demonstrably A-movement. One might therefore conclude that raising to object is A-movement to CP, which can then feed A-movement to a higher position in the matrix clause:

(716)  $[_{CP} (\text{A-pos.}) \dots V+\text{Agr}_1 [_{CP} \text{ NP}_1 [_{C} \dots t \dots ] ] ]$   
└──────────────────┘ └──────────────────┘  
A-mvmt A-mvmt

However, this conclusion is premature. We have seen two types of arguments: one that a raised NP raises out of the lower clause; and one that an apparently raised NP can undergo A-movement and argument structure alternations in the higher clause. But we have not yet seen these two things combined. That is, is it possible to show that a “raised” NP that undergoes A-movement processes in the higher clause must have raised out of the lower clause (using reconstruction, island phenomena, etc.)? I will argue that it is not, and that, in fact, whenever the NP undergoes A-movement in the higher clause, the evidence for movement out of the lower clause disappears.

## 5.4 Raising Does Not Feed Operations in the Higher Clause

We have seen arguments of two types: when long-distance agreement, either with or without movement, takes place, the NP involved must have come from the lower clause (if there is no movement it is visibly located in the lower clause); and long-distance agreement and presumably movement feed argument structure alternations, including A-movement, in the higher clause. Putting these two things together, we might conclude that raising to object is (or can be) an A-movement process (A-bar movement could not feed A-movement, by the ban on improper movement). This A-movement is, somehow, able to cross a clause boundary.

However, this conclusion is not forced. The two phenomena are actually distinct; no arguments have shown that a raised NP that participates in argument structure alternations or A-movement in the higher clause must have come from the lower clause. (All we know so far is that there is necessarily an association between such an NP and an argument position in the lower clause.) In fact, when we combine the two types of arguments, we end up with a conflict: an NP that undergoes A-movement does not show the properties of movement listed above. The conclusion, I will argue, is that long-distance agreement can take place, crossing clause boundaries, possibly accompanied by A-bar movement to a clause-peripheral position, but movement cannot cross the clause boundary. When the argument must be part of the higher clause, it must have started there.

The argument comes from combining A-movement and argument structure alternations in the higher clause with tests for movement out of the lower clause. It turns out that exactly when the raised NP undergoes A-movement or argument structure alternations in the higher clause, the evidence for movement out of the lower clause vanishes. In particular, in just this circumstance, island constraints can be violated.

### 5.4.1 The Inverse

When the raised NP inverts over the subject in the Inverse, it turns out that the evidence for movement out of the lower clause disappears. In exactly this context the raised NP can come from a position inside a syntactic island:

(717) Adjunct Island

- a. N-kosiciy-**oq** al nikuwoss elipsi=te wen uci-maceha-t [ mesq  
1-know.TA-Inv Uncertain 1.mother C all=Emph someone from-leave-3Conj not.yet

mace-ntu ] .  
 start-sing.1ConjNeg  
 ‘(I wonder if) my mother knows (about me) that everyone left before I started singing.’ AH,SN 10:7.15

- b. **Tihtiyas kosona Sapet** ’-kosiciy-**uku**-l wikuwoss-ol [eli]psi=te wen macehe  
 T. or S. 3-know.TA-Inv-Obv 3.mother-Obv C all=Emph someone leave.3  
 [ kisi-ntu-htit ] .  
 Perf-sing-3PConj  
 ‘Her mother knows (about Tihtiyas or Sapet) that everyone left after they started singing.’  
 AH,SN 10:7.16

## (718) Complex NP Island

- a. **Petak** ’-kosiciy-**uku** witapihi [eli]Mali kis-ankuweht-aq [<sub>NP</sub>  
 P 3-know.TA-Inv.ObvP 3.friend.ObvP C M. Perf-sell.TI-3Conj  
 nahsahqhtakon **Petak** mil-at-pon ] .  
 ring P. give-3Conj-Pret  
 ‘His friends know (about Petak) that Mary sold the ring that Petak gave her.’ AH,SN 10:7.15

## (719) WH-Island

- a. **Petak** ma=te ’-kosiciy-**uku**-wiy-il witapih-il ([eli])nucitqonket  
 P. Neg=Emph 3-know.TA-Inv-Neg-Obv 3.friend-Obv (C) policeman  
 nemiht-aq [<sub>CP</sub> keqsey kisi-komutonato-k ] .  
 IC.see.TI-3Conj what Perf-steal-3Conj  
 ‘His friend doesn’t know (about Petak) if the police saw what he stole.’ AH,SN 10:7.15

Note that in example 718a, the raised argument, *Petak*, is actually repeated within the island. This was not a production error, as I repeated it back to the informant, who assented and repeated it again. This example contrasts with 696 from above, in which a resumptive pronoun was impossible and did not salvage an island violation:

- (720) ?? N-kosiciy-a-**k** **Piyel naka Susehp** kis-ankuweht-uwon [<sub>NP</sub> atomupil-ol **nekomaw**  
 1-know.TA-Dir-3P P. and S. Perf-sell-2Conj car-InanP 3P  
 mil-osk-opon-il ] .  
 give-2ConjInv-Pret-PartInanP  
 ‘I know that you sold the cars Piyel and Susehp gave you.’

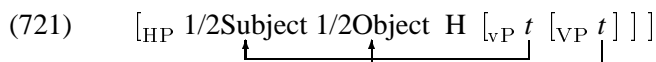
Resumptive pronouns are not attested in Passamaquoddy, as we saw with this example and in Chapter 3, and NPs are generally not repeated like this unless they are two distinct arguments. This fact combined with the possibility of the island violation suggests that the two positions are not related by movement when inversion has taken place in the higher clause, but necessarily are when it has not.

These data thus contrast with those given above for the Direct voice. In the Direct, island violations lead to ungrammaticality, indicating that movement is crucially (and unavoidably) involved. Just when A-movement in the higher clause raises the “raised” NP, however, it is not related to the lower position by movement.

The same can be shown for other matrix operations: first-second person interaction and reciprocalization.

### 5.4.2 First-Second Person Interaction

When first and second persons interact within a clause, they are marked on the verb in the same agreement slot as the Direct and Inverse markers. One morpheme (/ul/) indicates a first-person subject and a second-person object, while another (/i/) indicates a second-person subject with first-person object. In Chapter 2, I argue that first/second person forms are similar to the Inverse in that they involve movement of *both* the subject and the object to the head H. This movement follows from the fact that first and second persons are both inherently [+P]; only H checks [+P], meaning that they both must move. Morphologically this means that the two arguments will be spelled out in the same agreement slots, which is empirically correct. The movement is diagrammed below:



The Theme Sign, as in the Direct and the Inverse, indicates which argument is subject and which object.

With first-second person interactions in raising-to-object structures, it is possible to violate islands<sup>10</sup>

#### (722) Adjunct Island

- a. N-piluwitaham-**a Mihku** keti-maceha-t [ 'sami sakhip-huk-ihin ] .  
1-suspect-Dir M. IC.Fut-leave-3Conj because bring-drive-2Conj  
'I suspected that Mihku would leave when you drove up.' AH,SN 6:3.1
- b. **K**-piluwitaham-**ul** Mihku keti-maceha-t [ 'sami sakhip-huk-**ihin** ] .  
2-suspect-1/2 M. IC.Fut-leave-3Conj because bring-drive-2Conj  
'I suspected (about you) that Mihku would leave when you drove up.' AH,SN 6:3.1
- c. Kosiciy-**ul-pa** [eli] psi=te wen uci-maceha-t [ mesq  
know.TA-1/2-2P C all=Emph someone from-leave-3Conj not.yet  
mace-nt-ulti-**wehq** ] .  
start-sing-Plural-2PConjNeg  
'I know (about you guys) that everyone left before you guys started singing.' AH,SN 10:7.15

#### (723) WH-Island

- a. Ma=te kosiciy-**ul-uh-pa** nucitqonket nemiht-aq [<sub>CP</sub> keqsey  
Neg=Emph know.TA-1/2-Neg-2P policeman IC.see.TI-3Conj what  
kisi-komutonatom-**eq** ] .  
Perf-steal-2PConj  
'I don't know (about you guys) if the police saw what you guys stole.' AH,SN 10:7.15

#### (724) Complex NP Island (AH,SN 8:5.5)

- a. N-kosiciy-**a** [eli] **Susehp** kis-ankuweht-aq [<sub>NP</sub> atomupil mil-ot-opon ] .  
1-know.TA-Dir C S. Perf-sell-3Conj car give-2Conj-Pret  
'I know that Susehp sold the car you gave him.'

<sup>10</sup>All of the island data I have involve a first person subject with second person object. It is conceivable that this form involves inversion (the second person object is spelled out with the prefix), but forms with a second person subject and first person object do not. The reason to think that both forms involve movement is the fact that they are both spelled out in the same agreement slots.

- b. Kosiciy-**ul** [eli] Susehp kis-ankuweht-aq [<sub>NP</sub> atomupil mil-**ot**-opon ] .  
 know.TA-1/2 C S. Perf-sell-3Conj car give-2Conj-Pret  
 ‘I know (about you) that Susehp sold the car you gave him.’
- c. Kosiciy-**ul-pa** [eli] Susehp kis-ankuweht-aq [<sub>NP</sub> atomupil mil-**eq**-pon ] .  
 know.TA-1/2-2P C S. Perf-sell-3Conj car give-2PConj-Pret  
 ‘I know (about you guys) that Susehp sold the car you guys gave him.’

In some such cases, an overt pronoun must be repeated in the island, indicating that the lower position is not related to the higher one by movement (as we saw in 696, overt resumptive pronouns do not independently save island violations):

(725) Adjunct Island (AH,SN 5:11.14)

- a. Koti-ksociy-**ul-pa** cipotu=te ’Tlitoli koti-naci-witka [ tehpu **kiluwaw Phil**  
 want-know.TA-1/2-2P maybe=Emph T. Fut-go.do-dance.3 only 2P P.  
 natsakiw-iyeq ] .  
 watch-2PConj  
 ‘I want to know (about you guys) whether ’Tlitoli will go dancing only if you and Phil go to a movie.’
- b. Koti-ksociy-**ul-pa** **kiluwaw Phil** cipotu=te ’Tlitoli koti-naci-witka [ tehpu  
 want-know.TA-1/2-2P 2P P. maybe=Emph T. Fut-go.do-dance.3 only  
 \*(**kiluwaw**) natsakiw-iyeq ] .  
 2P watch-2PConj  
 ‘I want to know (about you and Phil) whether Tlitoli will go dancing only if you guys go to a movie.’

We saw above that a raised NP cannot appear internal to the higher clause, but only appears at the edge of the lower clause. However, in both the Inverse (third person) and first-second person interaction cases, the “raised” NP can appear within the higher clause quite naturally:

- (726) Ma=te **kiluwaw Piyel k-wewitaham-ol-uh-pa** kt-api-kotunkal-a-ni-ya otuhk.  
 Neg=Emph 2P P. 2-remember-1/2-Neg-2P 2-go.and.back-hunt-Dir-N-3P deer.ObvP  
 ‘I don’t remember (about you guys) if you and Piyel went to hunt deer.’

### 5.4.3 Reciprocals

We saw above that raising to object can apparently feed reciprocalization in the higher clause. However, when it does, raising can violate islands (here an adjunct island):

- (727) **Susehp naka Piyel** mili-ksiciy-utu-wok [eli] Mali maceha-t [ mesq  
 S. and P. varied-know.TA-Recip-3P C M. leave-3Conj not.yet  
 mace-ntu-htihq ] .  
 start-sing-3PConjNeg  
 ‘Susehp and Piyel know about each other that Mary left before they started singing.’ AH,SN 10:7.15

### 5.4.4 Summary

There appear to be two different derivations of raising to object. One, when no A-movement in the higher clause takes place, requires movement of the agreeing NP to a clause-peripheral position (or just long-distance agreement). The other involves A-movement of an NP in the higher clause that is related to some kind of resumptive element in the lower clause: a pronoun, or a copy of the NP itself. In this case there is no evidence of movement out of the lower clause.

## 5.5 A Theory of Raising to Object

Let us start with a summary of the facts uncovered so far. We began with evidence that raising to object does involve movement, looking at cases where no further operations took place in the higher clause. For these cases we discovered the following properties:

(728) Raising to object

- a. Evidence of movement: islands
- b. Evidence of movement: reconstruction
- c. Evidence against two arguments: doubling impossible
- d. Raising is only to the edge of the lower CP, not into the higher clause

These properties suggest that the raised object moves overtly from the lower clause (or remains in situ), but apparently not in such a way that it becomes a matrix constituent. One way to understand this is as A-bar movement to the clause periphery.

### 5.5.1 A-Bar Movement

Because reconstruction is generally a property of A-bar chains (see Barss 1986, Mahajan 1990 and references there), we can account for the properties listed above by hypothesizing that a raised NP in raising to object structures moves to an A-bar position at the edge of the clause. I have been referring to this position as a second specifier of CP:

(729)  $[_{CP} \dots V+Agr_1 [_{CP} NP_1 [_{CP} (WH) (C) \dots t_1 \dots] ] ]$   
└──────────────────┘  
A-bar mvmt

The higher verb is able to agree with the raised NP in this peripheral position (and to Case-mark it, as we will see when we turn to Japanese). If we suppose that agreement takes place via Chomsky's (1998) abstract Agree relation, in which no movement of an XP category or even of features takes place, this means that Agree (with the higher verb) can "see" down into the edge of the next lower phase (as argued by Chomsky). We will return to the question of whether it can see further, in the case where the agreeing NP remains in situ in the lower clause, or whether that NP must raise covertly.

For the moment let us see if we can establish that this movement to the clause periphery is in fact A-bar movement. The reconstruction facts suggest that it is A-bar movement. Evidence that it is not A-movement

comes from scope and variable binding. Overt raising to this peripheral position does not seem to be able to establish new binding possibilities. For instance, an object that raises cannot thereby bind into a subject that it crosses:<sup>11</sup>

(730) AH,SN 10:7.14

- a. \* *W-ikuwoss-ol* n-kisi-kat-a-ku-n **psi=te** **wen**.  
3-mother-Obv 1-Perf-hide-App-Inv-N all=Emph someone  
'His<sub>1</sub> mother hid everyone<sub>1</sub> from me.'
- b. \* N-kosiciy-a **psi=te** **wen-(il)<sub>1</sub>** tama *w-ikuwoss-ol* n-kisi-kat-a-ku-n *t<sub>1</sub>*.  
1-know.TA all=Emph someone-Obv where 3-mother-Obv 1-Perf-hide-App-Inv-N  
'I know about everyone<sub>1</sub> where his<sub>1</sub> mother hid him<sub>1</sub> from me.'

Contrast the above with the following, where the raised NP is a subject and is independently able to bind a variable in the lower object:

- (731) Ma=te n-wewitaham-a-w **psi=te** **wen<sub>1</sub>** tama *t<sub>1</sub>* 't-oli-kis-onuhmon  
Neg=Emph 1-remember-Dir-Neg all=Emph someone where 3-there-Perf-buy  
'*t-ahsosuwon*.  
3-hat  
'I don't remember where everyone<sub>1</sub> bought his<sub>1</sub> hat.' AH,SN 8:5.4

Similarly, an object that is unable to bind into an adjunct to the lower clause, as shown by the necessity of either plural agreement or repeating the indefinite *wen* (see Chapter 2), may not by virtue of raising to the clause-peripheral position take scope over the adjunct—plural agreement or repeating *wen* is still necessary:

(732) AH,SN 10:7.16

- a. Piyel naka Petak 'koti-komutonom-a-wa-l **psi=te** **wen-il** [ qeni  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during  
macaha-woloti-htit ] .  
leave-Plural-3PConj  
'Piyel and Petak are going to rob *everyone* while *they*'re away.'
- b. Piyel naka Petak 'koti-komutonom-a-wa-l **psi=te** **wen-il** [ qeni **wen**  
P. and P. 3-Fut-rob-Dir-3P-Obv all=Emph someone-Obv during someone  
macaha-t ] .  
leave-3Conj  
'Piyel and Petak are going to rob everyone<sub>1</sub> while someone<sub>1</sub> is away.'

(733) AH,SN 10:7.16

- a. Nucitqonket al 'kosi-ci-y-a-l **psi=te** **wen-il** eli  
policeman Uncertain 3-know.TA-Dir-Obv all=Emph someone-Obv C  
koti-komutonom-ahtit Piyel naka Petak [ qeni **wen** macaha-t ] .  
Fut-rob-3PConj P. and P. during someone leave-3Conj

<sup>11</sup>Raising does seem to be able to affect the scope of a quantifier over negation. However, the relative scope of quantifiers and negation also seems to be affected by word order variations in a simple clause, in a way that the scope of argument quantifiers is not.



‘(I wonder if) the police know (about everyone<sub>1</sub>) that Piyel and Petak are going to rob everyone<sub>1</sub> while someone<sub>1</sub> is away.’

- b. \*Nucitqonket al            ’-kosiciy-a-l            **psi=te**    **wen-il**            eli  
 policeman    Uncertain 3-know.TA-Dir-Obv all=Emph someone-Obv C  
 koti-komutonom-ahtit Piyel naka Petak [ qeni    macaha-t    ] .  
 Fut-rob-3PConj        P.    and P.        during leave-3Conj  
 ‘(I wonder if) the police know (about everyone<sub>1</sub>) that Piyel and Petak are going to rob everyone<sub>1</sub> while he<sub>1</sub> is away.’

Since this movement does not enable new binding possibilities and permits reconstruction,<sup>12</sup> we can conclude that it is A-bar movement, and the second Spec of CP in 729 an A-bar position. This is consistent with the general state of affairs cross-linguistically: positions at the edge of the clause are A-bar positions. It is also consistent with Potsdam and Polinsky’s (2001) description of raising to object in Tsez and Massam’s (1985) analysis of the same phenomenon in various languages: raising to object is actually not raising to an object position in the higher clause, but is instead A-bar movement to a position peripheral to but still within the lower clause.

<sup>12</sup>I have recorded one set of examples where raising might enable variable binding that is not otherwise available (ib,c vs. ia):

(i) AH,SN 10:7.15

- a. Skitap musqitaham-ac-il    ’-koti-tqon-a-l            psi=te    wen-il.  
 man    hate-3Conj-PartObv 3-Fut-arrest-Dir-Obv all=Emph someone-Obv  
 ‘A man that he<sub>2</sub> hates will arrest everyone<sub>1</sub>.’ (\*binding)
- b. N-kosiciy-a    **psi=te**    **wen-il**<sub>1</sub>            eli [<sub>NP</sub> skitap musqitaham-ac-il    ] koti-tqon-at    t<sub>1</sub>.  
 1-know.TA-Dir all=Emph someone-Obv C            man    hate-3Conj-PartObv    Fut-arrest-3Conj  
 ‘I know about everyone<sub>1</sub> that a man who hates him<sub>1</sub> will arrest him<sub>1</sub>.’
- c. N-kosiciy-a    **psi=te**    **wen-il**<sub>1</sub>            eli [<sub>NP</sub> skitap musqitaham-ihc-il    ] koti-tqon-at    t<sub>1</sub>.  
 1-know.TA-Dir all=Emph someone-Obv C            man    hate-3ConjInv-PartObv    Fut-arrest-3Conj  
 ‘I know about everyone<sub>1</sub> that a man that he<sub>1</sub> hates will arrest him<sub>1</sub>.’

However, there is something very odd about these examples. If they are correctly translated, the participle ending on the verb of the relative clause ‘the man who hates him/who he hates’ must be agreeing not with the head of that relative clause, ‘the man’, but with *psite wenil*, ‘everyone’. The latter does not pass through this clause, and should be unable to control participle agreement within it (see Chapter 4).

However, suppose that it is marginally possible for an operator coindexed with a moving operator—here the raising quantifier ‘everyone’—to raise within the relative clause, as in Chomsky’s 1986 and Nissenbaum’s 1998 analysis of parasitic gaps. This would enable the binding shown as an instance of a parasitic gap within the subject relative.

If this is true it might explain the following examples of wh-questions, where WCO is somehow violable and, again, the participle ending within the relative clause must be controlled by the wh-phrase if the translations are correct. They and the examples above would have the structure shown in (iic):

(ii) AH,SN 10:7.15

- a. Wen-il    skitap musqitaham-ac-il    kisi-komutonom-at?  
 who-Obv man    hate-3Conj-PartObv Perf-rob-3Conj  
 ‘Who<sub>1</sub> did the man who hates him<sub>1</sub> rob t<sub>1</sub>?’
- b. Wen-il    skitap musqitaham-ihc-il    kisi-komutonom-at?  
 who-Obv man    hate-3ConjInv-PartObv Perf-rob-3Conj  
 ‘Who<sub>1</sub> did the man he<sub>1</sub> hates rob t<sub>1</sub>?’
- c. [<sub>CP</sub> Who<sub>1</sub> [<sub>NP</sub> OP<sub>1</sub> man who hates t ] rob t ] ?

### 5.5.2 Discourse Properties

Raising to object also has certain discourse properties that are consistent with the raised position being an A-bar position. These are not uniform, but include notions like topic and focus. Previous work on Algonquian raising to object has been unable to pinpoint the exact interpretation; some sort of ‘aboutness’ (i.e., topicality) is usually concluded to be involved. According to (Frantz 1978b, 96), raising to object is “more likely [than using the TI form of the verb] if the complement is emotive.”

I will not have much to add on this subject, except to note that raising to object is compatible with both topic and focus. For instance, it is possible to explicitly mark the raised, agreeing NP as a topic with the (contrastive) topic marker *olu*:

- (734) Ma=te n-kosiciy-a-wi      **wot**    **olu n-tatat**, tan-iyut      keti-nomkuwal-s-it  
 Neg    1-know.TA-Dir-Neg this.An Top 1-father WH-this.Inan IC.Fut-lend-Intrans-3Conj  
 atomupil.  
 car  
 ‘I don’t know which car, my father, he’s going to buy.’ AH,SN 5:11.11

On the other hand, elements that could not be topics, such as *wh*-words, also agree with raising to object verbs. Similarly, singular nonreferential quantifiers cannot appear in the left-dislocated topic position:

- (735) AH7:4.5
- a. \* Yatte wen nitte      nokkahl-a-l      mahtoqehsuw-ol.  
 each one right.away eat.up-Dir-Obv rabbit-Obv  
 ‘Each one right away eats up a rabbit.’
- b. \* Psi=te    wen      nitte      ’-peci-naciph-a-n    nomehs-um-ol.  
 all=Emph someone right.away 3-come-take-Dir-N fish-Poss-Obv  
 ‘Right away everyone<sub>1</sub> comes to get his<sub>1</sub> fish.’

But these quantifiers can occur to the left of *WH*-words in the raising to object construction:

- (736) a. N-kosiciy-a    **yatte wen muwin** [<sub>CP</sub> keq kis-oto-k] .  
 1-know.TA-Dir each one bear      what Perf-eat-3Conj  
 ‘I know what each bear ate.’ AH7:4.5
- b. Sapet ’-kosiciy-a-l      **psi=te**    **wen-il**      [<sub>CP</sub> tan-iyuhtol    nucitqonkelic-il  
 S.    3-know.TA-Dir-Obv all=Emph someone-Obv    WH-that.Obv policeman-Obv  
 kisi-tqon-at      ] .  
 Perf-arrest-3Conj  
 ‘Sapet knows which policeman arrested everybody.’ AH,SN 10:7.14

The agreeing NP can also be focussed, as can be seen with the particle *tehpū*, ‘only’, which associates with focus (see Chapter 4):

- (737) a. N-kosiciy-a    **tehpū Susehp** oc menuwa-c-ihī      nuhu      akom.  
 1-know.TA-Dir only S.      Fut IC.buy-3Conj-PartObvP three.ObvP snowshoe.ObvP  
 ‘I know that only SUSEHP would buy three snowshoes.’ AH,SN 5:11.14

- b. Ma=te=apc        wen-il        wicuhkem-a-wiy-il Piyel, kosiciy-**ul**    tehpu=hc  
 Neg=Emph=Again someone-Obv help-Dir-Neg-Obv P.    know.TA-1/2 only=Fut  
 wicuhkem-osk sepawonu.  
 help-2ConjInv tomorrow  
 ‘Piyel won’t help anyone else; I know he’ll only help YOU tomorrow.’ AH8:5.3

The focussed constituent associated with ‘only’ need not be the raised one:

- (738) Kosiciy-**ul**    tehpu *nik*        *ehpic-ik*    musal-oc-ik.  
 know.TA-1/2 only    those.3P woman-3P like-2Conj-(Part3P)  
 ‘I know (about you) that you only like THOSE WOMEN.’ AH,SN 10:7.16

In other words, the agreeing, raised NP can but need not be a topic, and it can but need not be focussed. This is not incompatible with the raised position at CP being some type of A-bar position at the left edge of the clause; it is not very helpful either, though, in deciding what the properties of this position are. We can conclude, however, that the position is not a dedicated topic or focus projection.

### 5.5.3 A-Movement

Passamaquoddy has complications not found in languages like Tsez, which show only evidence of A-bar movement in raising to object. When we turned to cases where some operation acting on the raised NP takes place in the higher clause (the Inverse, reciprocalization), we found a completely different set of properties. These are listed below:

- (739) Raising to object plus higher movement
- a. Evidence against movement: can violate islands
  - b. Evidence of two arguments: can double pronoun or NP
  - c. Raised NP can be internal to higher clause

These properties contrast with those above, suggesting a different derivation. Given the possibility of an overt pronoun or even an overt NP in the lower position, doubling the higher NP, the structure might be something like the following:

- (740)  $[_{CP} \dots NP_1 V+Agr_1 [_{ZP} t_1 [_{CP} \dots pro_1 \dots ] ] ]$   
↑  
A-mvmt

$NP_1$ , just when it undergoes some kind of A-movement in the higher clause, is generated in some position ZP. It is necessarily coindexed with an argument position in the lower clause, but that position is not occupied by the trace of  $NP_1$ .<sup>13</sup> Instead  $NP_1$  is resumed by a pronoun or R-expression. This automatically accounts for the sudden disobedience to island constraints just when the raised object undergoes A-movement processes in the higher clause: there is no movement out of the lower clause. An important question, of course, is why this derivation is only available when some operation takes place in the higher clause. Discussion of

<sup>13</sup>It is not clear what forces an argument position in the lower clause to be coindexed with the “raised” NP.

this point will be postponed, however, until Section 5.5.5. For the moment let us address the nature of the projection ZP.

Is ZP in 740 the same as the second specifier of CP in 729, or is it some other projection, possibly a position internal to the higher clause? For instance, one might think that when A-movement takes place in the higher clause, the raised NP is generated in object position in the higher clause, rather than at the edge of the lower clause. However, constituency tests all indicate that in both the raising and base generation cases the NP plus the CP together form a propositional constituent. Even when there is evidence of a *pro* in the lower clause, the CP does not constitute a constituent to the exclusion of the raised NP.

### 5.5.4 Constituency

When no A-movement operations have taken place in the higher clause, a raised NP and the CP it was extracted from act like a constituent.<sup>14</sup> For example, it is impossible to relativize the CP to the exclusion of a raised NP:

(741) WN9:6.13

- a. N-kosiciy-a **Piyel** eli koluski-t.  
 1-know.TA-Dir P. C lie-3Conj  
 ‘I know that Piyel lies.’
- b. \* [ Eli koluski-t ] nit kesiciy-uk Piyel.  
 C lie-3Conj that.Inan IC.know.TA-1Conj P.  
 ‘That he lies, that’s what I know about Piyel.’

Instead, either the TI form of the verb must be used (and no raised NP), or a relative root must be added to the TA form:

(742) WN9:6.13

- a. [ Eli Piyel koluski-t ] , nit kesiciht-u.  
 C P. lie-3Conj that.Inan IC.know.TI-1Conj  
 ‘That Piyel lies, that’s what I know.’
- b. [ Eli koluski-t ] nit **eli**-ksiciy-uk Piyel.  
 C lie-3Conj that.Inan IC.thus-know.TA-1Conj P.  
 ‘That he lies, that’s what I know about Piyel.’

The fact that the TI form of the verb does not require a relative root shows that one is not simply required in order to create a relative clause with the propositional CP as its head. As for the relative root case, the TA verb is most likely simply taking an NP complement (this is possible with all raising to object verbs), along with a CP as an oblique argument added by the relative root.

Similarly, the CP cannot be questioned to the exclusion of the raised NP, without adding a relative root:

<sup>14</sup>Cinque (1995) makes similar observations regarding the structure of pseudorelatives in Romance languages.



- (746) a.  $[_{CP} \dots V+Agr_1 [_{CP} \underbrace{NP_1 [_{CP} \dots t_1 \dots]}_{\text{movement}}]]]$   
 b.  $[_{CP} \dots V+Agr_1 [_{CP} NP_1 [_{CP} \dots pro_1 \dots]]]$

The non-movement structure cannot be a freely available option, or there would never be any obedience to island constraints. Instead it can only be generated when the NP undergoes A-movement in the higher clause.

I suggest that the way to understand this is in terms of feature-checking theory (Chomsky 1993), making use of some notions from Chomsky (1998, 1999) and Pesetsky and Torrego (2001). Let us suppose, with Chomsky, that all movement is driven by the need to check uninterpretable features. In the case of A-movement, this is generally thought to be Case on NPs and/or uninterpretable  $\phi$  features on functional heads. The latter,  $\phi$  features, are interpretable on NPs, but not on functional heads such as T(ense); hence an NP must raise to a head such as T to check the latter's uninterpretable  $\phi$  features. Correspondingly, NPs possess some sort of feature that is interpretable elsewhere but not on NPs; following the theory in Chapter 2, I will call this feature [P(roximate)]. It is a feature on all NPs, which renders them syntactically visible and active.

The [P] feature they check either in the same movement that checks the  $\phi$  features of functional heads, or in a separate movement. I will refer to the [P] feature of NPs and the  $\phi$  features of functional heads together as A-features. A-features contrast with wh-features, which drive A-bar movement to a [+WH] C, and other types of A-bar features (for example, focus features driving focus movement).

When features are checked they are said to be deleted (perhaps literally). Suppose, however, that checked features are not deleted immediately but hang around until the next higher phase; thus, when they are checked they are “marked for deletion” (Pesetsky and Torrego 2001) but are still active syntactically. As stated above, an NP is only visible to the operation Agree if it has an active—undeleted—[P] feature. NPs will therefore remain syntactically active until the next higher phase after their [P] feature has been deleted.

Now let us return to the raising to object structure that involves movement.  $NP_1$  will be generated in the lower clause with an unchecked [P] feature:

- (747)  $[_{CP} C^{[Abar]} [_{CP} \dots NP_1^{[P]} \dots]]]$

It will also have whatever A-bar feature it is that drives movement to CP (annotated on the head C as  $C^{[Abar]}$ ). Now, the lower CP is a complete clause in itself; it can always appear unembedded, without the higher clause. Therefore, any A-features that can and must be checked in a simple (matrix) clause can and must be checked within this embedded CP as well. This means that  $NP_1$  will have its feature [P], however it is valued (see Chapter 2 and below) checked and marked for deletion before it ever raises to Spec-CP:

- (748)  $[_{CP} \dots V [_{CP} C^{[Abar]} [_{CP} \dots [_{XP} \underbrace{NP_1^{[P]} X^{[P]} \dots t_1}_{\text{A-mvmt}}]]]]]$

Whatever head normally checks the A-features of  $NP_1$  will check its A-features on its path to CP; here I have labelled this head X. A-movement itself is not necessary—both X's and  $NP_1$ 's A-features can be checked simply by Agree. The diagram collapses the unvalued [P] and [+P] cases from Chapter 2, where the former is checked in situ by  $v$ , while the latter is only checked through A-movement to a higher head HP.

Even though checked off, the [P] feature of NP<sub>1</sub> will still be active—marked for deletion but not actually deleted—until the next higher phase. That is, when NP<sub>1</sub> gets to CP it will still have an active [P] feature. The checked [P] feature will not be deleted until the next higher phase, *v*P within the higher clause:

$$(749) \quad [{}_{vP} \dots V [{}_{CP} NP_1^{[P]} C^{[Abar]} [{}_{CP} \dots [{}_{XP} t_1 X^{[P]} \dots t_1 ] ] ] ]$$

↑ ↑  
A-bar mvmt A-movement

The fact that NP<sub>1</sub>'s [P] feature has not yet been deleted makes it visible to Agree in the higher clause. In particular, the matrix verb can agree with NP<sub>1</sub>, taking its values for the  $\phi$  features its agreement morphology registers. Let us suppose that this is Agree between the head *v* and NP<sub>1</sub>, which checks  $\phi$  features of *v*:

$$(750) \quad [{}_{vP} v [{}_{CP} NP_1^{[P]} C^{[Abar]} [{}_{CP} \dots [{}_{XP} t_1 X^{[P]} \dots t_1 ] ] ] ]$$

↑ ↑  
A-bar mvmt A-movement

This Agree relation is able to check the  $\phi$  features of *v*, but *v* is unable to check the features of an NP. The matrix verb takes only a CP complement, as argued above, and hence is unable to check the features of an NP. This will be important for the base-generation case, to be discussed shortly.

Importantly, NP<sub>1</sub>'s [P] feature *will* be deleted by the time we get to any head that would drive A-movement in the higher clause. In particular, let us return to the analysis of the Inverse in Chapter 2. There it was suggested that a head H drove A-movement of either the object or the subject to a higher A-position, if that NP was valued [+P]:<sup>17</sup>

$$(751) \quad [{}_{HP} H [{}_{vP} Subject [ V Object ] ] ]$$

↑ ↑  
Direct Inverse

Because the head H can attract the subject as well as the object, it must be higher than the subject's base position at *v*P. Hence, H is outside the *v*P phase. Therefore, in a raising to object structure, the [P] feature of NP<sub>1</sub> in Spec-CP will be unavailable to the head H, having been deleted in the *v*P phase.<sup>18</sup>

$$(752) \quad [{}_{HP} H [{}_{vP} \dots V [{}_{CP} NP_1 [{}_{CP} \dots [{}_{XP} t_1 X \dots t_1 ] ] ] ] ]$$

↑  
\*

This is what rules out improper movement generally: A-features will usually be checked off in a lower phase, and deleted before they can be used again to check A-features in a higher phase.

It follows that some other derivation must take place when H *requires* NP<sub>1</sub>'s  $\phi$  features. In just this case NP<sub>1</sub> can be generated in CP, resumed by *pro*<sub>1</sub> in the lower clause. The latter takes care of all A-feature-checking in the lower clause, while NP<sub>1</sub> has an active and unchecked [P] feature that must be checked in the higher clause:

<sup>17</sup>Again, actual movement is probably always optional, at least overtly.

<sup>18</sup>One might wonder at this point about an embedded *object* raising to CP. If object agreement is Agree with *v*, as just suggested, an embedded object will have its [P] checked within the lower *v*P phase, meaning that it should be deleted at the CP phase, and hence should be invisible to Agree with the higher *v*. This expectation is not forced, however. An object that is raising to CP will have to stop at *v*P, by the Phase Impenetrability Condition. Following the discussion in Section 5.7, this means that *v*P will have two features to check with the object: the [P] feature that gives rise to object agreement, and whatever A-bar feature it is that drives movement to CP. The same operation of Agree with *v* will check both of these and drive movement to Spec-*v*P. Therefore the object will have its [P] feature checked at the edge of the *v*P phase, which is spelled out with the higher phase, CP, and not with the *v*P phase. It follows that even an object's [P] feature will still be present up to the matrix *v*P phase.

$$(753) \quad \left[ {}_{\text{HP}} \text{NP}_1^{[P]} \text{H} \left[ {}_{\text{vP}} \dots \text{V} \left[ {}_{\text{CP}} t_1 \left[ {}_{\text{CP}} \dots \left[ {}_{\text{XP}} \text{pro}_1 \text{X} \dots t_1 \right] \right] \right] \right] \right]$$

A-mvmt
A-mvmt

NP<sub>1</sub> is able to satisfy C's A-bar features simply by being base-generated there, and it satisfies H's and its own A-features through movement to HP—the Inverse, in which NP<sub>1</sub> crosses over the matrix subject and is able to bind into it.

Let us spell out this derivation more carefully, as detailed in Chapter 2. Recall from there that *v* enters into Agree relations with both the subject and the object, checking its own uninterpretable  $\phi$  features. However, it only checks unvalued [P] features. Any NP with the specification [+P] will have to raise to HP, which checks that feature. H requires a [+P] NP to check its  $\phi$  features; and a [+P] NP must move to HP to check the feature [+P]. By the Phase Impenetrability Condition, a [+P] NP will have to move first to vP; *v*, by virtue of Agree, makes available an extra specifier for this purpose:

$$(754) \quad \left[ {}_{\text{HP}} \text{Object} \text{H}^{[\phi]} \left[ {}_{\text{vP}} t \left[ {}_{\text{vP}} \text{Subject} \left[ {}_{\text{v}} v \left[ {}_{\text{vP}} \text{Verb} t \right] \right] \right] \right] \right] \quad \text{Inverse}$$

This derivation would crash if H did not attract NP<sub>1</sub>, and NP<sub>1</sub> did not move to vP. NP<sub>1</sub>'s [+P] feature would remain unchecked, would be uninterpretable at the interfaces, and the derivation would not converge (see Chomsky 1993). Similarly, the  $\phi$  features of H would remain unchecked, leading to crash. Thus it follows that NP<sub>1</sub> can only be generated in ZP when it can move further—to HP, in the Inverse (or first-second person interactions), or to subject position in a reciprocal.

However, H only checks [+P]. It is *v* that checks unvalued [P]. Therefore one might expect to be able to generate a syntactically active NP in ZP with an unvalued [P] feature. This feature would be checked by *v* without any A-movement, and the NP would be able to violate islands in the lower clause without doing the Inverse in the higher clause.

Such a derivation must be impossible. I suggest that this follows from what was already independently concluded: that the higher verb does not take an NP complement, but only a CP complement, even when the agreeing NP undergoes A-movement in the higher clause. The fact that it does not take an NP complement means that it is unable to check [P] features. Only the higher head, H, checks features of NPs: [+P], which is assigned to the subject if no NP is generated in ZP. (In the terms of Chapter 2, [P] is valued positively by a clause, which is a third person argument that, like obliques and relative root arguments, cannot itself be [+P].<sup>19</sup>) This means that Agree with NP<sub>1</sub> raised to CP can not check any of the features of NP<sub>1</sub>.

This should come as no surprise. The NP itself has satisfied all of its requirements, having checked its [P] feature much earlier, and its A-bar feature by raising to CP. The higher verb can check its  $\phi$  features against a raised NP, but when no such agreement takes place, it is spelled out as the default TI form.

Although the higher verb is unable to check features of a raised NP, it is able to participate in assigning it a new obviation value. In Spec CP, the raised NP is now in a local relation with the higher subject. Pairs of NPs, it will be recalled from Chapter 2, must take on opposite values for the feature [P]. Like the case of ditransitives and AI+O verbs, the relation here must be asymmetric: the raised NP has had its [P] feature checked already. A checked [P] feature, as hypothesized in Chapter 2, forces a higher [P] feature to become

<sup>19</sup>Clauses can be subjects, but only the logical subjects of Inverse verbs, which follows if the object must then be assigned [+P].



valued [+P]; this in turn assigns the feature [Obv] to the NP bearing the checked [P] feature, on top of any other features it has.

Consider the case where the raised NP is proximate in the lower clause, i.e. it has the feature [+P], or is unmarked (is in opposition to a first or second person). When it raises to Spec-CP, it will be assigned the feature [Obv] by a higher third person, and will be spelled out as an obviative even though it is proximate in the lower clause (and cannot be obviative in the lower clause):<sup>20</sup>

(755) AH,SN 10:7.16

- a. Nucitqonket al ' -koscicy-a-l **Piyel-ol** eli kisi-ksomahk-i.  
 policeman Uncertain 3-know.TA-Dir-Obv P.-Obv C Perf-push-1Conj  
 'I wonder if the police know I pushed Piyel down.'
- b. Nucitqonket al ' -koscicy-a-l eli kisi-ksomahk-i **Piyel>(\*ol)**.  
 policeman Uncertain 3-know.TA-Dir-Obv C Perf-push-1Conj P.-(\*Obv)  
 'I wonder if the police know I pushed Piyel down.'

The mechanisms we have so far then permit only NP<sub>1</sub> raising to CP, followed by morphological agreement without feature checking, and generating NP<sub>1</sub> with an active [P] feature in ZP. The latter choice crashes without the value of [P] being [+P], which results in the Inverse (or first-second person interaction).

Suppose, however, that NP<sub>1</sub> could be generated without an active [P] feature. This must be the case with a left-dislocated topic, for example, which seems to be generated in a left-peripheral position (left-dislocated NPs do not have to obey islands, as shown in Chapter 3). Such a derivation would also fail, because an NP without a [P] feature would be invisible to Agree. The higher verb would not be able to agree with NP<sub>1</sub>. This means that raising to object, unless it involves A-movement in the higher clause, must obey islands, because only an NP with an active [P] feature can agree with a higher verb; a base-generated NP, such as those that occur in left-dislocation, cannot. This is exactly the right result: islands can only be violated when something like the Inverse moves the agreeing NP within the higher clause. Only in this case can an NP be generated in CP with active A-features.

In fact, left-dislocated NPs *are* possible in raising-to-object structures, if something else agrees with the matrix verb:

(756) *Nihi mus Susehp* ' -kocicy-a-l **Can-ol** tan etoli-nehpah-at.  
 three.ObvP moose.ObvP S. 3-know.TA-Dir-Obv John-Obv WH IC.there-kill-3Conj  
 'Three moose, Susehp knows where John shot.' WN1:9.8

<sup>20</sup>The reverse situation also occurs, where an obviative in the lower clause raises into a clause where it is not obviative but unmarked. In this case it can be spelled out without an obviative suffix:

- (i) Ma=te n-wewitaham-a-wiy-ik mahtoqehsuw-ok tama muwin 't-otoli-putoma-n.  
 Neg=Emph 1-remember.TA-Dir-Neg-3P rabbit-3P where bear 3-there-lose.AI+O-N  
 'I don't remember (about the rabbits (Prox)) where the bear (Prox) lost them (Obv).'

It is unclear how to handle these cases in the current system. The raised NP has been assigned [Obv] within the lower clause, and should retain that feature into the higher clause, where it is spelled out. It must be the case that a zero specification from the higher clause can render it unnecessary to spell out the feature [Obv] on the noun.

In 756, ‘three moose’ has dislocated out of an island, meaning that it must be base-generated in the leftmost position. The matrix verb, however, agrees with *Can-ol*.

To reiterate, NP<sub>1</sub>, agreeing with the higher verb, can only be generated in CP when it undergoes A-movement in the higher clause. Otherwise it must move from within the lower CP to Spec-CP. This means that the properties of movement will hold in raising to object, *unless* the “raised” NP undergoes A-movement. This is exactly what was shown in the preceding sections. In the general case there is only one argument and one chain; but when A-movement takes place in the higher clause, there are two arguments: NP<sub>1</sub> generated in CP, and *pro*, coindexed with NP<sub>1</sub>, in the lower clause.<sup>21</sup>

In both cases, however, NP<sub>1</sub> forms part of the propositional complement of the matrix verb. This proposition can never be relativized, questioned, or replaced with a *pro*-form to the exclusion of NP<sub>1</sub>, even when NP<sub>1</sub> undergoes A-movement in the higher clause. This is because CP is the constituent that relativization and question-formation target.

### 5.5.6 Long-Distance Agree

We saw above that movement to the edge of the complement clause is not required in order for the matrix verb to agree with NP<sub>1</sub>:

- (757) N-wewitaham-a-k [CP ma=te nomiy-a-wiy-ik **mawsuwinuw-ok** Kehlis-k ] .  
 1-remember-Dir-3P Neg=Emph see-Dir-Neg-Part3P person-3P Calais-Loc  
 ‘I remember that I didn’t see people in Calais.’ AH,SN 4:10.20

Potsdam and Polinsky (2001) argue that the structure and movement in 746a are instantiated in raising to object in Tsez. They show that the A-bar movement involved is specifically to a topic position, as it necessarily creates a topic interpretation and is incompatible with focus. As in Passamaquoddy, this movement need not take place overtly. When it does not, however, there is compelling evidence from scope interactions

<sup>21</sup>This general approach to improper movement might be able to make sense of a restriction on the complement of the verb ‘help’ in Passamaquoddy. This is that the complement verb cannot be in the Inverse, even when that would be expected. In (ia), ‘its father’ is necessarily obviative, being possessed, and the logical object, being coreferent with the possessor, is the one to move to HP as a proximate ([+P]). However, this is not what happens when the verb is embedded under the verb meaning ‘help’ (ia-b); instead the logical object must be made obviative, and the logical subject [+P]:

- (i) AH,SN 9:6.12
- a. Wasos-sis ’-kospahl-oku-l mihtaqs-ol.  
 child-Dim 3-wash-Inv-Obv 3.father-Obv  
 ‘The baby was washed by its father.’
  - b. N-kisi-wicuhkem-a mihtaqs-ol kespahl-at wasos-sis-ol.  
 1-Perf-help-Dir 3.father-Obv IC.wash-3Conj child-Dim-Obv  
 ‘I helped its father wash the baby.’
  - c. \* N-kisi-wicuhkem-a mihtaqs-ol kespahl-ih-t wasos-sis.  
 1-Perf-help-Dir 3.father-Obv IC.wash-3ConjInv child-Dim  
 ‘I helped its father wash the baby.’

One potential explanation is that ‘help’ is a type of ECM or restructuring verb: the lower subject must A-move to object position. It is only able to do so if it is the NP that moves to HP. If the object moves to HP, it will interfere (Shortest Attract). This means that there are “real” raising to object verbs in Passamaquoddy, but they do not involve movement across a CP (‘help’ must take less than a complete CP complement; other hints that this is the case have been cited elsewhere).

that movement must take place covertly; that is, Agree cannot see down into the next lower phase but only to its edge. This is expected on Chomsky's phase theory: Agree is subject to the same locality condition as movement, the Phase Impenetrability Condition. We should ask, then, whether there is evidence for covert movement to CP in Passamaquoddy in cases of long-distance agreement.

Long-distance agreement does obey islands the same way overt raising does:

(758) Complex NP (AH,SN 9:6.11)

- a. **Kosiciy-ul** **kis-ankuweht-uwon** **atomupil-ol Piyel naka Susehp**  
 know.TA-1/2 Perf-sell-2Conj car-InanP P. and S.  
 mil-osk-opon-il.  
 give-2ConjInv-Pret-PartInanP  
 'I know (about you) that you sold the cars Piyel and Susehp gave you.'
- b. \* **N-kosiciy-a-k** **kis-ankuweht-uwon** [<sub>NP</sub> **atomupil-ol Piyel naka Susehp**  
 1-know.TA-Dir-3P Perf-sell-2Conj car-InanP P. and S.  
 mil-osk-opon-il ] .  
 give-2ConjInv-Pret-PartInanP  
 'I know (about them) that you sold the cars Piyel and Susehp gave you.'
- c. \* **N-kosiciy-a-k** **Piyel naka Susehp**<sub>1</sub> **kis-ankuweht-uwon** [<sub>NP</sub> **atomupil-ol**  
 1-know.TA-Dir-3P P. and S. Perf-sell-2Conj car-InanP  
*t*<sub>1</sub> mil-osk-opon-il ] .  
 give-2ConjInv-Pret-PartInanP  
 'I know (about Piyel and Susehp) that you sold the cars they gave you.'

Island sensitivity suggests that covert movement does take place. However, we expect phase boundaries to render islands impenetrable to Agree as well as to movement, so the fact that islands are respected does not necessarily tell us that covert movement takes place.

As we saw above, raising to object apparently does not affect scope, so we cannot tell from scope interactions whether covert movement takes place. Variable binding does tell us, however, that if covert raising is necessary, it must be able to be undone (i.e., reconstruct). In the following examples, the NP agreeing long-distance with the matrix verb contains a variable bound by a quantifier in the lower clause. If this NP were required to raise at LF, it would then have to reconstruct again, in order for variable binding to hold:

(759) AH,SN 10:7.14

- a. **N-kosiciy-a-k** [<sub>CP</sub> *psi=te wen* **kisi-mil-uwe-t** **'t-akom** ] .  
 1-know.TA-Dir-3P all=Emph someone Perf-give-AI+O-3Conj 3-snowshoe.ObvP  
 'I know that everyone<sub>1</sub> gave away his<sub>1</sub> snowshoes.'
- b. **N-kosiciy-a-k** [<sub>CP</sub> *ma=te wen* **'-kisi-mil-uwa-w-on** **'t-akom** ] .  
 1-know.TA-Dir-3P Neg=Emph someone 3-Perf-give-AI+O-Neg-N 3-snowshoe.ObvP  
 'I know that no one<sub>1</sub> gave away his<sub>1</sub> snowshoes.'

There is nothing to stop such a derivation, however; A-bar features would drive the movement of the in-situ NP to Spec-ZP, while interpretive mechanisms would force (or permit) reconstruction.

The theory, however, makes a strong claim about the locality constraints on Agree, leading to the prediction that covert movement to ZP is *necessary* in raising to object. What we have seen in Passamaquoddy is consistent with that claim, provided that covert movement can reconstruct.

### 5.5.7 Summary

The theory outlined above says that raising to object is nothing more than A-bar movement to CP, with agreement between the NP that moves to that position and *v* in the higher clause. If a head in the higher clause outside the *v*P phase requires A-features of the NP in CP, that NP must be base-generated there, but it may not be otherwise. This, I argued, simply followed from the way the derivation proceeds (in phases), and from the way feature checking works.

A completely unrelated language, one spoken on the other side of the world from Passamaquoddy, turns out to provide striking confirmation of this analysis. This language is Japanese, analyzed in Section 5.6. Section 5.7 returns to some implications of this analysis of raising to object.

## 5.6 Raising to Object in Japanese

Japanese is a language with a well-documented raising-to-object process, beginning with Kuno (1976). In this language the subject of an embedded finite clause can optionally be marked with accusative case rather than nominative, and appear to the left of matrix adverbs:

(760) Japanese (Kuno 1976, ex.21–22)

- a. Yamada-wa, orokanimo, [ **Tanaka-ga** tensai da to ] omotte ita.  
 Y.-Top stupidly **T.** **Nom** genius is Comp thinking was  
 ‘Stupidly, Yamada thought that Tanaka was a genius.’
- b. Yamada-wa **Tanaka-o**, orokanimo, [ tensai da to ] omotte ita.  
 Y.-Top **T.** **Acc** stupidly genius is Comp thinking was  
 ‘Stupidly, Yamada thought that Tanaka was a genius.’

Despite several differences from Passamaquoddy—raising only affects the embedded subject, and it is incompatible with embedded questions—raising to object in Japanese has all of the same essential properties that argued for two different structures in Passamaquoddy.

### 5.6.1 Arguments for Movement

Various kinds of evidence point to overt movement in 760. One type (due to Tanaka 2001) comes from the Proper Binding Condition (Fiengo 1977). Ordinarily finite clauses can scramble in Japanese, but they may not if something else has scrambled out of them first (on an ECP account, the scrambled NP does not c-command its trace after remnant movement; Saito 1989):

(761) Proper Binding Condition (Saito 1992, ex.29,31)

- a. [CP Hanako-ga sono hon-o yonda to ] Taroo-ga t<sub>CP</sub> itta (koto).  
 H.-Nom that book-Acc read Comp T.-Nom said (fact)  
 ‘That Hanako read that book, Taroo said.’
- b. \* [CP Hanako-ga t<sub>1</sub> yonda to ] [ sono hon-o]<sub>1</sub> Taroo-ga t<sub>CP</sub> itta (koto).  
 H.-Nom read Comp that book-Acc T.-Nom said (fact)  
 ‘That Hanako read t<sub>1</sub>, that book<sub>1</sub>, Taroo said.’

The same ungrammaticality with raising to object indicates that the raised NP has undergone movement; compare a Control case with PRO in the embedded clause:

(762) Tanaka 2001, ex.34–35

- a. \* [CP t<sub>1</sub> Baka da to ] John-ga [ Bill-o]<sub>1</sub> t<sub>CP</sub> omotteiru.  
 fool is Comp J.-Nom B.-Acc think  
 ‘As a fool, John thinks of Bill.’
- b. [CP PRO gakkoo-ni iku yoo-ni ] John-ga Bill-ni t<sub>CP</sub> meizi-ta.  
 school-to go in.order.to J.-Nom B.-Dat ordered  
 ‘To go to school, John ordered Bill.’

The ability of idiom chunks to appear in this construction also argues for movement?<sup>22</sup>

(763) SI,KH

- a. Taroo-ga [ sono-seejika-no kao-ga hiroi to ] omotta.  
 T.-Nom that-politician-Gen face-Nom wide Comp thought  
 ‘Taroo thought that that politician was well-known.’
- b. Taroo-ga sono-seejika-no kao-o (orokanimo) [ hiroi to ] omotta.  
 T.-Nom that-politician-Gen face-Acc (stupidly) wide Comp thought  
 ‘Taroo (stupidly) thought that that politician was well-known.’

(764) KH

- a. Taroo-ga [ John-no ashi-ga chi-ni tsuiteinai to ] omotta.  
 T.-Nom J.-Gen leg-Nom ground-to don't.reach Comp thought  
 ‘Taroo thought that John was restless.’
- b. Taroo-ga John-no ashi-o [ chi-ni tsuiteinai to ] omotta.  
 T.-Nom J.-Gen leg-Acc ground-to don't.reach Comp thought  
 ‘Taroo thought that John was restless.’

(765) KH

- a. Taroo-ga [ John-no ketsu-ga aoi to ] omotta (koto).  
 T.-Nom J.-Gen hip-Nom blue Comp thought (fact)  
 ‘Taroo thinks that John is inexperienced.’

<sup>22</sup>Japanese examples that are not attributed to a published source come from various speakers: Ken Hiraiwa, Shinichiro Ishihara, Shigeru Miyagawa, Shogo Suzuki, Satoshi Tomioka, Takae Tsujioka, and Hideaki Yamashita.

- b. Taroo-ga John-no ketsu-o [ aoi to ] omotta (koto).  
 T.-Nom J.-Gen hip-Acc blue Comp thought (fact)  
 ‘Taroo thinks that John is inexperienced.’

In addition to arguments for movement, several facts argue against a Control analysis. One was the Proper Binding Condition, which distinguishes between the two (this argument was already given by Kuno 1976, 35); another is the fact that a controller takes the dative case marker *-ni*, but a raised NP takes accusative *-o* (Kuno 1976). The ability to have a (resumptive) pronoun in the lower clause in Control cases (Kuno 1976) will appear in Section 5.6.6.

### 5.6.2 Operations in the Higher Clause

Other evidence indicates that a raised NP is in an A-position in the higher clause. For one thing, it can undergo A-movement within the higher clause, remedying a violation of Condition A of the Binding Theory:

(766) Tanaka 2001, ex.5

- a. \* Otagai-no sensei-ga **karera-o** [ bakada to ] omotteiru.  
 each.other-Gen teacher-Nom **them-Acc** fool Comp think.Prog  
 ‘Each other<sub>1</sub>’s teachers think of them<sub>1</sub> as fools.’
- b. **Karera-o** otagai-no sensei-ga [ bakada to ] omotteiru.  
**them-Acc** each.other-Gen teacher-Nom fool Comp think.Prog  
 ‘Them<sub>1</sub>, each other<sub>1</sub>’s teachers think of as fools.’

Many speakers prefer a conjoined noun phrase over the plural pronoun *karera*, but in either case the movement permits binding:

- (767) a. \* Otagai-no sensei-ga **Taro-to Hanako-o** [ baka da to ] omotteiru.  
 each.other-Gen teacher-Nom **T.-and H.-Acc** fool be Comp think.Prog  
 ‘Each other<sub>1</sub>’s teachers think of Taroo and Hanako<sub>1</sub> as fools.’
- b. **Taro-to Hanako-o** otagai-no sensei-ga [ baka da to ] omotteiru.  
**T.-and H.-Acc** each.other-Gen teacher-Nom fool be Comp think.Prog  
 ‘Taroo and Hanako<sub>1</sub>, each other<sub>1</sub>’s teachers think of as fools.’

A-movement is also evident in the availability of inverse scope and variable binding in the higher clause:

(768) KH,SM,HY

- a. Daremo-o dareka-ga [ baka da to ] omotte ita.  
 everyone-Acc someone-Nom fool be Comp thinking was  
 ‘Everyone, someone thought was a fool.’ (ambiguous)
- b. Daremo-o soitu-no hahaoya ka soitu-no titioya-ga [ baka da to ] omotte ita.  
 everyone-Acc his-Gen mother or his-Gen father-Nom fool be Comp thinking was  
 ‘Everyone<sub>1</sub>, his<sub>1</sub> mother or his<sub>1</sub> father thought was a fool.’

Although controversial, the general conclusion has been that raising to object is A-movement, A-movement that can cross a CP boundary (A-bar movement would not be able to feed A-movement; Kuno 1976, Tanaka 2001).

### 5.6.3 Raising Does Not Feed Higher Operations

However, when one tries to combine the Proper Binding Condition (PBC) with A-scrambling in the higher clause, one finds that this could not be correct. If the raised NP *must* be in the higher clause, by virtue of having A-scrambled to remedy a Condition A violation, the PBC violation induced by scrambling the finite clause remnant disappears:

(769) SI,SM,TT

- a. \* [  $t_1$  Baka da to ] John-ga [ Bill-o]<sub>1</sub> *t* omotteiru.  
 fool is Comp J.-Nom B.-Acc think  
 ‘As a fool, John thinks of Bill.’
- b. [ Baka da to ] karera-o otagai-no sensei-ga *t* omotteiru.  
 fool be Comp them-Acc each.other-Gen teacher-Nom think.Prog  
 ‘Them, each other’s teachers think of as fools.’
- c. [ Baka da to ] Taroo-to Hanako-o otagai-no sensei-ga *t* omotteiru.  
 fool be Comp T.-and H.-Acc each.other-Gen teacher-Nom think.Prog  
 ‘Taroo and Hanako, each other’s teachers think of as fools.’

(770) SI,SM

- a. \* [ Furansugo-o hans-eru to ] Yamada-ga Tanaka-o *t* omotte ita.  
 French-Acc speak-can.Pres Comp Y.-Nom T.-Acc thinking was  
 ‘Yamada thought Tanaka could speak French.’
- b. Taroo-to Hanako-o otagai-no sensei-ga [ furansugo-o hans-eru to ]  
 T.-and H.-Acc each.other-Gen teacher-Nom French-Acc speak-can.Pres Comp  
 omotte ita.  
 thinking was  
 ‘Taroo and Hanako, each other’s teachers think can speak French.’
- c. [ Furansugo-o hans-eru to ] Taroo-to Hanako-o otagai-no sensei-ga *t*  
 French-Acc speak-can.Pres Comp T.-and H.-Acc each.other-Gen teacher-Nom  
 omotte ita.  
 thinking was  
 ‘Taroo and Hanako, each other’s teachers think can speak French.’

The PBC violation also vanishes when A-scrambling for variable binding takes place:

(771) SM,HY

- a. Daremo-o soitu-no hahaoya-ga [ baka da to ] omotte ita.  
 everyone-Acc his-Gen mother-Nom fool be Comp thinking was  
 ‘Everyone<sub>1</sub>, his<sub>1</sub> mother thought was a fool.’
- b. [ Baka da to ] daremo-o soitu-no hahaoya-ga  $t_{CP}$  omotte ita.  
 fool be Comp everyone-Acc his-Gen mother-Nom thinking was  
 ‘Everyone<sub>1</sub>, his<sub>1</sub> mother thought was a fool.’

Simply scrambling over the subject is not sufficient:

- (772) ?\* [ Baka-da-to ] Hanako-o Taroo-ga *t* omotteiru.  
 fool-is-Comp H.-Acc T.-Nom think.Prog  
 ‘As a fool, Hanako, Taroo thinks of.’ SI,SM,TT

This means that, as in Passamaquoddy, only what is unambiguously A-movement—as indicated in Japanese by binding—does not involve raising out of the lower clause. Simply fronting the lower clause, as in 772, could only be two steps of A-bar movement (see below). When A-movement takes place, the “raised” NP must be base-generated in the same second specifier of CP as in Passamaquoddy:

- (773) a. \* A-bar mvmt: [ ...  $t_1$  ] ... [ <sub>CP</sub> NP<sub>1</sub>-Acc  $t_{CP}$  ]  
   └──────────┘  
   CP fronting
- b. A-movement: [ ...  $pro_1$  ] ... NP<sub>1</sub>-Acc [ <sub>CP</sub>  $t_1$   $t_{CP}$  ]  
   └──┬──┘  
   A-mvmt  
   └──────────┘  
   CP fronting

When the NP moves to CP (A-bar movement), fronting the CP it moved out of violates the PBC. However, just when the NP undergoes A-movement in the higher clause, it must be base-generated in CP and resumed by a *pro*, not a trace, within the lower CP. The lower CP is able to front without violating the PBC.

One other piece of evidence comes from scrambling of idiom chunks. As shown above, some (not very many) idiom chunks may undergo raising to object:

- (774) a. Taroo-ga sono-seejika-no kao-o (orokanimo) [ hiroi to ] omotta.  
 T.-Nom that-politician-Gen face-Acc (stupidly) wide Comp thought  
 ‘Taroo (stupidly) thought that that politician was well-known.’
- b. Taroo-ga John-no ashi-o [ chi-ni tsuiteinai to ] omotta.  
 T.-Nom J.-Gen leg-Acc ground-to don’t.reach Comp thought  
 ‘Taroo thought that John was restless.’
- c. Taroo-ga John-no ketsu-o [ aoi to ] omotta (koto).  
 T.-Nom J.-Gen hip-Acc blue Comp thought (fact)  
 ‘Taroo thinks that John is inexperienced.’

The idiomatic NP can appear before a matrix adverb, as in the above examples. But it cannot scramble to clause-initial position:

(775) KH,SI,SM

- a. ?? Sono-seejika-no kao-o Taroo-ga [ hiroi to ] omotta.  
 that-politician-Gen face-Acc T.-Nom wide Comp thought  
 ‘Taroo thought that that politician was well-known.’
- b. ?? John-no ashi-o Taroo-ga [ chi-ni tsuiteinai to ] omotta.  
 J.-Gen leg-Acc T.-Nom ground-to don’t.reach Comp thought  
 ‘Taroo thought that John was restless.’
- c. ?? John-no ketsu-o Taroo-ga [ aoi to ] omotta (koto).  
 J.-Gen hip-Acc T.-Nom blue Comp thought (fact)  
 ‘Taroo thinks that John is inexperienced.’



This means that A-movement within the higher clause is impossible if the raised NP must have moved out of the lower clause—in order to get the idiomatic meaning. That is, idioms have only the movement option and not the base-generation option available to them. (Idioms are independently known not to undergo long-distance scrambling in Japanese; Miyagawa 1997.)

I am not going to have much to say about the placement of adverbs in Japanese. Raising the NP to a position above the matrix adverb is not sufficient to get around the PBC, and idiom chunks can appear before matrix adverbs. All I have to suggest is that adverb placement may be much more flexible than is generally thought. As we will see, moving to the Spec of CP is sufficient to place a raised NP in the higher clause as far as various “clausemate” conditions in Japanese are concerned. It may be that adverbs can come between any elements of the phase where they are interpreted; as the edge of the lower phase, Spec-CP also counts as part of the higher phase, permitting an adverb to “niche” in under it.<sup>23</sup>

#### 5.6.4 Raising Does Not Cross the CP Boundary

Just as in Passamaquoddy, the evidence indicates (adverbs notwithstanding) that the raised NP does not actually raise into the higher clause. This evidence comes from topic phrases, which are required to be at the left edge of a clause:

(776) HM,SM

- a. Yamada-ga [ kono kurasu-de-wa zenin-o baka-zya-nai-to ] omotta.  
 Y.-Nom this class-in-Top all-Acc fool-be-Neg-Comp thought  
 ‘Yamada thought that in the class all were not fools.’
- b. \*Yamada-ga [ zenin-o kono kurasu-de-wa baka-zya-nai-to ] omotta.  
 Y.-Nom all-Acc this class-in-Top fool-be-Neg-Comp thought  
 ‘Yamada thought that in the class all were not fools.’

The topic phrase must be clause-initial; therefore, because the accusative-marked raised NP cannot come before it, it could not be outside the lower clause.

The same point is made by the following examples, where ‘summer’ is the left-edge topic in the lower clause:

(777) SM,HY,ST

- a. Daremo-ga [ natu-ga/wa [ biiru-ga ichiban umai-to ] ] omotte iru.  
 everyone-Nom summer-Nom/Top beer-Nom best tasty-Comp thinks is  
 ‘Everyone thinks that it’s during the summer that beer tastes the best.’
- b. Daremo-ga [ natu-ga/??wa [ biiru-o ichiban umai-to ] ] omotte iru.  
 everyone-Nom summer-Nom/Top beer-Acc best tasty-Comp thinks is  
 ‘Everyone thinks that it’s during the summer that beer tastes the best.’

<sup>23</sup>It has been known since at least Postal (1974) that English permits adverbs to follow referential ECM subjects, but not nonreferential ones: *I believed John with all my heart to have ascended into heaven* vs. *\*I believed there with all my heart to have been an ascension into heaven*. This may be an instance of the same sort of phenomenon.

- c. ?? Daremo-ga biiru-o natu-ga [ ichiban umai-to ] omotte iru.  
 everyone-Nom beer-Acc summer-Nom best tasty-Comp thinks is  
 ‘Everyone thinks that it’s during the summer that beer tastes the best.’

Under a raising to object verb, the lower subject can be either nominative (777a) or accusative (777b; for some reason the topic cannot be marked with -wa when the subject is accusative, but this is tangential). 777c, where the accusative-marked subject raises to the left of the topic, is ungrammatical on a neutral reading. It is only grammatical if ‘beer’ is contrastively focussed. This is the same as in a matrix clause—in the following, ‘beer’ must also be contrastively focussed in order to be grammatical:

- (778) Biiru-ga natu-ga/wa ichiban umai.  
 beer-Nom summer-Nom/Top best tasty  
 ‘It’s during the summer that beer tastes the best.’

This means that raising to object cannot raise an NP over a topic, out of the lower clause, except to the extent that that is allowed within a matrix clause: to achieve a contrastive focus interpretation. That is, there is no position outside the embedded clause that a raised NP moves to; there is only a clause-peripheral position within the lower clause (what I have been labelling a second specifier of CP).<sup>24</sup>

- (779) [CP ... Verb [<sub>Foc</sub> (NP<sub>1</sub>) [<sub>Top</sub> Topic [CP NP<sub>1</sub> ... t<sub>1</sub> ] ] ] ]

As in Passamaquoddy, this movement structure is the usual one. Only if the NP undergoes A-movement can it be base-generated in CP, for the reasons of feature checking given above:

- (780) [CP ... NP<sub>1</sub> subject Verb [CP t<sub>1</sub> [CP ... pro<sub>1</sub> ... ] ] ]  
 A-mvmt

### 5.6.5 Constituency

As in Passamaquoddy, even when the “raised” NP is base-generated in CP it forms a constituent with the lower clause. That is, CP is part of the lower clause, as indicated by labelling it CP, and is not a position within the higher clause.

For example, it is possible to question a Control clause:

- (781) SM  
 a. John-ga Bill-ni [ PRO gakkoo-ni iku yoo-ni ] meizi-ta.  
 J.-Nom B.-Dat school-to go in.order.to ordered  
 ‘John ordered Bill to go to school.’

<sup>24</sup>The raised NP can scramble to the front of the matrix clause without being contrastively focussed, but this is just A-bar scrambling from the post-topic position:

- (i) Biiru-o daremo-ga natu-ga [ ichiban umai-to ] omotte iru.  
 beer-Acc everyone-Nom summer-Nom best tasty-Comp thinks is  
 ‘Everyone thinks that it’s during the summer that beer tastes the best.’

- b. John-ga Bill-ni nani-o meizi-ta-no?  
 J.-Nom B.-Dat what-Acc ordered-Q  
 ‘What did John order Bill to do?’

But it is impossible to question the remnant of raising to object, to the exclusion of the raised NP:

(782) SM

- a. Taroo-ga nani-o kangaete iru no?  
 T.-Nom what-Acc think Prog Q  
 ‘What does Taroo think?’
- b. \* Taroo-ga Tanaka-o nani-o kangaete iru no?  
 T.-Nom T.-Acc what-Acc think Prog Q  
 ‘What does Taroo think of Tanaka?’
- c. \* Taroo-ga Tanaka-o doo kangaete iru no?  
 T.-Nom T.-Acc how think Prog Q  
 ‘What does Taroo think of Tanaka?’

It is also impossible to cleft the lower clause to the exclusion of the raised NP:

(783) SM

- a. [ Taroo-ga kangaete iru-no-wa ] [ Tanaka-ga baka da to ] da.  
 T.-Nom think Prog-Q-Nominal T.-Nom fool is Comp is  
 ‘What Taroo thinks is that Tanaka is a fool.’
- b. \* [ Taroo-ga Tanaka-o kangaete iru-no-wa ] [ baka da to ] da.  
 T.-Nom T.-Acc think Prog-Q-Nominal fool is Comp is  
 ‘What Taroo thinks of Tanaka is that is a fool.’
- c. \* [ Tanaka-o Taroo-ga kangaete iru-no-wa ] [ baka da to ] da.  
 T.-Acc T.-Nom think Prog-Q-Nominal fool is Comp is  
 ‘What Taroo thinks of Tanaka is that is a fool.’

Clefting is still ungrammatical even if the “raised” NP undergoes A-scrambling to fix Condition A:

(784) SM

- a. ?? [ Taroo to Hanako-o otagai-no sensei-ga kangaete iru no-wa ] [ baka da  
 T. and H.-Acc each.other-Gen teacher-Nom think Prog Q-Nominal fool is  
 to ] da.  
 Comp is  
 ‘What each other’s teachers think of Taroo and Hanako is that are fools.’
- b. ?? [ Otagai-no sensei-ga kangaete iru no-wa ] [ Taroo to Hanako-ga baka da  
 each.other-Gen teacher-Nom think Prog Q-Nominal T. and H.-Nom fool is  
 to ] da.  
 Comp is  
 ‘What each other’s teachers think is that Taroo and Hanako are fools.’

This fact distinguishes raising to object plus A-scrambling from Control. In Control, the higher NP is not a constituent with the lower clause. In raising to object it is: the constituent CP in the structures given above.

### 5.6.6 Evidence: Pronouns

One of Kuno's Kuno 1976 arguments for raising in Japanese was the fact that it was impossible to double the raised NP with a pronoun in the lower clause, although this is possible with Control cases:

(785) (Kuno 1976, ex.67–68)

- a. \* Yamada wa Tanaka<sub>1</sub> o [ kare<sub>1</sub> ga baka da to] omotte ita.  
 Y. Top T. Acc he Nom fool is that thinking was  
 'Yamada thought of Tanaka that he was a fool.' Raising
- b. ? Yamada wa Tanaka<sub>1</sub> ni [ kare<sub>1</sub> ga sore o suru] koto o meizita.  
 Y. Top T. Dat he Nom it Acc do that ordered  
 'Yamada ordered Tanaka that he do it.' Control

It turns out, however, that it *is* possible to have an overt pronoun just when the raised NP A-scrambles to bind a higher subject.<sup>25</sup>

(786) SM, HY

- a. ?? Yamada-wa Tanaka<sub>1</sub>-o [ kare<sub>1</sub>-ga baka da to] omotte ita.  
 Y.-Top T.-Acc he-Nom fool is that thinking was  
 'Yamada thought of Tanaka that he was a fool.'
- b. **Taroo-to Hanako-o** otagai-no sensei-ga [ karera-ga bakada to ] omotteiru.  
**T.-and H.-Acc** each.other-Gen teacher-Nom they-Nom fool Comp think.Prog  
 'Taroo and Hanako<sub>1</sub>, each other<sub>1</sub>'s teachers think of them as fools.'

This means that just when the raised NP undergoes A-movement in the higher clause, its position in the lower clause is occupied by *pro*, not trace. We saw the same fact in Passamaquoddy.

Just scrambling the NP, without binding, does not improve the pronoun, meaning that only binding permits A-movement; otherwise A-bar movement must have taken place:

- (787) \* Tanaka<sub>1</sub>-o Yamada-wa [ kare<sub>1</sub>-ga baka da to] omotte ita.  
 T.-Acc Y.-Top he-Nom fool is that thinking was  
 'Yamada thought of Tanaka that he was a fool.'

The same thing holds with wh-phrases. Wh-phrases can undergo A-scrambling and bind a reciprocal; they can also bind a variable (with no WCO) in the higher clause, meaning that they can undergo A-movement:

(788) SM

- a. Dare-to dare-o otagai-no sensei-ga [ baka da to ] omotte-iru-no?  
 who-and who-Acc each.other-Gen teacher-Nom fool is C thinking-is-Q  
 'Who all<sub>1</sub> do each other<sub>1</sub>'s teachers think of as fools?'

<sup>25</sup>My informants do not find 786a as ungrammatical as Kuno indicates, though there is still a sharp contrast with 786b.

- b. Dare-o soitu-no okaasan-ga [ baka da to ] omotte-iru-no?  
 who-Acc he-Gen mother-Nom fool is C thinking-is-Q  
 ‘Who<sub>1</sub> does his<sub>1</sub> mother think of as a fool?’

In just such a case it is possible to have an overt pronoun; without A-binding this is impossible:

(789) SM

- a. Dare-o soitu-no okaasan-ga [ soitu-ga baka da to ] omotte-iru-no?  
 who-Acc he-Gen mother-Nom he-Nom fool is C thinking-is-Q  
 ‘Who<sub>1</sub> does his<sub>1</sub> mother think of as a fool?’
- b. \*Dare-o Taroo-ga [ soitu-ga baka da to ] omotte-iru-no?  
 who-Acc T.-Nom he-Nom fool is C thinking-is-Q  
 ‘Who<sub>1</sub> does Taroo think of as a fool?’

This means that wh-phrases, too, can be generated in a left-peripheral position just when they undergo A-movement in the higher clause; otherwise they can only do A-bar movement.

### 5.6.7 Further Evidence: Topic/Focus

Japanese has a topic/focus construction, in which a topic or focus is base-generated at the edge of a clause; it need not be an argument of that clause. Such a topic/focus phrase can be marked with accusative case in raising to object:

- (790) a. **Tokyo-wa** sumi-nikui.  
 Tokyo-Top live-hard  
 ‘Tokyo is hard to live in.’
- b. John-wa **Tokyo-o** sumi-nikui-to omotta.  
 J.-Top Tokyo-Acc live-hard-Comp thought  
 ‘John thought that Tokyo is hard to live in.’ (Marantz 1983, ex.31b)

This base-generated phrase turns out to have the properties of a “raised” NP that undergoes A-scrambling in the higher clause; that is, an NP that is hypothesized here to be base-generated in CP. The fact that they have the same properties supports the hypothesis that an NP that undergoes A-movement is base-generated in a clause-peripheral position, just like a topic/focus phrase.

For instance, there is no Proper Binding Condition violation when the lower clause is scrambled to the exclusion of the topic/focus:

- (791) [ Sumi-nikui-to ] John-wa Tokyo-o t omotta.  
 live-hard-Comp J.-Top Tokyo-Acc thought  
 ‘John thought that Tokyo is hard to live in.’ SM, HY

Because the topic/focus is base-generated at the edge of the clause and did not move out of it, that clause can scramble without a PBC violation. In the same way, a “raised” NP that is base-generated in CP in order to

be visible to higher A-movement never moved out of the lower clause, and also does not give rise to a PBC violation.

Just like the NP that is hypothesized to be base-generated in CP, a topic/focus phrase, which *must* be base-generated at a clause-peripheral position, can A-scramble to remedy a Condition A violation:

- (792) [ Tokyo-to Kyoto-o ]<sub>1</sub> otagai<sub>1</sub>-no jyannin-ga t<sub>1</sub> [ sumi-nikui-to ] omotta.  
 Tokyo-and Kyoto-Acc each.other-Gen resident-Nom live-hard-Comp thought  
 ‘Tokyo and Kyoto<sub>1</sub>, each other<sub>1</sub>’s residents thought are hard to live in.’ SM, HY

The topic/focus construction bears a strong resemblance to the structure attributed to the base-generated version of raising to object. The analysis presented here accounts for the similarity: a topic/focus phrase, occurring as it does at the left-edge of the lower clause, can Agree with the higher verb and receive Case from it. In order to do so it must be generated with A-features; but we might suppose this to be independently possible, since such phrases can be marked with nominative Case as well as the topic marker *-wa*.

### 5.6.8 The Peripheral Position

Japanese is also able to tell us something about phase edges and how they are treated by various principles of the grammar. As we saw, an NP that raises to object in Japanese does not actually leave the embedded clause. However, it can be Case-marked from without (via Agree), meaning that it is visible within the next higher phase. Its visibility to elements in this phase can also be seen in different “clausemate” conditions in Japanese.

For example, it is only possible to scramble a clausemate wh-phrase across another wh-phrase:

- (793) Tanaka 2001, ex.7
- a. Dare-ga [ John-ga nani-o katta-to ] itta-no?  
 who-Nom John-Nom what-Acc bought-Comp said-Q  
 ‘Who said that John bought what?’
- b. \* Nani-o<sub>1</sub> dare-ga [ John-ga t<sub>1</sub> katta-to ] itta-no?  
 what-Acc who-Nom John-Nom bought-Comp said-Q  
 ‘What, who said that John bought?’

A raised NP counts for this condition, whether or not it A-binds matrix elements:

- (794) Tanaka 2001, ex.8
- a. Dare-ga dare-o [ baka-da-to ] omotteiru-no?  
 who-Nom who-Acc fool-Cop-Comp think-Q  
 ‘Who thinks who is a fool?’
- b. Dare-o<sub>1</sub> dare-ga t<sub>1</sub> [ baka-da-to ] omotteiru-no?  
 who-Acc who-Nom fool-Cop-Comp think-Q  
 ‘Who, who thinks is a fool?’

Similarly, the sequence *why*-wh-phrase is ungrammatical, but can be saved by scrambling a third, clause-mate, wh-phrase to a position before *why*; a raised wh-phrase can satisfy this requirement (Tanaka 2001):

(795) Tanaka 2001, ex.16

- a. ?\* Naze dare-ga dare-o [ baka-da-to ] omotteiru-no?  
 why who-Nom who-Acc fool-Cop-Comp thinking-Q  
 ‘Why does who think of whom as a fool?’
- b. Dare-o<sub>1</sub> naze dare-ga t<sub>1</sub> [ baka-da-to ] omotteiru-no?  
 who-Acc why who-Nom fool-Cop-Comp thinking-Q  
 ‘Whom, why does who think of as a fool?’

These clausemate conditions are not enough to permit the base-generated version of the raising to object structure; it is still a PBC violation to front the remnant clause:

(796) SM, HY

- a. Dare-o<sub>1</sub> dare-ga t<sub>1</sub> [ baka-da-to ] omotteiru-no?  
 who-Acc who-Nom fool-Cop-Comp think-Q  
 ‘Who, who thinks is a fool?’
- b. ?? [ Baka-da-to ] dare-o<sub>1</sub> dare-ga omotteiru-no?  
 fool-Cop-Comp who-Acc who-Nom think-Q  
 ‘Who thinks who is a fool?’

(797) SM, HY

- a. Dare-o<sub>1</sub> naze dare-ga t<sub>1</sub> [ baka-da-to ] omotteiru-no?  
 who-Acc why who-Nom fool-Cop-Comp thinking-Q  
 ‘Why does who think of whom as a fool?’
- b. ?? [ Baka-da-to ] dare-o<sub>1</sub> naze dare-ga omotteiru-no?  
 fool-Cop-Comp who-Acc why who-Nom thinking-Q  
 ‘Why does who think of whom as a fool?’

The implication is that base-generation is not necessary for the raised NP to count as part of the higher clause. This is not surprising, if “clausemate” simply means “visible and active”: non-clausemates cannot satisfy these requirements, because they have been spelled out in a lower phase and are not available within the higher phase. An NP that has moved to Spec-CP, however, is visible to the higher clause.

Similarly, a pronoun that raises to object gives rise to a Condition B violation if it is coreferential with the matrix subject:

(798) Kuno 1976, ex.42–44

- a. Yamada<sub>1</sub>-wa [ zibun<sub>1</sub>/ ?kare<sub>1</sub>-ga tensai de aru ] koto o sitte ita.  
 Y.-Top self/ ?he-Nom genius is that knew  
 ‘Yamada knew that self/?he was a genius.’
- b. Yamada<sub>1</sub> wa [ zibun<sub>1</sub>/ ?kare<sub>1</sub>-ga tensai da to ] omotte ita.  
 Y.-Top self/ ?he-Nom genius is that thinking was  
 ‘Yamada thought that self/?he was a genius.’

- c. Yamada<sub>1</sub>-wa [ zibun<sub>1</sub>/ \*kare<sub>1</sub>-o tensai da to] omotte ita.  
 Y.-Top self/ \*he-Acc genius is that thinking was  
 ‘Yamada thought that self/\*he was a genius.’

This will follow if the domain in which a pronoun must not be bound is also the phase: a pronoun at the left edge of a lower phase is within the domain of the higher phase.

Condition B also indicates that, in Japanese, raising to CP *must* take place, either overtly or covertly, in order for the NP to get accusative case. If the NP could remain in situ in the lower clause and still get accusative case from the higher clause, there would be no Condition B violation.

### 5.6.9 Summary

Raising to object in Japanese, strikingly, has all the properties that argued in Passamaquoddy for two different derivations, a movement derivation and a base-generation derivation. The latter is only available when further A-movement in the higher clause takes place. Furthermore, Japanese confirms the constituency tests from Passamaquoddy: raising to object verbs really only take CP complements, and do not make an object position available for a raised NP.

In addition, Condition B argues that raising *must* take place, either overtly or covertly, for Agree to hold between the matrix verb and a lower NP. Condition B and various “classmate” conditions also indicate that the phase is the relevant unit for disparate syntactic phenomena: elements within the same phase are syntactically visible to each other.

The theory outlined above accounts for the two different derivations of raising to object in both Passamaquoddy and Japanese. An NP may only undergo A-movement and check A-features in the higher clause if it is base-generated with uninterpretable features at the edge of the lower clause. Otherwise an NP moves out of the lower clause to a position in which the matrix verb can Agree with it, but such an NP will not be able to undergo A-movement in the higher clause. Its features will have been checked and deleted. This is what rules out improper movement generally: simply the fact that A-features are checked off prior to A-bar movement, meaning that any NP that has undergone A-bar movement will not have A-features left to drive A-movement.

## 5.7 WH-Questions in Passamaquoddy and Economy

Returning to Passamaquoddy, it is possible to do wh-movement out of the complement of a raising to object verb, but in such a case the verb *must* agree with the wh-phrase that is extracted. This is unlike embedded questions, where we saw that some other element could move to a position to the left of the wh-phrase and agree with the matrix verb. (Branigan and Mackenzie 1999 find the same constraint in the related language Innu-Aimun.) For instance, in the following the verb must agree with ‘who’, and *cannot* agree with any other argument:<sup>26</sup>

<sup>26</sup>In 800, the Conjunct would be expected for the Independent inflection of ‘remember.’ I believe the sentence would still be ungrammatical if the verb were in its Conjunct form.



(799) AH,SN 6:3.2

- a. **Wen**<sub>1</sub> kil piluwitaham-**ot** kisi-komutonom-uk *t*<sub>1</sub>?  
 who 2 suspect-2/3Conj Perf-rob-1Conj  
 ‘Who do you suspect that I robbed?’
- b. \***Wen**<sub>1</sub> kil piluwitaham-**iyin** kisi-komutonom-uk *t*<sub>1</sub>?  
 who 2 suspect-2/1Conj Perf-rob-1Conj  
 ‘Who do you suspect me that I robbed?’

(800) AH,SN 10:7.15

- a. **Wen**<sub>1</sub> k-wewitaham-**a** ap-sakiy-uk *t*<sub>1</sub>?  
 who 2-remember.TA-Dir go.and.back-see-1Conj  
 ‘Who do you remember that I went to see?’
- b. \***Wen** k-wewitaham-**i** ap-sakiy-uk?  
 who 2-remember.TA-2/1 go.and.back-see-1Conj  
 ‘Who do you remember that I went to see?’

The analysis advocated here, based on feature-checking theory, has the tools to explain this restriction, if we simply add the notion of economy (which is independently necessary). To see how, let us construct the derivation of 799a–b up to the edge of the embedded clause. The wh-phrase must move to the edge of this phase in order to move further (the matrix clause is shown for ease of exposition but is not actually constructed yet in this derivation):

(801)  $[_{CP} C^{[wh]} \dots v^{[A]} [_{CP} WH_1^{[A]} \dots t_1 \dots ]]$ 

Like an NP that moves to CP, this wh-phrase has checked A-features that are marked for deletion but not yet deleted. Simply for the sake of argument, let us say that another NP raises to a second specifier of CP, above the wh-phrase:

(802)  $[_{CP} C^{[wh]} \dots v^{[A]} [_{CP} NP_2^{[A]} [_{CP} WH_1^{[A]} \dots t_2 t_1 \dots ] ]]$ 

Both of these specifiers count as the edge of the phase, and will not be spelled out with the lower phase. They are both therefore equally visible to Agree in the higher clause, both being at the edge of the lower phase.

Now, there must also be some kind of feature to draw the wh-phrase to the edge of the *v*P phase, since it must move on to matrix CP (see Chomsky 1998); call this, like the feature on matrix C, [wh]:

(803)  $[_{CP} C^{[wh]} \dots v^{[A,wh]} [_{CP} NP_2^{[A]} [_{CP} WH_1^{[A]} \dots t_2 t_1 \dots ] ]]$ 

*v* now has two requirements: it must check A-features, and it must also check wh-features. In this configuration it could in principle check both features with the same NP, the wh-phrase; or with different NPs: the wh-feature with the wh-phrase, and the A-features with the raised NP. This is where the notion of Economy comes in. Following Pesetsky and Torrego (2001), let us suppose that one instance of Agree, checking more than one feature, is more economical than multiple instances of Agree, each checking only one feature. If this is true, then there is no way *v* could Agree with the raised NP here; economy dictates that it Agree just

once, with the *wh*-phrase, which can check both of its features. Thus we have derived the restriction that a matrix *wh*-phrase agree with the matrix verb.

Some evidence for this account comes from one of the relative root scope-marking questions from Chapter 4:

- (804) **Tan kt-oli-wewitaham-a-n      tan tuci-molikikona-n-ess?**  
 WH 2-thus-remember.TA-Dir-N WH X.extent-be.strong.3-N-DubPret  
 ‘How strong do you remember he was?’ AH,SN 10:7.13 relative root

Here the *wh*-phrase itself has no  $\phi$  features: it is the default *wh*-quantifier, ranging over degrees. And exactly in this case the verb can agree with an NP, here the null third-person pronoun that is the lower subject. That is, the verb is unable to check  $\phi$  features against the *wh*-phrase, and so it is permitted to (in fact must) engage in two Agree relations, one checking *wh*-features and the other  $\phi$  features.

This account makes an additional prediction. It should be impossible for raising to object to involve an unbounded dependency, whether or not islands intervene. That is, nothing rules out an NP doing successive-cyclic A-bar movement from a severely embedded position to the Spec-CP immediately under a raising to object verb, but by the time it gets there its A-features will have been deleted and it will be unable to trigger agreement with the higher verb. (I have no data indicating whether this is correct or not.) The same should hold of a matrix *wh*-question: by the time a doubly-embedded *wh*-phrase reaches the Spec-CP immediately beneath a matrix raising to object verb, it too will have lost its A-features. Therefore the matrix verb should be able to agree with something else, just when the *wh*-phrase came from a position at least one clause lower than the embedded clause. Again, I have no data bearing on this prediction.

## 5.8 Conclusion

This study has investigated three phenomena in the grammar of Passamaquoddy: successive-cyclic movement, *wh*-scope marking, and raising to object. I have argued that the Phase theory of Chomsky (1998, (1999)), including the operation of Agree, is able to account in a very simple way for the complex patterns of agreement that occur with successive-cyclic movement in Passamaquoddy. Moreover, these agreement facts were able to decide between the two competing analyses of *wh*-scope marking: they are both correct, and instantiated in different *wh*-scope marking constructions. Passamaquoddy possesses both of them. Finally, raising to object showed why successive-cyclic movement must be A-bar movement: it follows from the way feature checking works. A- vs. A-bar properties are also characteristic of movements that check certain types of features, they are not characteristics of positions. What counts as an A-bar position for a moved NP can launch A-movement for a base-generated NP. In addition, raising to object provides further support for the phase theory, as it indicates that the edges of lower phases are indeed visible to higher phases—but only the next higher phase. Structural tests diverge from syntactic accessibility in raising to object: a raised NP can be shown to be in the lower clause, yet it is syntactically accessible to the higher clause. Raising to object also interacts with long-distance *wh*-movement, in a way that proves that Agree is necessary for movement.

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